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Dynamics in an Unequal World

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ABSTRACTS

plenaries | world café | sessions | presentations | posters

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1. Plenaries & World Café

Plenary Session I: Tuesday, July 24, 2018

The Geographical Roots of Inequality and the Future of the Liberal International Order

Panel Organizers:

Harald Bathelt - University of Toronto | **Michael Storper** LSE, UCLA, Sciences Po Paris

The past thirty years have generated a strong geographical spreading of capitalist market relations – especially to East Asia and the former Soviet Union. This has been accompanied by an unprecedented increase in global prosperity, measured by global per capita income, the massive expansion of the global middle class, and a precipitous decline in extreme poverty in many parts of the world. And yet, in many countries, there are growing populist movements that call into question unbridled globalization, liberal internationalism, and the rule of markets. Among the many varieties of such movements can be included the American election and the Brexit vote in 2016, and strong revanchist tendencies in many other countries worldwide from Russia to Turkey, Hungary and the Philippines.

There are undoubtedly many complex reasons for this new “age of anger”, ranging from economic to cultural. Principal among them are the growth in two kinds of inequality amidst general increases in prosperity: interpersonal inequalities in income and social status are growing in many countries, along-side geographical inequalities in prosperity, income and opportunity. The globalized urban centers that were the drivers of economic growth and seemingly borderless networks have come under pressure and urban elites are claimed to be responsible for stagnation and decline in other regions.

Political entrepreneurs have assigned much of the reason for these inequalities to globalization and liberal internationalism and hence are prescribing remedies that involve retreat from global trade, global labor and capital mobility, and global political order and international obligations. A new populist turn in politics has mobilized masses of what could be referred to as disillusioned globalization losers that are ready to push for isolationist, anti-immigration, anti-globalization policies.

In this panel, we aim to discuss: the nature and reasons for the geography of inequalities; the nature and reasons for the strong regional or geographical expressions of populism/anti-globalism versus pro-globalism and openness; the possible futures of such movements and their geographical bases; and the consequences for re-thinking development policies, whether at the level of the architecture of globalization or at the scale of spatial-regional economic policies within countries.

The confirmed panellists are (aside from the panel organizers):

- **Kathy Cramer** (Political Science, University of Wisconsin – Madison)
- **Ron Inglehart** (Political Science, University of Michigan)
- **Cristóbal Kaltwasser** (Political Science, Diego Portales University, Chile)
- **Jonathan Rodden** (Political Science, Stanford University)

Plenary Session II: Wednesday, July 25, 2018 **Poverty and Inequality: Trends, Drivers, Policy Options**

Panel Organizer:

Javier Revilla Diez - University of Cologne

Since the 1990s, global poverty has reduced considerably. However, poverty remains a substantial problem for many countries across the so-called Global South and in pockets of the Global North. According to the International Poverty Line, set at US\$1.90 per day for 2017, approximately 768.5 million people worldwide are considered extremely poor; if the poverty line is drawn at US\$2.50 per day, then almost half the world's population lives in poverty. Why is progress on poverty reduction so slow? This panel's discussions focus especially on growing internal inequalities within countries. Indeed, several emerging economies in Africa, Asia, and Latin America have achieved the status of a middle-income countries. At the same time, income disparities remain high, or are even increasing, challenging social cohesion within and between countries. Against this background, this plenary session will focus on three core topics. First, it will discuss global trends in poverty and inequality, including methodological questions related to measurement and other challenges. Second, it will focus on societal outcomes of growing inequalities, and the reasons for existing structures of discrimination and exclusion. Third, it will explicitly discuss policy options to reduce inequalities, and to more equitably distribute access to resources and assets.

The confirmed panellists are (aside from the panel organizer):

- **Kenneth Matengu** (University of Namibia)
- **Tomomi Tanaka** (The World Bank, USA)
- **Fabrice Murtin** (OECD Statistics Directorate, France)

Plenary Session III: Thursday, July 26, 2018 **Feeding the Global South.** **How do local and global processes contribute to food justice?**

Panel Organizer:

Boris Braun - University of Cologne

Between 2015 and 2016, the global number of chronically undernourished people increased from 777 million to 815 million. This reversed a decades-long downwards trend in the absolute number of people who were consuming insufficient calories for their daily energy requirements. Yet this alarming statistic reveals only one dimension of the world food problem. An additional 2 billion people eat enough calories for their daily energy needs, but don't receive the requisite vitamins and micronutrients for a healthy life. And 13 % of the world's adult population is overweight and obese, twice the prevalence in 1980. The conjuncture of these different dimensions of hunger and malnutrition represents the outcome of complex social, economic and environmental processes cutting across different geographical scales. This panel addresses this critical global problem. It asks how the place- and scale-sensitive foci of geographers can lead to new understandings of how and why food justice – defined as the right to a satiating, healthy, culturally appropriate and sustainable diet – still eludes so many on the planet. Moreover, the session aims to discuss practical strategies to overcome hunger and undernourishment of millions of people in the Global South.

The confirmed panellists are (aside from the panel organizer):

- **Stephanie Barrientos** (University of Manchester)
- **Sudha Narayanan** (Indira Gandhi Institute of Development Research)
- **Gilbert M. Nduru** (Karatina University, Kenya)
- **Bill Pritchard** (University of Sydney/University of Cologne)

World Café: Friday, July 27, 2018
World Café: Dynamics of Unequal Developments in the Global South

Panel Organizer:

Martina Fuchs - University of Cologne

The World Café approach is a practical communication tool to support a flexible and vivid discussion. Discussants will host constantly changing groups of participants and confront them with guide-lining questions based on emerging topics of economic geography in the Global South. Later, the results will be collected and assembled to reflect on the individual group results. The World Café segment encourages a broad variety of research fields.

The World Café focuses on the dynamics of unequal developments in the Global South. Discussions relate e.g. to industrial and agricultural value chains, urban, peri-urban and rural development, international mobilization and grassroots initiatives, digital transformation and innovation, as well as tourism, as critical factors of regional development.

Discussants:

- **Adrian Guillermo Aguilar** (Geography, Universidad Nacional Autónoma de México)
- **Tatiana Lopez Ayala** (Regional Studies, University of Cologne)
- **Phyllis Bussler** (Regional Studies, University of Cologne)
- **Niels Fold** (Geography, University of Copenhagen)
- **Wenyang Fu** (Geography, South China Normal University)
- **Aarti Krishnan** (Geography, Overseas Development Institute (ODI) and University of Manchester)
- **Julia Verne** (Geography, University of Bonn)

2. Sessions and presentations

AGRARIAN TRANSFORMATION IN THE GLOBAL SOUTH

Session

Agrarian transformations in the Global South: Technological change and socio-ecological consequences

Markus Keck - University of Goettingen | Alexander Follmann - University of Cologne

With hundreds of million people depending directly or indirectly on agriculture, farming remains a backbone of the economies in the Global South. The development and diffusion of new technologies and increasing public and private (both domestic and foreign) investment in land and infrastructure have the potential to improve agricultural productivity and contribute to feeding the world's growing population. At the same time, however, there are concerns that farmers' livelihoods and regional food supply will increasingly rely on expensive, rapidly changing technologies owned by transnational corporations. Where, how and through which means food and nutrition security and safety are achieved are central questions in an unequal world, and in how far the current transformations can contribute to these goals is subject of controversial debates. This session provides the opportunity to discuss theoretical and empirical accounts of present-day agricultural transformation processes in the Global South by raising the following questions: (1) What technological dynamics and socio-ecological consequences characterize rural, urban and peri-urban spaces in the Global South with regard to agricultural transformation? (2) How do current modes of managing natural resources (soils, water and land) change in the face of agrarian transformation and what are their impacts on food and nutrition security, poverty, and employment? (3) What are the implications of current transformations for the attainment of the sustainable development goals particularly for achieving "No Poverty", "Zero Hunger", "Gender Equality" and "Decent work and economic growth"?

Flex-crops and the transformation of the corporate agri-food model in Argentina. Social inequalities and environmental impacts in regional perspective

Anne Tittor - Friedrich Schiller Universität | Ariel Garcia - CEUR-Conicet

In the last two decades, the agricultural model of Argentina underwent a profound transformation and was fully inserted into a globalized economy. Especially soybean expanded enormously and it is grown on more than half of the agricultural land. As almost 100% of soybeans are genetically modified, and are grown in direct seeding, production requires less labor, and deepens dependencies of transnational corporations. Other forms of land use were displaced and intensified the profound social, productive and economic transformations of rural areas (Lapegna 2016, Gras and Hernandez 2013). The number of agricultural producers decreased, the concentration of land increased and oligopolistic structures were established within the seeds, fertilizers and pesticides segment. Transnational actors, the application of technology and financialization increasingly inscribed their logic in agriculture. Almost the entire agricultural sector in Argentina is part of the corporate agrifood model (Gorenstein, 2016, McMichael, 2009, 2012, Delgado Cabeza, 2010). With the corporate agrifood model, flex-crops (Borras et al 2016), which have multiple uses such as food, animal feed, fuel and other commercial and industrial uses (in Argentina: soy, corn, cereals) play a key role. The decision process, if and where food is produced, changed profoundly, as did the commercial strategies of the sector, and the position of family farmers within the system. The proposed paper addresses these ongoing transformations and explores the strategies of transnational and national actors to shape, lead and resist this development. Specifically, the research analyzes the impacts of flex-crops in Argentina at the beginning of the 21st century, in terms of: a) territorial inequalities between agricultural producers and b) social inequalities concerning access to and control over land as well as labour conditions; c) in terms of environmental impacts concerning pesticides and biodiversity d) effects on consumer prices and their consequences for food sovereignty in Argentina.

Perception of climate change and mitigation strategy among local farmers in Awgu local government area of Enugu State in Nigeria

Virginia Okwu-Delunzu - Enugu State University of Science and Technology | **Blessing Ugboaja** - Enugu State University of Science and Technology

This paper assesses the farmers' perception of climate change and the mitigation response in Awgu, Enugu State of Nigeria. The objectives are to ascertain the knowledge level of farmers on related climate change issues and their sources of information on climate change. It also investigates the degree of synergy between farmers' perception and climatological data series as well as mitigation options available to farmers. Questionnaires and interviews are used to generate information from the farmers' perception, which was compared with historical climatic data from the closest weather station in the study area. The result of the study revealed that 23.35% of the farmers know about climate change through the media while 73.60% observed the change through their local knowledge. 88.83% of the farmers observed increase in sun heat, 73.19% observed increased rainfall, while 59.90% agreed there is a change in climate which matches with the climatological evidence. 43.65% of the farmer attributed the climate change to industrialization, 24.37% to indiscriminate felling of trees and 5.58% to burning of fossil fuel. The study recommends developing high-value crop varieties that will be suitable to local conditions, especially in the emerging lands. It is important to accelerate the adaptive processes and sensitization programs as to create more awareness on the causes, impact and prevention of climate change.

Key words: Farmers perception, climate Change, Mitigation, Agwu Local Government

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Spatial patterns of farmland abandonment in Rio de Janeiro State

Pedro Castro - Cologne University of Applied Sciences / University of Bonn / Fluminense Federal University (Brazil) | **Oscar Baez** - TH-Köln | **Sven Lautenbach** - University of Bonn | **Rui Pedroso** - TH-Köln | **Raúl Vicens** - Fluminense Federal University (Brazil)

While land use change in Brazil is characterized by strong cropland expansion, the federal state of Rio de Janeiro, located in Southeast Brazil, shows an opposite trend: a significant amount of cropland has been abandoned. The temporal and spatial distribution of farmland abandonment in Rio de Janeiro state was analyzed at the municipal level from 1991 to 2013. Developments differ strongly between the different regions. The Norte Fluminense region, which holds the highest share of cropping area in the state, showed the highest cropland abandonment. This decrease was mainly due to a reduction of the areas used for the cultivation of banana, maize, and sugarcane. In the Baixadas and Metropolitan Regions, the reduction of areas for orange plantations played an important role while the reduction of areas for coffee production was important for mountainous areas. Another transition seems to be the substitution of sugarcane cultivation with pineapple cultivation. Areas for coconut crop production increased mainly in the Quissamã municipality. Areas for manioc crop production remained stable throughout the analysis. The patterns identified in this paper will provide an important background for the policymakers in implementing spatially explicit plans for the agricultural sector.

Inequality, investment and agricultural expansion in tropical regions: the effect of domestic versus foreign capital

Graziano Ceddia - University of Bern | **Thomas Goda** - EAFIT University | **Pasquale Pazienza** - University of Foggia

Agricultural expansion remains the most important proximate cause of deforestation in the Global South, particularly in tropical areas. Over the last ten years there has been increasing attention to the role of foreign investments in processes of large scale land acquisitions in the Global South, which in turn may have spurred agricultural expansion and deforestation. At the same time, it has been pointed out that after the 2008 global financial crisis, extremely wealthy individuals may have diverted their investments from the financial sector towards land and other real assets. This suggests a potential effect of rising inequality in stimulating demand for land. In this paper we address these issues by looking at 21 countries in Latin America and South East Asia, two regions who are heavily affected by large-scale land acquisitions, agricultural expansion and deforestation. We deploy a number of multivariate statistical models to assess: a) the role of both domestic and foreign inequality on domestic and foreign investment in agriculture respectively and b) the impact of domestic and foreign investment on agricultural expansion. Our results suggest that domestic investment is indeed positively correlated with domestic inequality. At the same time domestic investment has a significantly larger impact on agricultural expansion than foreign investment

Session

The changing economic geographies of food production and consumption in the Global South Implications for nutrition, sustainability, livelihoods and gender. Part I: Case studies from Asia.

Bill Pritchard - University of Sydney | **Amelie Bernzen** - University of Cologne

Economic geographers have much to contribute to debates on the social implications of rapidly changing food systems in the global South. Traditional own-production food systems in rural areas are giving way to more diverse agrarian landscapes based on production for markets. On the one hand, farm production is increasingly being incorporated into value chains in which downstream actors (such as supermarkets and global traders) execute key governance powers. These processes have crucial implications for farmer agency over land use and production systems, the role of labour within agricultural production, and the concentration of farm production. Additionally, food consumption landscapes in rural areas of the global South are being restructured by greater physical and economic accessibility of highly-processed foods, with ramifications for nutrition and the gendered expression of food preparation activities. This Session welcomes researchers working on diverse aspects of food production and consumption dynamics in the global South, including key themes such as value chains, diets and nutrition, gender, food environments, sustainability and the politics of food and environment.

How Tongan squash pumpkin industry was “downgraded” in the emerging global value chain? : The evolution of a local supplying system

Kohei Oro - Oita University

Economic growth, development of transport technology, and trade liberalization has been surging import of off-season fresh fruit and vegetable (FFV) in East Asian countries. This gives great potential for rural Asia-Pacific to participate in the emerging value chain.

However, to participate in the chain, it is vital for the producing area to arrange a “local supplying system” regarding the production and marketing (e.g., strict quality and quantity control, prompt response to buyers’ request, and motivating farmers’ innovation). Such an arranging practice is a key process to explain rise and fall of producing areas, and it is a dynamic process as the system is to be aligned with variable institutional environment such as national politics, sociocultural customs, and various historical contexts.

The experience of squash pumpkin industry in Tonga, a remote small country in south pacific, provides a good example for the dynamics. In the late 1980’s Tonga successfully participated in the value chain to Japan by arranging a integrated local supplying system for squash with the royal family’s initiative. The export jumped in the early 1990’s, and its value account for more than half of the nation’s GDP. Twenty years on, however, the export declined drastically although the market of off-season squash expanded more in Korea and China. This crash is mainly because the previous supplying system lost its power due to the institutional change such as political democratization, waning royal power, increasing Tongan businessmen educated in Anglo-Saxon countries, and structural changes in farm sectors. The previous system has fallen, but the new system seems yet to be rightly arranged.

This study explains the trajectories of Tongan squash industry focusing on the evolution of local supplying system, and also tries to make an analytical framework for the effective realignment of the system.

Conceptualizing land in commodity chains: Evidence from the Philippines and Papua New Guinea

Caroline Hambloch - University of London

The chain literature (Global Commodity Chains/Value Chains/Production Networks) has remained surprisingly silent about land as a factor of production and as the basis for chain configuration, overemphasizing capital and to a lesser extent labor. Issues of land have largely been overlooked in the chain literature. This paper fills this gap by operationalizing land and land policies as part of the institutional framework within the broader chain framework (GCC, GVC, GPN) by investigating the interaction of land issues, chain governance, and their implications on economic, social, and environmental up-and downgrading. I use fieldwork experience from the palm oil industries in the Philippines and Papua New Guinea to illustrate the way in which the buyer-driven nature of the chains interacts with major institutional changes made to land tenure arrangements. In the case of the Philippines land tenure changes relate to the redistributive land reform, Comprehensive Agrarian Reform Program, whereas in Papua New Guinea they are related to customary land registration processes for oil palm development. I argue that changes to land tenure arrangements imply far-reaching institutional changes, shifting the underlying power distribution between the plantation/milling companies and

small-scale producers/landowners/farmworkers, and producing various economic, social, and environmental downgrading trajectories for landowners, small-scale producers, and farmworkers. I conclude that rethinking chain configurations in terms of the role of land and contestations thereof will provide more nuanced understandings of dynamic power distributions along the chain, which are useful to inform sustainable redistributive policy making.

Food transition and practice theory – findings from rural-urban Bengaluru

Mirka Erler - Göttingen University

The South Indian mega city Bengaluru doubled its inhabitants in the last decade and sprawls into the rural surrounding. It could therefore be regarded as a burning glass for developments influenced by urbanization such as food transition (Pingali & Khwaja 2004, Landy 2009, Erler & Dittrich 2017). Although practice theory provides important insights regarding transitions only little efforts have been made so far in focusing on the practices regarding the phases of food transition for India. The objective of this presentation is to link practice theory to Indian food transition by identifying relevant practices and to clarify whether and how these are influenced by the location of a household. Furthermore, as it is a pressing issue of our times, I will analyze if food practices are becoming more or less sustainable.

I conducted eight month of field research including qualitative (27) and quantitative (300) household interviews of middle-class families in rural as well as urban areas. We chose to interview only middle-class households as they are most likely subject to food transition. The research was part of the DFG-funded research group FOR2432.

The findings confirmed the influence of location on eating practices. Nevertheless, its influence could best be described as diffuse and entangled with many other factors such as class or culture, which often seem to outweigh location. Regarding some practices there seemed to be a strong contrast between the very urban areas and all other areas. Regarding food sustainability we found promising as well as adverse practices independent from the location of a household.

Competition strategies of local market chains against national and global retail chains: the case of Gaziantep City

Mehmet Ragıp Kalelioglu - Gaziantep University | Nuri Yavan - Ankara University

This study examines the competitive strategies of local food retail chains that have developed against global food retail chains in order to survive in the urban local market. While there a number of studies about the various characteristics of organized retail firms in Turkey, as far as we know there are virtually no studies about how local companies versus global/national retail firms compete with each other at the urban scale and how local retail chains develop strategies in order to establish a presence in the market. Therefore, in this study, the strategies used by local retail companies to sustain their existence and activities against the global organized retail firms are examined using the triple framework of “resilience”, “reworking” and “resistance” that Katz (2004) proposed. In addition to this triple framework, some competitive advantages of local retailers against global chains are explained in the context of “territorial embeddedness” concept. In this context, the purpose of this study is to explain the success that local organized retail companies have achieved against global and national chains at the local level in Gaziantep, which is one of the most important industrial and commercial centers in Turkey and to reveal what kind of tools and competitive strategies the local chains use in order to thrive in the market. To this end, the data was collected through face-to-face interviews with local, national and global firm representatives operating in Gaziantep. The obtained data were transformed into text, coded through content analysis and the main themes (categories) were determined. Preliminary findings from the analysis of interviews show that organized retail firms both local chains and global/national chains have concentrated intensively in the newly developed urban area located in the western and south-western part of Gaziantep city and have engaged in competition to establish dominance in these regions. In addition, it has been found that global and some national retail firms have not been successful in the competition with the local retail firms, and that two global retail chains (Real and Carrefour) have withdrawn from the city. Accordingly, the study shows that the findings should be well read by the global firms and that the national or global retail firms, which do not take local consumption habits, local practices and socio-cultural composition into account, will have little or no chance of success in their investments.

Session

The changing economic geographies of food production and consumption in the Global South: Implications for nutrition, sustainability, livelihoods and gender [Africa and Latin America]

Niels Fold - University of Copenhagen | Stephanie Barrientos - University of Manchester

Economic geographers have much to contribute to debates on the social implications of rapidly changing food systems in the global South. Traditional own-production food systems in rural areas are giving way to more diverse agrarian landscapes based on production for markets. On the one hand, farm production is increasingly being incorporated into value chains in which downstream actors (such as supermarkets and global traders) execute key governance powers. These processes have crucial implications for farmer agency over land use and production systems, the role of labour within agricultural production, and the concentration of farm production. Additionally, food consumption landscapes in rural areas of the global South are being restructured by greater physical and economic accessibility of highly-processed foods, with ramifications for nutrition and the gendered expression of food preparation activities. This Session welcomes researchers working on diverse aspects of food production and consumption dynamics in the global South, including key themes such as value chains, diets and nutrition, gender, food environments, sustainability and the politics of food and environment.

Conceptualizing the integration of urban and peri-urban agriculture in commercial agri-food value chains: linking value chains and urban metabolisms

Alexander Follmann - University of Cologne | Peter Dannenberg - University of Cologne | Maximilian Willkomm - University of Cologne

Rapid urbanization and the transformation of urban food systems in low-income countries, particularly in Sub-Saharan Africa, pose new opportunities and challenges for urban and peri-urban agriculture (UPA). Often based on micro-production for subsistence, most UPA is portrayed as a livelihood strategy of the poor. However, many Sub-Saharan African cities are experiencing a proliferation of market-oriented forms of UPA, which not only resist “urban land grabs” (Zoomers et al. 2017) but even economically thrive under urban growth. One explanation for the proliferation of market-oriented UPA is seen in the increasing and changing urban demand for perishable, high-value agricultural products (e.g. meat, dairy goods, eggs, fresh fruit and vegetables). In order to better understand these dynamics and their social and environmental effects, this conceptual paper links the debate around integrating horizontal elements in agro-food value chains (Bolwig et al. 2010) to a political-industrial ecology perspective on metabolisms (Newell & Cousins 2014). Such an approach offers a theoretical framework to (re)conceptualize input-output relations and socio-material practices within value chains – an approach we term ‘value chain metabolism’. Environmental concerns are integrated into value chains by introducing a critical analysis of resource flows and underlying power structures. Social concerns are addressed by linking socio-material practices within value chains (Hall 2015) to their socio-ecological implications and governance on the city level (Broto et al. 2012, Newell & Cousins 2014). The paper uses insights from explorative fieldwork in medium-sized Kenyan cities (Nyeri, Nakuru) to exemplify the adaption of capital-intensive technologies (e.g. greenhouses, vertical farming) and an increasing use of off-farm inputs (including chemical pesticides, mineral fertilizers, irrigation systems and wage labour) in market-oriented UPA.

Measuring environmental upgrading in polycentric agricultural value chains: insights from Kenyan farmers

Aarti Krishnan - University of Manchester

Upgrading is critical for farmers to participate in global production network (GPNs) and Regional production networks (RPNs) as it permits upskilling and building greater value addition thus creating positive developmental outcomes. While significant research has been conducted on economic and social upgrading in GPNs, relatively little attention has been directed towards environmental upgrading and even less in the context of RPNs. Environmental upgrading has thus far been examined as an outcome of the power and politics of lead firms i.e. systemic pressures that emanate from different forms of buyer driven governance in GPNs (e.g. sustainability standards); and has not integrated aspects of climate variability and shocks, which also directly impact the ability of farmer to participate in GPNs/RPNs and thus their livelihoods. This research endeavours to advance the concept of environmental upgrading and downgrading by categorizing three types, product, process and strategic. It also seeks to identify its complex and heterogenous trajectories across farmers participating in GPNs and RPNs (with farmers participating in local production networks as a counterfactual).

This paper uses a mix method approach by drawing on survey of 579 fresh fruit and vegetable farmers, 106 interviews across various stakeholders and 6 focus group discussions collected in Kenya in 2015-16. It assesses the varied processes and mechanisms through which farmers environmentally upgrade or downgrade across different end markets. It also elicits the links between economic, social and environmental upgrading, suggesting that economic and social upgrading are not sufficient conditions to lead to environmental upgrading; and often cause environmental downgrading. This research has the potential for policy makers to identify critical environmental upgrades that promote building farmer resilience to shocks and promote long term sustainable development.

Benevolent failures? Unintended rural development as a result of unsuccessful contract farming

Niels Fold - University of Copenhagen | Frederik Brønd - University of Copenhagen

State initiated promotion of palm oil production in Ghana has primarily focused on smallholders' incorporation in the formal value chain through outgrower schemes and large-scale industrial development. However, different artisanal oil palm products play a significant role in Ghanaian rural and urban diets, and smallholders have traditionally depended on oil palm as a subsistence crop. This strand of the value chain has by and large been left to NGO-initiatives that have addressed the dissemination of new oil palm varieties and simple processing equipment. This paper examines the material and organisational configuration of the artisanal and small-scale palm oil activities in the Kwaebibirem District (Eastern Region) where Ghana's biggest outgrower scheme (GOPDC) is located. The scheme has throughout its existence struggled with organisational problems and unstable supplies from the outgrowers. We show, however, that the formal and large-scale operations have played a crucial role for the development of a plethora of artisanal and small-scale palm oil activities in the area and fostered productive linkages to small-scale industries in the rural settlements. The case provides valuable insights on how regional economic development and reduced vulnerability in rural areas can be spurred by 'unintentional' linkages between formal and partially informal strands within the same value chain. Comparable obscured effects of large-scale, state-driven interventions need to be examined. Specifically, we argue that contract farming schemes – even apparent failures – potentially may be transformed into small-scale activity-based rural development if stimulated by alternative policy mechanisms.

Articulations of healthy food consumption by South Africa's urban middle classes: poly-temporal food knowledges and contested moralities

Alex Hughes - Newcastle University | Shari Daya - University of Cape Town

This paper presents a critical engagement with notions of healthy food articulated by middle class residents of Cape Town, incorporating reflections on food purchase and use in the context of everyday life. It does so in an attempt to grasp shifting food consumption practices in a city and country experiencing significant political-economic and cultural change over the past two decades, with diets and food purchasing patterns changing in a context of rapid urbanisation, economic liberalisation, growing numbers of middle classes, post-apartheid legislation and ever increasing pressure to address sustainability challenges. Growing numbers of middle classes in South Africa have been simultaneously celebrated for their contribution to economic growth and derided for their materialist aspirations, leaving nuanced analysis of consumption practice lacking. Our particular intervention embraces the multiple and contested meanings of healthy food for consumers broadly identifying as middle class, capturing not only the views of people in the context of current lived experience, but also the significant influence of food knowledges concerning health and wellbeing that have been shaped for many by life under apartheid and through the everyday negotiation of commercial and cultural influences resulting from subsequent political and economic transition. Drawing on research using interviews and focus groups, the paper therefore places centre-stage the ways in which middle-class consumers in Cape Town define and understand healthy food and eating in the context of the political-economic systems through which food is made available and marketed to them, and the ways in which they navigate ethical, economic and cultural decisions about health and wellbeing through the rhythms of their everyday home, social and working lives. We thus challenge some of the binaries dominant in food consumption analysis, including healthy/unhealthy eating and thrifty/extravagant consumption, which have tended to generate simplified accounts and sometimes problematically moralising policy agendas.

Session

Transformations and future pathways of smallholder farming in the Global South

Maximilian Willkomm - University of Cologne | Katharina Molitor - University of Cologne

Smallholder farming is coined as the backbone of livelihoods in rural but also urban and peri-urban areas in the Global South, as it captures a wide range of socio-economic and environmental functions. However, especially smallholder farming in its

heterogeneity is subject to diverse dynamics of environmental, demographic, social, political and economic dimensions. These dynamics could lead to risks and opportunities for farmers. For example, commercialization processes and expanding market thinking may induce smallholders shifting their cultivation (and selling) practices which often result in extensive land-use changes including socio-economic, political as well as environmental implication. This session should critically engage with ongoing dynamics in smallholder agricultural practices focussing on recent risks and opportunities for smallholder livelihoods. The session discusses current discourses, recent developments and future pathways of smallholder agriculture addressing both, rural but also urban and peri-urban agriculture. The organisers welcome conceptual-theoretical, methodological and empirical discussions and findings around the debate of small-scale agriculture in the Global South. Abstracts might include, but are not limited, to the following aspects within rural, urban, and peri-urban smallholder farming:

- processes and practices of commercialization, markets and marketization;
- land use dynamics;
- smallholder livelihoods.

Please do not hesitate to send further questions or abstract drafts to Katharina Molitor (katharina.molitor@uni-koeln.de) and Maximilian Willkomm (m.willkomm@uni-koeln.de).

Transformations and future pathways of smallholder farming in the Global South I

Picking the Low-Hanging Fruit: Finance, Racialized Economic Inequality, and Transformation in South Africa's Commercial Fruit Farming Sector

Melanie Sommerville - University of British Columbia

This paper utilizes a case study of recent investments in farmland and agriculture in South Africa to examine the mobilization of finance in processes of racial economic redress and reparations. South Africa remains home to very high levels of racialized economic inequality in the aftermath of colonialism and apartheid. It is also the site of new practices of financial inclusion that, while promising to deliver 'development' and economic 'upliftment' to marginalized black communities, may actually revivify racial oppression and exploitation. I look at the articulation of these practices with state-led programs of land reform and agricultural Black Economic Empowerment (BEE) in the commercial fruit farming sector. I trace the activities of one particular corporate family and associated financiers through three modalities: (i) positioning themselves as intermediaries in the transfer of farms (and shares therein) from white owners to the government; (ii) forming so-called 'strategic partnerships' with black farmers and communities that receive such farms under land reform; and (iii) establishing a suite of investment funds that combine the first two modalities under the cover of 'impact' investment. I show how the capital growth and preservation opportunities prised from these modalities have worked to stabilize the corporate family amid fruit sector deregulation and provided returns to finance at the expense of black farm workers and rural communities. I reflect on what the case reveals about the entanglement of finance in new regimes of 'accumulation by reparation' that operate alongside those of 'accumulation by dispossession' in (post)-colonial agrarian environments. My paper suggests a need for further attention to the mechanics of economic reparations projects and a clear-eyed accounting of the benefits that result and to whom they will accrue.

Food Security: Struggles of Small Scale Farmers in South Africa

Katharina Diederichs – University of Cologne

Food –and Water Security cross-cuts the macro- and micro-economic political agenda of SSA countries. In the face of thoroughgoing impacts of extreme weather conditions due to global climate change, SSA countries are in dire need for well-researched national policies on access to food to feed their people in the coming decades. National and municipal agenda-setting faces multi-tiered future challenges, with urbanization and poverty presenting the most immediate impact-factors on Food Security. South Africa's population is urbanized, undernourished (hidden-hunger) and poverty-stricken. With Cape Town now facing a severe drought Food Security is even more at risk; by cutting the availability of food as well as by posing income-related threats on the urban poor who often rely on unskilled labour sources in (urban and peri-urban) agriculture, the drought very directly endangers livelihoods. This presentation will showcase the struggle of Cape Town's Phillippi Horticultural Area (PHA) civil campaign. PHA is a large agricultural area just outside Cape Town's city center in the heart of the Cape Flats. While providing an important source of income for unskilled labour, the PHA is situated on a large aquifer; a fact that increases its strategic value. Despite that it provides Cape Town's population with locally grown vegetables and adds to its citizens nutritional intake, the 3.000ha of farmland is now under threat of short-term capitalist interests. The City of Cape Town is enroute to process middle-class housing developments, which threatens farmlands and the Cape Flats Aquifer. The PHA-campaign is a grassroots peasant movement of smallholder farmers that showcases local class-struggles and the legacy of South African Apartheid. It aims to safeguard local production and livelihoods. This talk is based on empirical data from a 2017 PHA-case study and it will provide a theoretical framework that draws on Environmental Justice and Food Sovereignty Movements in South Africa.

The Smallholder Perspective in Organic Agriculture

Shantonu Abe - University of Cologne | **Amelie Bernzen** - University of Cologne

Economic geographers have traditionally studied organic agriculture in the Global South using political economy approaches, or value chain approaches framed within a neoliberal paradigm. These approaches, however, fail to view things from a smallholder's perspective. The narrative of the lead firm as the driver of change within Global Value Chains ignores the 'translations' occurring at the fringes, making it difficult to understand what happens on the ground. It fails to explain the spread of many non-certified organic initiatives in India, and it also fails to include smallholder farmers as actors with agency, reducing them to the role of an instruction-receiving supplier. Here I present my ideas on how to attempt an exploration of organic agriculture from a smallholder perspective, and why I think it is important to do so. The 'how' requires a brief discussion of two conceptual advances. The first advancement is the use of Assemblage Theory. Assemblage Theory emphasizes 'the coming together of actors, objects and discourses in more or less stable formations'. It attempts a shift away from a priori reductionism using abstract concepts towards a more descriptive approach to the study of economies. The second advance is the adoption of a food sovereignty paradigm across multiple disciplines working with agronomy, food and rural development. Broadly characterized by an emphasis on revaluation of smallholder autonomy, fairer market systems, and an agroecosystem approach, it focuses on the ability of rural communities to generate endogenous growth whilst maintaining environmental sustainability. The 'why' question is answered based on an appreciation of the resource-constrained situation of smallholder farmers in India and the evidence showing the contribution of smallholder farmers towards the provisioning of food on global scale. Through using these concepts in my paper, I try to enunciate how smallholders are using organic agriculture as a strategy to improve their livelihoods.

Multidimensional Poverty, Aspirations, and the Diversification of Agricultural Livelihoods: The Cases of Charcoal Production and Illegal Rhino Hunting in Mozambique

Julie Silva - University of Maryland

Within the human development literature, a growing body of work uses the future-oriented logic of aspirations to examine the complex motivations underlying human action as people strive for better lives. Framings that account for aspirations can better illuminate how different dimensions of disadvantage shape the desire for change and, consequently, motivate smallholder farmers to diversify livelihood strategies. This longitudinal study employs a mixed methodology to examine the role of multidimensional poverty and aspirational capacity in rural livelihood diversification among Mozambican smallholders. Drawing on Sen's capability approach to structure the analysis, the study analyzes interview and socio-economic survey data to examine motivations for adopting two supplemental off-farm activities: small-scale charcoal production and illegal rhino hunting. Findings suggest that smallholders view farming as increasingly unviable under market capitalism. In cases where rural households diversify into charcoal production, economic deprivation initially drives participation. Households gradually become locked into charcoal production traps as the activity degrades ecosystem services and social systems come under stress. Findings indicate that the non-monetary dimensions of poverty play a larger relative role in the adoption of illegal wildlife hunting. International conservation initiatives contribute to the uptake of illegal wildlife hunting among agriculturalists as diminished control over wildlife and other natural resources compromises the ability of smallholders to live with dignity. Illegal rhino hunting and other activities classified as wildlife crimes are consistently linked to higher levels of well-being, despite the high associated risks. In contrast, charcoal production is widely associated with few personal risks but low standards of living. This study sheds light on the complex motivations and drivers of livelihood diversification in smallholder farming landscapes spaces, provides insights on future trajectories of small-scale agricultural systems, and identifies strategies for better aligning rural development and conservation goals with local value systems.

Transformations and future pathways of smallholder farming in the Global South II

Transfer the Smallholder Farming to Large-scale Farming: Absorb Subjects of Large-scale Farming to Promote Agricultural Development

Lijuan Wang - Zhejiang Academy of Agricultural Sciences | **Yangfen Chen** - Chinese Academy of Agricultural Sciences | **Bao Hu** - Zhejiang Academy of Agricultural Sciences | **Changcun Wen** - Zhejiang Academy of Agricultural Sciences

With the rise of population aging and the transfer of young and middle-aged agricultural labor force, China is facing an imminent agricultural labor shortage. Thus, it is necessary to change the smallholder farming into large-scale farming. A stable farmland property right system has been established as a support for large-scale farming, while large number of farmland still has been abandoned because of the lack of the new subjects of large-scale farming. How to cultivate new subjects has been an important issue in the process of large-scale farming development. There are great regional differences in agricultural resources as well as in agricultural development level in China, and in some regions with poor agricultural resources and high land productivity like Zhejiang Province in the eastern coastal area, a large number of farmers go out to other regions and engage in large-scale farming acting as investors. This provides a new way to cultivate new subjects of large-scale farming for the host regions. Which regions the investors prefer and how they make decision on location choice. Result shows that cultivated land resources, agricultural development, natural environment and the physical distance between the original and the investment are the main influencing factors of location choice of the agricultural trans-regional business. According to the result, a strategy of "targeted investment" was put forward to improve the effect of regional agricultural investment attraction.

Does value addition or market participation significantly affect cassava commercialization in ASAL areas? A case of Siaya County, Kenya.

Florence Opondo - Laikipia University | **Poti Owili** - Laikipia University

Value addition in agriculture has increasingly been adopted as a strategy for enhancing product quality and thus improving household income. Market participation on the other hand has been extensively studied as a concept of commercialization whereby smallholder farmers participate in both input and output markets. Enhancing commercialization involves integration of both value addition and market participation. Among the crops with a high potential of both value addition and market participation is cassava. This crop is known to thrive in ASAL (Arid and Semi-arid) areas where food security is a challenge. The adoption of value addition in these areas is still low while market participation is limited and it is mostly done informally. The government and have intervened in various ways to promote cassava commercialization without much success. Is it possible that this could be attributed to lack of understanding on the contribution of each element to commercialization? Data was collected from 181 farm households through a multistage and systematic random sampling. Commercialization index was constructed and used to characterize the levels of commercialization. The study applied an ordered logistic regression model to assess the determinants of value addition and market participation. The study found that majority of smallholder farmers from the two sub-counties in Siaya County engaged in low levels of value addition and market participation. Results further indicated that age of the household head, membership to a farm based group and total household size significantly influenced both value addition and market participation. The study recommends that farmers should actively participate in farm based groups where a number of trainings related to value addition and market participation are conducted. Also, farm households should utilize household labour in undertaking cassava commercialization activities which are known to be labour intensive.

Keywords: commercialization, cassava, smallholder farmers, value addition, market participation

Use of Agricultural Innovations and its Effects on Finger Millet Yields among Smallholder farmers in Kenya

Rebecca Jerop - Egerton University | **Peter Dannenberg** - University of Cologne | **George Owour** - Egerton University | **Patience Mshenga** - Egerton University | **Paul Kimurto** - Egerton University

Finger millet is an important drought tolerant and nutritive underutilized cereal crop in Kenya and especially in the ASAL areas like Elgeyo-Marakwet County which is characterized by high incidence of poverty. However, yield of the crop is low. Using agricultural innovation on this crop can increase yields and consequently raise household income and reduce poverty. Data obtained from 384 small holder farmers from Elgeyo-Marakwet County using multi-stage sampling technique, were used to assess the effects of four agricultural innovations (improved seed variety, conservation tillage, integrated pest and weed management and group marketing) on finger millet yields. Stochastic frontier model was used to assess the effects of these innovations on yields. The parameters of the function were estimated by maximum likelihood function half-normal frontier using STATA version 14.

The inefficiency parameter estimates indicated three innovations namely; improved varieties, conservation tillage and group marketing, as having significant and positive effect on yields. Level of education, household size and extension services were the key farmer and institutional characteristics found to have significant influence on yields. Based on these findings its recommended that, research, learning and non-governmental organization promoting these innovations have to plan in such a way that finger millet farming household access sufficient information on the benefits obtained from adopting these innovations.

Key words: Agricultural innovations, yields, finger millet

Economic Viability of Marginal and Small Agricultural Households in India

Raya Das - Jawaharlal Nehru University

The most crucial concern of today's agriculture in India is the growing marginalisation of land and the viability of agriculture as a source of livelihood for rural households. According to the latest survey of agricultural households by National Sample Survey Organisation (2012-13), 87 percent of agricultural households are marginal and small farmer comprising 57 percent share of operated land at all India level. Against the backdrop of extremely unequal land distribution, lack of institutional accessibility and property rights make this segment as the most vulnerable in the agrarian production organisation (NCEUS Report, 2008). In this context, this paper analyses the economic viability of small and marginal farmers in a regional framework. The viability of agricultural household has been conceptualized as the potentiality of agricultural income to generate subsistence level of income defined by certain parameters. At all India level, around 60 percent of marginal farm households are unable to earn subsistent level of income with present level of earning from all reported sources. The viability of marginal and small agricultural households depends on multiple factors such as off-farm income, crop productivity, irrigation intensity, share of area under high value crops, institutional facilities and socio-economic characteristics of households. Linear Discriminant Function Analysis has been canvassed to differentiate between the economically non-viable and viable agricultural households and to assess the contribution of these variables to the economic viability of the household. It is observed that the share of livestock income followed by ownership of land and productivity level explain the maximum share of the discriminating coefficient of viable and non-viable farm households for the marginal and small agricultural households. Hence, augmenting productivity at farm level and boosting up the livestock sector are important from the policy point of view to ensure the viability of marginal and small agricultural households in India.

Transformations and future pathways of smallholder farming in the Global South III

Bringing the politics back in: Towards a political-economy informed livelihoods approach for rural poverty analysis

Mark Vicol - University of Sydney

Livelihoods approaches to understanding rural poverty and socioeconomic change in low-income countries have had a significant influence in the last two decades. Such approaches have enabled a welcome shift in rural poverty research from conventional econometric-driven and single sector analysis to a 'people-first' approach that takes the individual life-world as the starting point of analysis. However, in recent years livelihoods approaches have increasingly been critiqued as pre-occupied with micro-individualism and agency, particularly in the unproblematised and overly-instrumental use of the livelihood capitals approach for rural poverty analysis. This is at the expense of understanding the broader social and political relations that structure livelihood possibilities and outcomes. In response, Ian Scoones (2015) has recently proposed an integrated approach to rural poverty analysis that combines the insights of livelihoods approaches with critical agrarian political economy. A combined approach can address critical questions of why certain livelihoods are possible for some, but not for others. There remain, however, theoretical tensions in combining these two different frameworks, particularly because for agrarian political economy the primary analytical category is class, while for livelihoods the focus is the individual or household. This paper proposes that a livelihood pathways-based approach provides a way forward for resolving these tensions. This is illustrated with reference to insights from recent livelihoods-focused field work in rural India, Indonesia and Myanmar.

Shaping Agriculture Practices through Commercialisation Discourse; A case from Ghana's Brong Ahafo Region.

James Bofo - University of Queensland

Agriculture commercialisation is framed as pathway out of poverty for smallholder farmers in Ghana. This discourse drives government policies and donor-sponsored projects at the local level, with outcomes that are changing agriculture practices, including land use and selection of crop types, as smallholder farmers seek to find ways to enter into the cash economy. This paper critically analyses the multiple processes driving agricultural commercialisation practices and their local level impacts. It does this through an analysis of Wenchi and Kintampo Municipalities in the Brong Ahafo Region of Ghana – widely described as the 'bread basket' of Ghana. The paper presents data from interviews, focus group discussions and farm-based ethnographic observations conducted over six months throughout 2016 to identify discourses of commercialisation and modernisation, and their intersection with the transition from food to export cropping. Based on data presented in this paper, I argue that changes in land use is directly tied to this commercialisation of agriculture imperative; and with outcomes that pose significant adverse socio-economic consequences. The paper concludes that while commercialisation and marketization narratives – with a specific focus on export markets – are shaping agricultural practices, these largely ignore the local needs and sustainable livelihood options for smallholder farmers in Ghana.

Gender and Global Value Chains: drivers of change and diverse outcomes in smallholder cocoa farming

Stephanie Barrientos - University of Manchester

Gender analysis has long examined the unpaid role women play in commercial agriculture, including their role as unpaid family labour on smallholder farms. Integration of smallholders into global value chains brings another dimension less often explored in the literature. Some large agri-food multinational companies concerned about the future resilience and sustainability of supply are increasingly promoting gender equality within their value chains. Gendered analysis of such initiatives requires analysis of tensions between global drivers of commercial sourcing and locally embedded gender norms that can play out differently across production locations. This paper draws on global value chain (GVC) analysis and feminist political economy to develop a global (re)production network (GrPN) framework for examining how value chain participation can reconfigure gendered divisions between commercial production and women's unpaid work as a contested process. Applied to small-scale agriculture, contestation can be multi-faceted involving tensions between diverse global and local drivers and actors: farm households, commercial companies, civil society and public organisations. This paper analyses these gendered tensions drawing on a case study of cocoa-chocolate sourcing from Ghana. It applies a GrPN approach to examine the rationale for an intervention by a leading chocolate manufacturer (Mondelez/Cadbury) to support socio-economic sustainability in cocoa farming, incorporating a gender focus. It compares this initiative across two cocoa communities in Ghana, examining how and why gendered contestation and outcomes evolved differently at local levels. It argues that whilst value chain initiatives can disrupt embedded gender norms with potential benefits for women in smallholder farming, they also risk re-creating gendered inequalities across the broader commercial value chain terrain.

Acquiring and Maintaining a Regional Advantage in Agriculture: Focusing on Innovation and Shipment Strategy in Japanese Soybean and Strawberry Production Districts

Hajime Kobayashi - Osaka University

Development of the national and global commodity chain has enabled consumers to obtain various foods at lower prices, which has forced farmers in developed countries to survive in severe interregional competition. Japanese agricultural geographers have recognized the importance of innovation in explaining the mechanism of interregional competition. However, they have not clarified the process of innovation in agricultural areas in detail. This study aims to uncover how farmers and their supporters acquire and maintain their advantage in the market, with a focus on the innovation process. For this purpose, I have conducted two case studies on black soybean and strawberry production in Japanese agricultural areas. Japanese farmers in larger production districts often outsource their shipments to agricultural cooperatives in order to achieve economies of scale in the market. Such outsourcing has played an important role in successfully enhancing product quality and branding, but it may create selection pressure on farmers both directly and indirectly. Concerning black soybeans, agricultural cooperatives have had to ship their commodities in a hurry to avoid being late for peak demand and acquired buyers' credits each year. However, early shipment has posed considerable hardships on farmers for whom much heavier labor is required to produce high quality crops. Regarding strawberries, the adoption rate and speed of new strawberry varieties has been higher in large production districts, and agricultural cooperatives have been well organized there. They have contributed to extend new varieties by providing information to farmers.

In smaller production districts, farmers have tended to ship on their own, and the adoption rate of new strawberry varieties has not been as high. These results indicate that shipment strategy may affect the way in which production districts develop and their possibility of doing so, as shipment strategy influences labor requirements and the possibility of innovation diffusion.

Panel Session

African futures and the future of global capitalism

Stefan Ouma - Goethe University Frankfurt | **James Murphy** - Clark University | **Alex Hughes** - Newcastle University

The trajectories of African economies and the history of Euro-Atlantic capitalism have been firmly entangled. While the continent became increasingly marginalized in academic debates and world affairs in the 1980s and 1990s, 'Africa' is now heralded as the last frontier of global capitalism by businesses, international organizations, governments and scholars inside and outside of Africa. Some even go further and say that the social, economic and ecological future of (global) capitalism is being shaped by movements and events taking place on the continent right now (Mbembe 2016). The theme of "African futures" reminds us that the future of Africa and that of globalized capitalism (and its potential alternatives) are intertwined in complex ways. What conceptualisations of "African futures" exist across the whole range of economic, technological, social and ecological fields? Whose futures are being considered and whose interests are being served? How does the rise of the BRICS and their increasing involvement in Africa recalibrate the question of African futures?

At the same time, it remains an open question how well economic geographers and other social scientists, inside and outside of Africa, are positioned to engage with the positionality of African political economies in globalized capitalism and the theme of "African futures"?

Furthermore, what kinds of knowledges, narratives and framings do we mobilize to engage with both, especially in light of the recent calls for "decolonizing the curricula" and "decolonizing the academy"? How would we know when economic-geographical knowledge is more or less "colonized"? Is it simply about the positionalities and identities of researchers and from what locations they do or write the work? Is it about the methods used? Is it about our curricula and the demographic make-up of the academia? And if so – what readings and professional politics might support a decolonized politics of the future?

Panel Session: African futures and the future of global capitalism: Socio-economic futures I

Africa futures and the future of capitalism II: Comparative urbanisms and natural resources

Francis Owusu - Iowa State University

In the much of the popular media the discourse around Africa is changing. Whereas stories of the "hopeless continent" abounded a decade ago, it is now increasingly seen as the final global investment frontier with rapid uptake of cellular technology and economic growth. Although much of this growth is propelled by natural resources, the transformations offer many opportunities as well as challenges for African cities and raise many questions about the role of cities in the continent's development prospects. How has the recent growth turnaround affected cities? Can African cities provide the needed infrastructure and services to support their rapidly growing population as well as meet the needs of investors? Can the natural resource-driven growth spur the necessary structural diversification in the cities to drive the economies if and when resources are depleted? How vulnerable are Africa's burgeoning coastal cities to sea level rise associated with climate change. Can the cities generate enough resources for effective adaptation of these changes? My presentation will address these questions as they relate to continent's future.

Economic-geographic theory from the South: African experience in the global economy

Padraig Carmody - Trinity College Dublin and University of Johannesburg

Most economic-geographic thinking and theorising takes place in relation to spaces and production networks centred in the Global North and East. How does adopting an Afro-centric perspective on patterns of economic restructuring on the continent and beyond change or challenge our understandings of these processes? In what ways might African experience inform economic-geographic thinking more broadly and should theory from the South be developed inductively, deductively or retroductively? This intervention will explore these issues with reference to concrete examples and explore the potential applicability of economic-geographic concepts developed in relation to Africa to other parts of the world.

African futures: decolonizing African curricula by creating African entrepreneurs

Mangasini Katundu - Moshi Cooperative University

The debate on decolonizing the African curricula is not new and has been dominating the higher education talks for some time. Proponents for this move argue that African Curriculum is still suffering from the colonial syndrome which was meant to create job seekers and not job creators. It is also argued that, many students who study within African universities are still taught based on a curriculum designed somewhere in the west. They learn western concepts, culture and applications and then they graduate and end up unable to use it in their African work environment. Likewise, African universities do not produce graduates which match the demand of the labour market. It is argued that curriculum development cannot be just equated with having or producing a syllabus. Rather, it is a social process that is grounded in concrete practices situated within the concrete social environment of a particular university. Many governments in Africa have expanded higher education and increased enrolment rates which has resulted into an increase in number of graduate who enter the labour market annually. A shift from knowledge to competence-based curriculum will bridge the knowledge-skills gap by matching the curriculum with what employers need. It is important to note that, not all graduate will be employed, vacancies are few. Hence, the future of Africa lies on creating, "African entrepreneurs". It is proposed that universities in Africa should design their curriculums in such a way that, they create "African entrepreneurs". Entrepreneurship nowadays is seen as the viable solution to graduate unemployment. In order to make meaningful changes in higher education, it is proposed that, Africa must tackle and dismantle the epistemic violence and hegemony of Eurocentrism, completely rethink, reframe and reconstruct the curriculum and place Africa at the centre of teaching, learning and research.

Africa's future of extraversion

Heidi Haugen - University of Oslo

"More than ever, the discourse of African marginality is a nonsense", Jean-François Bayart wrote during the heights of Afro-pessimism in the Western world (Bayart 2000: 267). The narrative that African societies have been isolated is all but innocuous, as it feeds into portrayals of the continent as wanting. My talk will start from Bayart's recommendation that we understand and approach African societies as ordinary, and capture the dynamics of extraversion through the concepts of locality (terroir) and action. To this we should add space: Extraversion reorders relations between entities, and is thus an inherently spatial process. Engagements between African economies and other capitalist systems have taken on diverse forms. Yet, they have played but a cameo role in economic-geographical knowledge production. In African settings, economic geographers have generally left the kind of contextually sensitive analysis they normally undertake to economic historians and anthropologists. Knowledge in and about Africa increasingly travel along axes that do not incorporate Euro-Atlantic institutions: China has scaled up its scholarship programs for students and professionals and joint research programs with African partners, Malaysia has become a site for Africans to study Islamic finance, and Asia studies programs are established in African countries. These developments invite us to look back and reconsider the role of knowledge production in colonization and decolonization processes in Africa. Looking forward, they force us to acknowledge that knowledge is plural and recognize the power involved in choosing who we cite, invite to speak, and put on our curricula.

The Kenyan Political Economy and Global Capitalism

Maggie Opondo - University of Nairobi

Elections in Africa are often marred with violence and a lot of uncertainty. After the 2007/8-post election violence in Kenya there was a concerted international (particularly from the west) effort to chart a new road map that culminated in the promulgation of a new constitution in 2010. The 2010 constitution put in place a structure that appeared to address both the political and economic issues that almost led Kenya to the brink in 2007/8. Since 2010, Kenya has held 'free' and 'fair' elections – a perspective that depends on which side of the political economic divide one leans towards. Kenyans have always assumed that the west (global capitalism by extension) is interested in creating democratic institutions. The 2017 Kenyan elections make an interesting study of how democracy that the west preaches can easily be sacrificed at the altar of global capitalism.

Panel Session: African futures and the future of global capitalism: Socioecological futures II

Grounding African Futures: Development corridors as dreamscapes of modernity?

Detlef Müller-Mahn - University of Bonn

Development corridors are criss-crossing the African continent. Some only on paper, and some already in practice as zones of investment and accelerated growth. Regardless of their stage of implementation, they are powerful tools of spatial planning and rural transformation, with far-reaching effects for the populations in the peripheries. This presentation will propose some hypotheses to scrutinize the role of development corridors as tools of 'future-making' (Appadurai 2013). It views them as spatial imaginations or 'dreamscapes of modernity' (Jasanoff and Kim, 2015), which raises the following questions: How are futures manufactured, or, in other words, put on the ground? To what extent does this reflect the visions and aspirations of Africans themselves? In which way are 'desirable futures' expressed, performed, politically negotiated and put into practice? And finally: Which modernity is mirrored in the dreamscapes of the corridors?

Aspirations and African Futures: A Capability Approach Perspective

Julie Silva - University of Maryland, College Park

Aspirations represent ideas of the future embodied in hopes, goals, dreams, and ambitions. To the extent that the ability to desire and pursue a better future adds value to human life, the capacity to aspire is a cognitive dimension of well-being. Aspirations also act as signifiers of local value systems and provide insights into motivations for action and inaction. Within Amartya Sen's capability approach, a growing body of work frames aspirations as a catalyst of positive change. The capability approach offers a promising framework for conceptualising African futures in a manner more deeply informed by contextually relevant worldviews, values, and wider socio-economic relations. Drawing from research on illegal wildlife hunting and small-scale charcoal production, I briefly illustrate how capability framings that account for the future-oriented logic of aspirations produce alternative narratives of African development within the global structure of capitalism.

Changing climate and agrarian relations in a complex globalism

Joseph Yaro - University of Ghana

The growth of capitalism over the decades has complicated agrarian relations in Africa. These relations are even more tensed in an era of climate change when environmental pressure has exerted considerable production pressure on land and labour resources in agriculture. Farmers negotiating their way out of increasing capitalist's relations of vertical production networks and stiff competition in addition to pre-existing unfair trade and highly unreliable weather systems has led to a completely new terrain for agrarian studies. These trends and processes call to question the future of the African small farmer and African agriculture within the globalized capitalist system. Increasingly, precarious livelihoods are adopted all over Africa by a failing peasantry described as those dropping off in contrast to narratives positing significant numbers stepping up farming activities and even diversifying into high earning activities. There is the need to critically interrogate these fine pathways generated with highly ideological lenses and discourses that seek to valorize contemporary capitalist structures or demonize them.

Revisiting the Agrarian Question: Agricultural Futures and Smallholders' Adaptive Capacity

Opportuna Kweka - University of Dar es Salaam

Panel speaker

ALTERNATIVE ECONOMIES AND PRACTICES

Session

Alternative economic practices and spaces

José Luis Sánchez-Hernández - Universidad de Salamanca | **Johannes Glückler** - Universität Heidelberg

At least since the unleashing of the ongoing financial and economic crises in 2008, a great variety of alternative economic practices (AEPs) has been flourishing across regions in the world. Time banks, community gardens, organic/local food consumer groups, barter/producer markets, or social currencies, to name just a few, have evolved or been resurrected as forms of economic coordination based on sets of values and institutions which enhance participation, consensus, sustainability and localness. Despite the growing body of in-depth qualitative case-studies, a conceptualization of these practices with (at least some of) the main theoretical tools of economic geography is still missing. Marxist, anarchist and socio-technical transition approaches should not be the only frameworks to unveil the alternativeness of AEPs. Since they pretend to develop an alternative economy with a particular focus on places and local communities, they might be scrutinized in the light of political economy, relational, institutional or evolutionary perspectives in economic geography as well. We welcome theoretical and empirical papers related, among others, to the following questions: -How and to what extent are AEPs actually alternative? Do AEPs offer alternatives to capitalism, generally, or do they contribute to the creation of varieties of capitalism? -What are the institutional conditions and effects of AEPs? How do AEPs affect the resilience of cities, social inclusion, and collective wellbeing? -Are state-led practices as alternative as grassroots projects? -How can the development of alternative economies avoid parochialism and territorial exclusion? -How do AEPs relate to and connect with the 'conventional' economy? -What are the institutional and organizational innovations found in AEPs across the world? -What is the role of meeting places (squares, streets, gardens, commons) in keeping these practices alive in the digital age? Please send your paper title and abstract to José Luis Sánchez-Hernández (jlsh@usal.es).

Alternative economic practices and spaces I

Is economic geography a pro-growth science? A critical reflection of and prospects for concepts of economic practices and spaces.

Christian Schulz - University of Luxembourg | **Fabian Faller** - Christian-Albrechts-Universität zu Kiel

Against the backdrop of current debates around degrowth, alternative practices and diverse economies (Krueger et al. 2017, Zademach and Hillebrand 2013, Gibbs and O'Neill 2017, Faller 2016), the main aim of this paper is to critically reflect upon prevailing concepts and models used in contemporary economic geography. Illustrative examples from different analytical scales and epistemological levels will be discussed in order to a) carve out the concepts' inherent growth paradigm, b) critically question their appropriateness for understanding economic development in times of pressing challenges such as climatic change, growing and aging populations, growing energy demand, growing urbanization, and the digitalization of all life-spheres, and c) provide suggestions of adjustments needed for economic geography research on sustainability transitions. The paper will discuss these challenges at three conceptual scales, that is 1) Global Production Networks (macro-level), 2) Clusters and Smart Specialisation (meso-level), and 3) Entrepreneurship and Place Leadership (micro-level). In each case, the underlying development and growth rationales, the related terminology used, as well as the reference framework for evaluation and empirical investigation will be scrutinized before elaborating on the respective potentials for adaptation.

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Institutional diversity, market borders and alternative economic practices

Christian Berndt - University of Zurich

There has been increasing recognition within heterodox economic geography widely understood of the need to problematize naturalized divisions between a formal market-driven capitalist economy and its various others. Against this an understanding of economic life has been advanced that stresses diversity and pluralism, acknowledging that neither commodification nor de-commodification can ever be completed fully. Rather than starting from pre-given non/capitalist or non/market boundaries and from predefined "normal" and "alternative" economies, such a perspective highlights processes of marketization (and demarketization) and is interested in the ways in which concrete economic entities emerge in a struggle around those boundaries.

In principle, such an entity may either be perceived as belonging to the "normal" economy (e.g. a concrete market, a certain business firm) or to be part of some alternative realm (e.g. a sharing project, a housing cooperative). In all these cases, it is possible to approach their emergence as an open-ended process that involves the continuous drawing, blurring and shifting of boundaries. Geography plays a crucial role in this ambivalent struggle. It is the materialization of economic and social differences in the form of spatial borders which stabilizes marketization and demarketization processes, giving the production of market-inside and outside particular force.

Using the example of cooperative housing in Zurich as illustrative example, the paper applies this perspective, reading the emergence of this "alternative" economic phenomenon as a malleable phenomenon that is ambiguously positioned between "market" and "community" and (private and public) "hierarchy". I highlight the ambivalent coexistence of commodification and non-commodification and point to non-market aspects as opening possibilities for "alternatives", at the same time acknowledging the impossibility to disentangle from the so-called formal economy.

Spatial diffusion of alternative economic practices

Anna Butzin - Institute for Work and Technology | **Hugues Jeannerat** - University of Neuchâtel

The paper analyses alternative economic practices (AEPs), such as urban gardening, transition towns, or sharing initiatives, in relation to socio-economic change and territorial development. It argues that socio-cultural contexts at local and regional scale construct value of AEPs by problem setting and problem solving activities rather than by market competitiveness.

An open question is how AEPs diffuse across space, since competitiveness, as a motivation for AEPs diffusion is not driving force. Our hypothesis is that the main issue is no longer to produce locally and consume globally, but to co-produce and implement multi-locally through territorial dynamics of up-scaling and down-scaling problems and solutions.

By developing a typology of AEPs spatial diffusion patterns, this contribution focusses on the interplay of new social practices and business models, up-scaling and down-scaling, institutionalization and remain in niches. We suggest four diffusion types, namely regional social innovation milieus, up-scaled solution adoption, user-based territorial broadening, and transitional up and down-scaling, representing multi-local co-production and implementation of AEPs. Empirical foundation of the types bases on data generated in two EU-funded research projects on social innovations.

From partnership to minimum standard. Mapping the dynamics of alternativeness in global fair trade value chains

Jutta Kister - Universität Innsbruck

Within the vital discussion around alternative economies, 'fair trade', containing of a longstanding tradition as alternative production, trading and consumption pattern of global significance has received little recognition among economic geographers. What is summed up under 'fair trade' today shows up to be a diverse collection of trading practices being the result of a negotiation process between a global heterogenic social movement and the capturing attempts of mainstream conventional economy. While the conventionalisation of fair trade is on a prosperous pathway in many countries, in Germany there are many alternative trading organisations eagerly practising partnership in trading (rather than completing transactions based on a minimum standard) and keeping alive World Shops as alternative selling points. In doing so, these niche market participants are maintaining alternativeness at a high level.

This presentation aims to map global value chain-configurations in 'fair trade' over time, combining it to an analysis of the evolution of 'fair trade' in Germany. By comparing the configurations it gets possible to demonstrate dynamics in 'fair trade'. It also aims to show diverse types of 'fair trading' value chains and argues why they evolved.

Terms such as solidarity, partnership and caring for the distant 'other' are conceptualized by an actor-based analysis of the relationships going along with key transactions. I therefore argue for a more precise analysis of the relationships between the key participants of the value chain. The results of the empirical study of global 'fair trade' value chains leading into the German market showed that the ways these relationships between participants are arranged, has a formative influence on the way e.g. knowledge

is transferred as well as on the scopes of action and development options of the producer groups involved in the respective value chain.

Alternative economic practices and spaces II

The dynamics of social innovation in the new food system in Turkey

Ebru Seçkin - Yildiz Technical University | **Ayşe Nur Ökten** - Yildiz Technical University

Social innovation is one of the key drivers of bottom-up development strategies which have been developed since 1980s as an alternative to top-down development strategies. This term responds to the grand challenges that societies are facing. Non-public actors play an active role in the formulation and implementation of new social solutions. The term alternative food networks (AFNs) is used in this study as an example of social innovation.

To access quality and healthy food is a major issue needed to overcome in the challenge against conventional and global food systems. In this context, alternative food networks (AFNs) bear a transformative potential towards a more just, equal and sustainable food system because they are built upon the re-connection or close relationships between producer and consumer. Networks are described as one of the most important characteristics of the new food systems. The importance of new types of networks, civil society organizations, consumer co-ops, and social entrepreneurs engaged in finding alternative models against to conventional or global food systems is growing (Kneafsey et al., 2008; Goodman et al., 2012; Sage, 2011; Hinrichs, 2003; Mount, 2012).

This paper focuses on an initiative taking place in Turkey (in Istanbul), in which non-profit organizations and social entrepreneurs are interacting for the establishment of alternative food networks as a new food governance system. The aim of the paper is to construct a typology of actors and their roles within the AFNs in Turkey. Four key dimensions of social innovation (agents, purposes, drivers and processes) are explored in relation to the research questions below:

- How can the actors who are involved in alternative food networks be categorized?
- What is the function and role of each actor within the changing food system?
- What are the modes of interaction between actors involved?

Keywords: social innovation, alternative food networks, food democracy, networks, social embeddedness.

Empresas recuperadas in Argentina: Resilience by self-management of labour

Tim Roesler - Philipps-Universität Marburg

Resilience to economic crisis and the loss of jobs has become an important subject of political and socioeconomic studies. A specific form of this are factories or enterprises which are recovered by former workers who react to their dismissal with self-management of labour. A very prominent example of recovered factories are empresas recuperadas in Argentina. Based on the concepts of Global Production Networks and Resilience, the example of empresas recuperadas in Argentina will highlight how workers self-management can preserve jobs after economic crisis and the closing of factories.

In empresas recuperadas former workers take factories and means of production after a bankruptcy and revive the former production in formal or informal ways by forming worker cooperatives. Especially since the Argentina crisis in 2001/2002, this concept has been recognised as a strategy of workers to resist to their loss of jobs. Today, empresas recuperadas are still relevant, but face much political and economic pressure since the change in Argentinian government in 2015.

Based on examples of empresas recuperadas from different sectors and different periods of emergence it will be shown how workers self-managed labour is an alternative way economic practice and resilience. By taking the perspective of (global) production networks, the processes of recovering factories will be viewed as part of a larger economic and social network that is embedded in specific cultural and political frameworks. By doing so, it will be shown what the success factors and barriers of recovered factories in Argentina are, and how the (partially informal) working practices in recovered factories are influencing economic processes such as customer relations, innovations, income and job security.

Diverse economies and contested neoliberalism. Case study of a farmer's cooperative in O'Higgins region (central Chile)

Diana Carolina Morales Arcila - Newcastle University

This presentation aims to contribute to the debate on diverse economies as responses and adaptations to neoliberalism, by introducing the experiences of Latin American rural regions to the conversation. Using the case study of the Cooperativa Campesina de Peumo COOPEUMO, I argue that cooperative organisations can be framed within the wider theme of regional cooperation, if taken as context dependant processes of voluntary and concerted work amongst diverse regional actors. Cooperative agreements play a crucial role in reshaping and contesting neoliberalism at a local scale, while contributing to the improvement of local and regional development. The implementation of neoliberal policies in unprepared ground, have resulted in and intensified inequality, unsustainable competition, and uneven development. This situation is aggravated in regions like O'Higgins, where its rural area continues to play a crucial role in regional economy, and is inhabited by historically marginalised population. This context has encouraged the creation of different strategies of adaptation and contestation, within which regional cooperation is accounted. By exploring the rationales and evolution of the cooperative, I argue that it has served to reshape and contest neoliberalism according to the local needs, resources, and limitations, understanding local development as growth, but intervening to correct market's distribute failures.

Alternative economic practices and spaces III

The Cultural Political Economy of local-alternative food networks

Denise Misleh - The University of Manchester

Alternative Food Networks is a broad concept used to define a system of food provision that falls outside the conventional agri-food system by short-circuiting the mainstream chains through new relationships between producers, consumers and other actors involved. Local Food Networks underscore the respatialisation of the network bringing production and consumption closer in space, shortening geographical but also relational distance. However, AFNs transformative potential has remained one of the most controversial issues in the literature. Diverse interpretations of AFNs' alterity appeared to favour specific dimensions depending on the theoretical perspectives employed. Frameworks on a socio-cultural strand tend to consider the economy as site of decisions and ethical practices, while political economic approaches tend to close the possibilities of change as AFNs are restrained by capitalist economic structures. This paper seeks to integrate these dimensions by employing a Cultural Political Economic (CPE) approach which allows conceptualising the wide empirical diversity of Local AFNs and its different positionalities. CPE aims to explain co-evolution between semiotic and extra-semiotic factors in the movement from construal of the world to construction of social orders, which is shaped by evolutionary mechanism of variation, selection and retention (Sum and Jessop, 2013). Crisis or periods of instability are central as diverse economic imaginaries emerge as sources of explanation and recovery. Only some of these imaginaries get selected for action, being translated in material practices and some might even get institutionalised. In this line, AFNs are analysed as contested alternative agri-food imaginaries, which are not based on a single coherent set of values, but rather it comprise competing meanings and values which are selectively translated to economic strategies and mechanism for capturing and redistributing economic value. CPE allows investigating AFNs transformative potential as an open-ended process in which they might take form of restoration, reform, or radical innovation.

How to survive: Artificial quality food spaces and the new forms of rule for farmers embedded in direct marketing strategies

Lucía Argüelles - Universidad Autónoma de Barcelona | **Isabelle Anguelovski** - UAB-ICTA | **Filka Sekulova** - UAB-ICTA

While direct agricultural markets, predicated upon face-to-face ties between producers and consumers, are central components of more alternative, localized and qualified food systems (Hinrichs 2000) scholars have rightfully suggested to avoid obscuring the social inequalities, exclusionary discourses, and relations of power more broadly at work in these activities (Goodman 2003; Slocum 2007; Guthman 2008). They have also called for not inadvertently producing an overly benign view of economic relations embedded in direct marketing and other "alternative" market venues (Sayer 2001; Wilson 2013; Bowen and De Master 2011), and for repoliticizing urban-rural food relations (DuPuis and Goodman 2005).

Different institutional programs are intended to support these forms of agriculture by incentivizing market-led models to add value to certain distinctive products. In this context, quality food spaces emerged: spaces in which particular products or characteristics are ascribed a certain superiority that allows producers to obtain premium prices or sell to exclusive markets. Somehow different from other qualifiers (local, organic, community-based, cooperative), "quality" is abstract and becomes an elastic term. Yet, it

comes quite handy to study production sites where the differentiation alternative VS mainstream is not clear-cut. In this paper, we analyze the contradictions embedded in the quality strategy by looking at the effects and meaning for farmers in a peri-urban agricultural area of Barcelona, where many of these programs overlap. We argue that, although the strategy might have positive impacts on farmers' livelihoods, the use of market-based and entrepreneurial logics and the focus on quality and gastronomy for the benefits of urban customers bring new challenges to producers. These artificial quality food spaces result in imposed new forms of rule to farmers. Their implementation raises important questions in terms of how "quality" products are identified and rated and for whom, with further implications on how farmers perceive and adopt these programs.

Characterisation of organic food consumers in shortened food chains in the urban area of Alicante (Spain)

Ana Espinosa Seguí - University of Alicante

The expansion of the organic food consumption in Spain has faced many obstacles along the last decades. Despite the leading position of Spain in the EU organic agricultural production, the Spanish society still finds itself at an early stage in the phases of commercialisation and consumption.

While importing the majority of the produce to third countries, particularly to North and Central Europe, consumption in Spain remained very weak for decades. The reasons were the higher prices of organic products, the unfavourable atmosphere for developing environmental awareness politics in comparison with the rest of Western Europe and the strong connection of Spanish consumers with the conventional agriculture, among others.

Thus, the tiny organic market had to create alternative channels to connect producers and consumers and to commercialise the products on a local or regional scale.

In many cases, consumers created organic consumers' cooperatives or consumers' associations in order to lead, manage and control the whole value chain of organic products from the consumers' point of view. In this sense, consumers chose consciously their suppliers and dealers in parallel to the strong mass distribution channel.

These entities of consumption link consumers with different social, political and cultural background but sharing a common thread. In order to understand the patterns of organic consumption of consumers in these organisations, a research was conducted in three organic consumers' organisations in the urban area of Alicante (in Spain) during 2017.

Although these organisations were created by social and environmental activists in order to create a constant supply of organic products for themselves and fight for their food sovereignty, the results of this research have shown that many consumers in Alicante buy in them as captive consumers of the atrophied organic commercialisation chain.

Mechanisms of food transition carried by civil society: Insights from the local currency of Puy-de-Dôme, France

Marie Houdart - Irstea

Our communication is part of the scientific and societal debates on the food transition that aims to reconnect agriculture and food on territories. In this context, the food issue may be seen as a lever for territorial issues. For instance, food is central in local currencies (LC), through production and distribution in a local network, with the aim of boosting local economy. Thus, the setting up of a local currency can reveal the ways civil society supports the food transition.

To inform this questioning, we take the example of a LC in Puy-de-Dôme (France). The analytical framework refers to the concept of territory, defined as a system composed of three dimensions: material, symbolic and organizational. In addition to the documentary data (accounting of meetings, project site, association statutes), the analysis employs the data of semi-structured interviews with stakeholders.

We first show what are the material resources created and the boundaries of the area of action that they define. We then highlight the values that constitute the symbolic dimension of the area of action: the alternative to capitalism, the participatory democracy, the ecology, etc. These values are expressed in the statutes of the association and in a charter, as well as through the projects and citizens movements supported by the association (e.g. citizen stores). Finally, we emphasize the organizational dimension of resources created, especially individual and collective empowerment.

These results highlight the mechanisms of the food transition carried by civil society: by building new territory-networks, based on values and organizations of actors engaged in a pragmatic militancy. Therefore, we discuss the capacity of the civil society to allow the food transition by a dominant regime change, both by the replication of projects within the regime, the grow in scale of the project, and the translation of values into mainstream settings.

Alternative economic practices and spaces IV

Communal sharing and reimagining the local economies: perspectives from Sydney, Australia

Inka Santala - University of Wollongong | **Pauline McGuirk** - University of Wollongong

In recent years, cities across the world have witnessed the emergence of alternative economic practices that have come to challenge norms related to production and consumption. Some of the more progressive alternatives, materialising as a response to the unequalising tendencies of the market economy, can be seen to exist through the proliferating practices of communal sharing in contemporary cities. Counter-balancing corporatized forms of the sharing economy (characterised by Uber, AirBnB and the gig economy), various forms of grass-roots organisations, community groups and co-operatives have begun to advocate sharing as an alternative way of organising the city through co-production, shared consumption and non-market forms of exchange. According to sharing advocates, these alternative practices of urban sharing demonstrate citizens' capability to self-organise and rebuild local economies based on shared values and collaboration. Yet, despite a growing interest in supporting such development, little is known about the practices through which communal sharing is realised or about the nature of their potentially transformative implications when it comes to existing economic structures or dominant urban subjectivities. Drawing on preliminary findings from a case study based in the City of Sydney, Australia, this paper aims to shed light on the actually-existing nature of communal sharing. Exploring the potential of communal sharing practices to create new capacities, agency and other-than market-encased subjectivities, the paper will unpack the diversity of actors, practices and aspirations as well as potential controversies and challenges involved. The results will provide insights into the social process of communal sharing, evaluating the extent to which these sharing practices might contribute to the reimagining of local economies or remain vulnerable to reproducing conventional markets, hierarchies and subjects.

Markets for Networks? Structural Dynamics of Social Integration and Economic Exchange in a German Time Bank.

Jakob Hoffmann - Universität Heidelberg | **Johannes Glückler** - Universität Heidelberg | **Adrian Strobel** - Universität Heidelberg

Time banks have been characterized as an expression of alternative economic practices (e.g. Sánchez 2017). Participants come together in a bounded community often at local scale to trade time (i.e. services) in return for credits of an autonomous virtual currency. In the relatively sparse academic literature, time banks have been associated with community development, social inclusion and active citizenship (Gregory 2009; Seyfang 2004). As such, they have become a tool for local policymaking, aimed especially at disadvantaged neighbourhoods. However, apart from qualitative evidence about individual participation and practice, knowledge about the entirety and dynamics of exchanges in time banks is limited. In this explorative study, we analyse the evolution of the exchange network of a German time bank. We use original relational data on over 6,000 transactions over a period of nine years between 2009 and 2017 to examine the structural characteristics and dynamic changes underlying and shaping the community building process. Such dynamic social network analysis offers original insight into the ways time banks produce markets and into the process of gradual embedding of participants and services into an evolving community.

Generation and Transfer of Knowledge between Temporary Clusters and Permanent Sites

Harald Bathelt - University of Toronto | **Sebastian Henn** - Friedrich Schiller University Jena

In recent years, there has been a growing interest in understanding the role of temporary clusters, such as leading international trade fairs and corporate conferences that attract participants from different parts of the world, in disseminating knowledge about markets and technologies. Research in economic geography has been particularly interested in exploring the circumstances of such face-to-face encounters, the types of communities involved, as well as the knowledge ecologies that characterize these events. It has been argued that these gatherings stimulate the creation and dissemination of knowledge over great distances and affect permanent locations and production systems. To date, however, it has not been systematically studied how firms utilize the various knowledge pieces they come across during such events and how these feed back into corporate practices of planning, organizing and producing. This paper aims to contribute at closing this research gap. Based on a mixed-methods approach that includes interviews and systematic observations at corporate conferences in Canada and Germany, we explore the processes how firms gain knowledge at such events, how they make sense of this and how they intentionally and unintentionally integrate new insights into their production processes. We argue that the participation in temporary clusters especially triggers ongoing adjustments and improvements that affect the effectiveness and competitiveness of both individual firms and communities.

The attention economy between busking and corporate retail stores

Daniel Paiva - University of Lisbon | **Pedro Guimarães** - University of Lisbon | **Filipe Matos** - University of Lisbon

This communication focuses on the possible nexus between busking and high street retail. Busking is an informal economic practice in which artists perform their acts on the street, receiving donations from passersby who stop to contemplate the performance. Albeit informal, busking is a highly organized activity in affluent sites where artists have to compete for space and time on the street. Furthermore, the economic success of performances is highly dependent on the performers' capacity to attract attention from passersby.

It has been argued that, in a context of the experience economy, the captivation of the consumer's attention has become the main focus of firms who intend to provide meaningful experiences to consumers. Due to the high levels of marketing competition, methods for capturing the attention of consumers are being thoroughly explored by firms and academics, to the point that some authors speak of the existence of economies of attention.

With this in mind, the purpose of this communication is to address the relations between busking, corporate retail stores, street rhythms, and consumption practices in Largo do Chiado, a small public square in Lisbon's most consumerist and touristic neighborhood Chiado. In this small square, street performers compete for the attention of consumers and tourists, creating positive externalities for cafés, restaurants, and high end stores when they succeed in making consumers and tourists stop and spend time at the square. Our results highlight how street rhythms are shaped by and shape the success of both formal and informal economic practices.

Session

Alternative green practices

Christian Schulz - University of Luxembourg | **Julia Affolderbach** - University of Hull | **Robert Krueger** - Worcester Polytechnic Institute

Debates around the capacity of and limits to the current capitalist mode of production have led many to reconceptualize economic models and to rethink how development occurs in practice. One widely promoted strategy within these debates is the 'green economy'. The idea of a green economy is not new as illustrated by the spread of eco-industrial parks, green clusters, carbon finance and clean technologies. The green economy in practice is often reduced to financial and technological fixes through the diffusion, adoption and mainstreaming of green innovations and technologies or to new green products, services, and markets that sustain the growth imperative of the capitalist system.

This session explores alternative green economies by bringing together work on actually existing alternative practices, experiments and economies that break free from the described current paradigms of greening and speak to emerging de-growth debates. We are looking for examples of new, alternative, diverse, and socially just conceptions of the economy (in a wider sense) and economic development both in the global North and South.

We are particularly interested in empirically grounded case studies including, but not restricted to:

- the dematerialization of production (and consumption)
 - alternatives in agriculture and food production and provision
 - green services & manufacturing
 - alternative finance
 - building construction and urban infrastructures
 - energy demand and supply
 - different forms of sharing economies
 - social and solidarity economy
 - commons, cooperatives and new forms of organizations
 - hybrid organizations
 - bottom-up and grassroots alternatives
 - environmental justice-driven development (including pro-poor growth)
-

Alternative green practices I

The (mis)match between green discourse and green practice in alternative economies.

Jose Luis Sanchez-Hernandez - Universidad de Salamanca

Alternative economic practices pretend to build a more cooperative, inclusive and sustainable model of economic development. They usually re-structure their production, distribution and consumption patterns in order to reduce the ecological footprint. Supporting locally- or proximity-based circuits of value is probably the commonest way to achieve this overarching goal. Nevertheless, these alternative economies face several internal and external constraints which hinder their contribution to a sustainable transition. This paper highlights these constraints in a sample of 55 alternative economic experiences located in seven Spanish cities, including urban gardens, consumer cooperatives, farmers' markets, time banks, local/social currencies and urban commons. Internal constraints are mostly related with lack of financial resources to purchase sustainable food; external ones come from supply shortage in the local environment, which compels stakeholders to resort to distant suppliers, therefore incurring in the food-miles problem. This contravention of the expected behaviour is often legitimized ex-post by arguments borrowed from other orders of worth like trust, community or commitment.

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Energy cooperatives in Germany – an example of successful alternative economies?

Thomas Meister - Universität Bonn | **Britta Klagge** - Universität Bonn

Because of their democratic governance and value-driven approach cooperatives are often regarded as a prime example for alternative economies and contributing to (more) equitable economic development. Furthermore, they theoretically combine production and consumption and are often regionally-oriented. The recent boom of German renewable-energy cooperatives provides an interesting example of how cooperatives can also make an important contribution to sustainable development, here the German energy transition, and its social acceptance. The paper will first show how a specific regulatory environment supported this development and then analyze how German energy cooperatives cope with legal changes leading to less favorable institutional conditions. Based on a comprehensive survey we examine whether they can, apart from their legal form, be regarded as alternative economies. Our analysis is guided by a set of criteria derived from Gibson-Graham's diverse-economies framework, including voluntary and paid work, size and structure of membership, business goals and strategies, especially after the legal changes, as well as regional orientation. We will show how different categories of German energy cooperatives differ with regard to their business models, alternative-economy characteristics and coping strategies. The future development of energy cooperatives in Germany will very likely be as diverse as their recent history, thus illustrating the diversity of alternative-economy organizations as stipulated by Gibson-Graham. Most of them, however, deal with the new regulatory environment pro-actively and are developing business models, which are independent from public support and might lead to new cooperative strategies at the shifting interfaces between state, market and civil-society.

Are Algae and Insect Producers Forming an Innovative Niche for the Contemporary Agri-Food Industry? The Case of Germany and the Netherlands

Arne Bünger - University of Greifswald | **Danel Schiller** - University of Greifswald

In the context of emerging industries, strategies to attain legitimacy and to generate momentum are essential. Especially niches are sources for breakthrough innovations, which often contribute to the adjustment of development trajectories of industries (e.g. Geels 2002).

Algae and insect production are used as an example for a potentially innovative and sustainable niche in this paper. Algae and insects are considered as a more sustainable protein source in comparison to soybeans (e.g. Veldkamp & Bosch 2015, Van Huis 2013). The search for alternative protein sources is motivated by an expected 76% increase of meat products by 2050, a high dependency of the EU on soybean imports, and the environmental footprint of soybean farming.

Against this background, it is the aim of the paper to evaluate the status quo of algae and insect producers and their potential in forming an innovative niche within the agri-food industry. Therefore we will focus on (legitimation-)strategies of producers aiming to generate momentum for the adolescence of the industry and on learning and innovation processes, co-operation and self-

perceived roles. The results are expected to provide evidence on whether there is potential for algae and insects to replace the contemporary regime of soybeans (for feed and food) in the near future.

The empirical analysis is based on semi-structured expert interviews with algae and insect producers in Germany and the Netherlands. The results show that research about algae and insects and knowledge for production are already in place. A rather critical issue is the non-existence of a pronounced (European) market, which poses several bottlenecks, e.g. the difficulty to find production partners, suppliers and customers. In addition, difficulties to adapt legislation procedures at EU-level, the struggle with “liability of newness”, and low intra-industry cohesion are barriers to an upscaling of the industry.

Alternative distribution chains of organic farming produce in Poznań

Ewa Kacprzak - Adam Mickiewicz University | **Barbara Maćkiewicz** - Adam Mickiewicz University

The 1990s saw a period of intense development of eco-farming in Poland, accompanied by an early distribution system of organic farming produce. It was a very dynamic process. Even though, as time passed, we witnessed the substantial intertwining of the distribution of organic farming produce and the distribution system for traditional farming produce, a parallel development were alternative distribution chains as attempts at implementing A socially just concept of the economy.

This research article features a study of the establishment and operation of alternative distribution chains for organic farming produce in Poznań (i.e. the fifth largest conurbation in Poland in terms of the number of inhabitants). We have focused on initiatives based on local eco-farming (the inhabitants of Poznań vs. organic farms from the province of Wielkopolska). The following were included in the research: Poznań Food Cooperative, purchase groups using the Internet, organic farms building their own distribution chains as well as “Dobra” and “Wspólny Stół” social cooperatives.

The results of the research show that alternative distribution chains for organic farming produce in which the production potential of local organic farms is used are of marginal significance in the distribution system of organic food at present. Some of them are of an experimental nature. However, they are extremely precious in terms of the concept of A socially just economy being implemented. It has also been determined that some of the chains are informal or transitory.

The factors determining this state of affairs include: the low income of the inhabitants, a growing but still rather low awareness of consumers regarding the quality of food, the need for greater engagement of consumers with their purchases as part of alternative chains, farmers being discouraged by legal regulations governing direct sales, but, first and foremost, the insufficient promotion of alternative distribution chains for organic farming produce.

Alternative green practices II

Tools for commoning in diverse urban food economies

Oona Morrow - Wageningen University & Research | **Stefan Wahlen** - Wageningen University & Research

Foodsharing.de is a volunteer led food rescue and redistribution network committed to reducing food waste. Participants utilize an online platform and a network of public fridges to decentralize and self-manage the complex logistics of food rescue and redistribution. These activities contribute to an urban food commons, in which food, fridges, and risk are shared and collectively managed (Morrow, forthcoming). This paper draws from ethnographic research with Foodsharing.de to explore the “rules and tools” for commoning food in Berlin. In particular, it explores the role that community created or DIY infrastructures (online sharing platforms, public fridges, community centers and gardens) can play in facilitating grassroots and solidarity driven forms of food sharing. We investigate the performative role that DIY infrastructure can play in making an urban food commons imaginable, if not always governable. Examining the multi-level governance of these commons, as they appear in rules around food and sharing, the paper offers insight into the political possibilities and legal constraints of practicing an urban food commons in Berlin. As an emergent alternative green practice, food sharing interrupts hegemonic performances of platform capitalism in the sharing economy to reveal a diverse food sharing economy rooted in commons, innovation, and solidarity.

Local notions of alternative farming and food practices – civil stakeholders in the organic movements in Bangkok and Chennai

Judith Bopp - Kiel University

Organic food scenes are globally gaining momentum. Their provenance and regional contextualisation are matters of intrigue, as Western perspectives on alternative food movements tend to dominate the discourse. According to Traveling Theory, theories or

ideas may take in local traits when circulating between locations and settings; and transferred to the context of movements, this can mean their integration and potential transformation is adapted to the local pace and scale.

This paper presents empirical findings from field research conducted in Bangkok, Thailand (2013-2016), and Chennai, India (2017). It elaborates how on the one hand the civil stakeholder challenges the public food system through bottom-up participation to stimulate personal well-being and social community in the megacity; and on the other hand, how both regions create their own notions of mindful living beyond the imprint of global movements.

Through observation and open expert interviews, emerging urban scenes were discovered with multiple purposes, and organic food production is promoted for reasons of health, environment, personal lifestyle and solidarity with the rural producers. The movements feature notably the role the civil stakeholder has in advancing health food provision, alternative farming, and consumer-producer cooperatives, thereby advocating matters of public health that public policies yet need to address.

The organic movement thus embodies a New Social Movements perspective which is said to apply to non-class based collective action for socio-cultural, ideological or identity reasons. It beyond represents stakeholder aspirations of mindful living equally found in the Voluntary Simplicity approach.

This study led to insight that organic movements in Bangkok and Chennai receive grounds and impulse largely from within their own societies whereas Western influence appears minor; both scenes explicitly refer back to their indigenous traditional practices in farming. From the starting point of Traveling Theory, this paper suggests a non-Western perspective on citizen led organic food scenes.

Alternative Food Networks as Alternative Green Economic Practices

Marit Rosol - University of Calgary

In this presentation, I will discuss Alternative Food Networks (AFNs) as 'alternative green economic practices'. AFNs can be conceptualized as alternative economic networks in the food sector that seek to transform production-consumption-relations by providing a spatial, economic, environmental, and social alternative to conventional food chains.

Firstly, I will situate AFNs within the alternative economies literature. Like other forms of urban food initiatives (Food Policy Councils, foodsharing, urban gardening, foods banks etc.), AFNs aim for a more environmentally and/ or socially responsible food system. However, they also have economic goals. They are a means to create (self-)employment and thus secure livelihoods for producers and distributors. Consequently, most AFNs can be categorized as alternative-complementary market spaces rather than anti-market or alternative-oppositional spaces.

Based on these findings, secondly, I will present some of the current dynamics of those alternative green practices drawing on my empirical research in Toronto, Berlin and Frankfurt in 2017. Besides well-established models like farmer's markets, box schemes and CSA (Community Supported Agriculture), increasingly we also see start-ups that aim to find solutions to the problems of the contemporary food system, for example the high amount of food waste, through a business model. Their founders sometimes refer to themselves as 'social entrepreneurs'. However, such a 'social and eco-preneurship' model is not free from tensions that arise between social and environmental goals on the one hand, and the aim to secure an income and survive in the marketplace on the other. I will discuss those tensions in relation to the goals and the potentials of AFN to bring about systemic changes to our current food system.

I will close with some reflections on what we can learn from these examples concerning the wider debates on alternative, diverse, and socially just green economies.

Alternative Green Practices

I-Chun Catherine Chang - Macalester College

Session discussant

Session

Degrowth economies as transitional geographies?

Bastian Lange - University of Leipzig | **Benedikt Schmid** - University of Luxembourg

Recently, a lively debate within the discourse on alternative economic geographies centres on so-called open workshops, creative hubs (Schmidt / Brinks et al 2014), FabLabs (Fleischmann / Hielscher et al 2016), repair cafés, etc. as sites of open collaborative processes. Contrary to the prevailing growth paradigm of numerous regional economic approaches, these micro-spaces open up a

lively, transdisciplinary debate about the acquisition of alternative, decentralized, and coproducing concepts. As a practical consequence, these spaces demonstrate insights how manufacturing, repairing, mobility, urban farming, cloth making characterize the city as fabrication plant (Jabareen 2014, Petschow 2016).

Economic geography as a discipline has been invited by different scholars (Smith/Voss/Grin 2010, Truffer 2013) to shed light on so-called transitional geographies. The discipline could contribute in more detailed ways to overcome static e.g. multi-level-perspectives and multi-level theories (Coehnen et al. 2012) within the discourse of transition economies and sustainability goals. The task of the session is to invite papers to better understand the rapidly growing field of “grassroots innovation movements” (Smith 2017). The session will be a platform that seeks to discuss current empirical, conceptual and case-study contributions analysing occurrences of experimental urban transformations (Färber 2014). Potential topics are welcomed, but are not limited to the following thematic sub-fields:

- Upscaling and professionalization in grassroots economies
 - Urban commons and experimental spaces
 - Makerspaces and flexible cooperation between different stakeholders
 - Values and category building in grassroots movements
 - The role of intermediaries, NGOs, and supportive governance policies
 - Digital infrastructures as modes of stabilization
 - Space-making of innovation, co-production and knowledge-sharing
 - The urban fabric as background and resource for decentralized industries
 - local manifestations of degrowth economies
 - organizing for post-growth economies / post-growth organization(s)
 - Shifting meanings of work and economic practice
-

The economics of protest spaces. Naples’ occupied centres between counter-cultural production and openness

Andrea Varriale - Europa-Universität Flensburg

This contribution looks at the socio-economic significance of informal activities in a network of occupied spaces in Naples, Italy. First established as places of political activism and counter-cultural experimentation in the 1970s, occupied spaces in Naples and in Italy have acquired a more explicit economic function in their post-crisis (2008-onwards) iteration. While raising questions – and internal discussions – on how to balance their roles as centres of political contestation with a renewed ambition to tackle socio-economic exclusion in a direct fashion, these spaces host and organise a variety of economically significant activities. These range from culture economy (concerts, writing and production of theatrical pieces, production of short movies) to manufacture and production (set design for theatre, urban gardening) to services such as volunteering medical examinations to counselling for labour issues, and day care for local pre-school children. Drawing on discourse analysis and interviews, this paper elaborates on four discursive and practical tensions arising from such activities, namely that between: (i) economic innovation vs. provision of a localised “fix” to institutional shortcomings; (ii) protest and countercultural production vs. valorisation of professional expertise; (iii) group-based legitimacy vs. legal criteria; and finally between criteria of open access and implicit or explicit selection criteria to access and use these spaces.

Minor and major experimental practices in degrowth centre Can Decreix in Cerbère, France and beyond

Elisa Schramm - University of Oxford

Degrowth has been advanced by some social scientists and activists as a possible alternative way of living or economic ideology, advocating the reversal of economic growth for environmental and social reasons. In 2012, the Research and Degrowth Institute has established the degrowth centre Can Decreix (CD), in Cerbère, France, which is concerned with the reduction of ‘unsustainable’ objects and the ‘transformation of fruits, vegetables, constructions, societies and with testing frugal technologies, arts and agro-ecology’ (degrowth.org). This conference paper draws on the materialist turn in human geography as well as a Deleuzian vocabulary to illuminate the role of non-humans and their capacity to affect humans in the constitution of this degrowth experiment. It also argues that viewing CD specifically as both a place of ‘minor’ and a ‘major’ experiment, a place in which attachments and detachments to particular objects and technologies are innovatively and experimentally reconfigured in more sustainable ways, can reveal interesting tensions and the potential of a space of experimental alternative economic practices. Minor experimentation understands experiment and experience as closely related and refers to a sense of ‘something/happening’, occurring at the ‘edges of knowing’ and working towards the suspension of habits and the creation of new arrangements, through exploratory, processual, ambiguous and tentative experimentation (Jellis 2015). Simultaneously, minor modes of experimentation clashes with ‘major’ impulses, that are here understood as the intentional, human-initiated design of experiments, which seeks to

uniformly extend degrowth practices beyond its original place of experimentation, which reveals a tension between experimentation and planning and demonstration. Importantly, distinguishing between minor and major forms of experimentation can also provide a more nuanced understanding of how experimentally derived practices, knowledges and ideas are spread through the wider movement, attending closely to the transformation that occur between places, passing through rhizomatic and arborescent structures.

Revisiting the Cornucopia? Developing a new research agenda for environmental economic geographers

Robert Krueger - Worcester Polytechnic Institute | **Julia Affolderbach** - University of Hull | **Christian Schulz** - University of Luxembourg

For over half a century the environment has been a concern for society and academics. These concerns have followed two main threads: 1) the scarcity of finite resources and, 2) the negative externalities of industrial production and resource extraction. As a result, various scholarly accounts emerged as a result, resource geography in the 1960s examined both finite resources and environmental externalities. Ecological economics sought to account for full environmental costs by reconnecting the human economy of labor and capital to land. For them, the earth's ecosystems formed the basis of the human economy, both in terms of sources (raw materials) and sinks (pollution). In the 1990s, ecological modernization and sustainable development emerged as economy-environment alternatives as they tried to overcome concerns of resource extraction and pollution. Most recently, however, a new movement has emerged, Degrowth, that has taken issue with both ecological modernization and sustainable development on a number of counts. It has squarely focused its sights on two areas these theories sought to reconcile: the growth imperative of production and consumption. Degrowth represents a fundamental break from the reified "growth imperative", which, heretofore, most commentators appear to embrace.

In each of the previous generation's analysis, economic geography has found a way to explore, if only implicitly at times, the economy-environmental relationship. In this paper we take a historical perspective to develop a research agenda for environmental economic geography in light of the Degrowth alternative. Themes include the localisation and regionalisation of production and consumption networks, changed mobility patterns and life styles that reflect a re-evaluation of resources, products and services, changes in use and allocation of resources and capital as well as new products, services and markets.

FINANCE AND FINANCIALIZATION I: TECHNOLOGIES AND BUSINESS SERVICES

Session

Financial technology (fintech) and the spatial economy

Eric Knight - University of Sydney | **Dariusz Wójcik** - University of Oxford

“Fintech” is a relatively new term that is being applied to the convergence of finance and technology to facilitate the creation of innovative financial products and services. The intersection of these two sectors has profound implications for the spatial economy and has a long history. This session seeks papers that wish to explore the economic geography and spatial dimensions of the fintech economy and emerging issues. Empirical studies are encouraged, but theoretical papers are also welcomed.

Financial technology (Fintech) and the spatial economy I

Mapping the global fintech economy

Eric Knight - University of Sydney | **Dariusz Wojcik** - University of Oxford

The fintech economy has emerged over the last decade as a significant new development within the financial services economy, linking financial institutions to the technology sector. Yet little academic research has mapped its incidence, geographical spread, and characteristics. Drawing on a range of proprietary datasets, this paper seeks to develop a map and typology of the fintech economy in order to inform better understanding.

Finance's hydra: an economic geography of FinTech

Michael Samers - University of Kentucky | **Karen Lai** - National University of Singapore

‘FinTech’ appears to be a ‘chaotic concept’ that describes so many twenty-first century financial and technological innovations or disruptions that it cannot possibly be grouped together under a single theoretical, conceptual, or indeed substantive roof. Yet, therein lies both the motivation and challenge of our ‘state-of-the-art’ paper. In the first part of the paper then, we present an outline of the various contours of FinTech, delineating its many manifestations from blockchain developments to P2P lending, to payments and fund transfers, and so on. In the second part of the paper, we speculate on how and why different elements of this ‘hydra’ have emerged, their apparent growth (especially after 2008), and interrogate the different logics at work (some of which may not be construed as singularly ‘economic’). To be more specific, we ask whether FinTech represents an imperative to lower the cost of financial transactions; whether it is a means of strengthening or financial capacity-building in existing markets (such as its promotion by governmental and private actors in International Financial Centers) or the creation of new ones in cash-dominated poorer countries; whether it represents a strengthening of monopoly incumbents in financial services or conversely, the emergent power of financial ‘start-ups’; whether it is a ‘culturally-driven’ extension of the techno-libertarian cypher-punk movement of the 1980s, or more broadly a deepening of a ‘security-finance complex’. Finally, we draw on three sites of financial regulation (Hong Kong, Singapore, and New York), to offer a geographical perspective on this financial hydra. In doing so, we explore how ‘territoriality’ (understood as the effectivity of laws, rules, regulations, and practices) and trans-territorial networks shape and are shaped by FinTech.

Decentralisation and technologisation of financial market infrastructure

Sabine Dörny - Luxembourg Institute of Socio-Economic Research (LISER) | **Ben Derudder** - Ghent University | **Gary Robinson** - Luxembourg Institute of Socio-Economic Research | **Tom Storme** - Ghent University

How ‘urban’ will FinTech (still) be? This paper identifies and engages with some mutually constitutive trends, which have emerged in finance since the global financial crisis; namely, decentralisation and technologisation. Global finance has been harmonizing for decades driven by ever-more acute crises and exponentially rising financial flows from international financial centres. While political shocks such as Brexit are an obvious decentralising force, fintech, or ‘technology-driven innovation in financial services’ (BIS 2018), is another prominent vector. Some of the fintech revolution’s potential effects on banks and other

financial institutions are already well-documented (Hendrikse et al. 2018). The impact of such tech-related disruptions on crucial financial market infrastructure (FMI), such as clearing, settlement, and exchanges, however, is less clear. FMI is a systemically important building block of the financial eco-systems in international financial centres (IFC) that link and enable global financial activity. Technologies like blockchain offer technology firms an opportunity to disrupt the established order in the finance industry, forcing incumbents to respond by adopting the new technology and forging new partnerships, thereby fragmenting long established conduits of intra-industry co-operation among competitors. This paper seeks to examine the spatial, organisational, functional and regulatory facets of the technology-driven decentralising shift in FMI. In so doing, it seeks to illustrate how technology and finance reshape each other and thus (re)fashion the socio-spatial architectures of the global financial networks.

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The Economic Geographies of the Fintech Sector in China

Fenghua Pan - Beijing Normal University | **Dariusz Wójcik** - University of Oxford

Fintech, also known as internet finance in China, has grown significantly in the country in the last five years. The rise of the fintech sector has profoundly impacted the financial behaviors of economic actors at various levels and reshaped the financial geographies in the country as well. The ongoing growth of fintech will thus exert significant influences on the regional economies in many ways. Despite the increasing importance of the fintech sector, the overall geographies of the sector and the development trajectories are not well studied. Drawing on the detailed information of fintech firms from various sub-sectors in China, this paper is one of the first to explore the development of the fintech sector from the economic geography perspective. It is found that there exist strong geographical disparities of the development of the fintech sector, and several centers of the fintech sector, including Beijing, Shenzhen, Shanghai and Hangzhou, have emerged in the country. In addition, fintech firms from different sub-sectors have distinctive geographies. Overall, the peer-to-peer lending firms are more scattered across the country, while the mobile payment, crowd funding and block chain firms are more concentrated. The development of the fintech sector at local level is highly related to regional endowments on the financial sector, high-tech industry, in particular, the internet sector, as well as the policy supports from the local governments. The future landscape of the fintech sector remains to be seen in a context where the technology and regulation schemes are changing so fast.

Keywords: Fintech, Internet Finance, China, Financial Geography, Regulation

Financial technology (Fintech) and the spatial economy II

Placing platform finance

Andrew Leyshon - University of Nottingham | **Paul Langley** - Durham University

This paper considers the role of geographical space within the emerging models of finance categorized as 'FinTech', and especially those models that build upon platform modes of digital economic organization that intermediate and extract economic rent from circulations of money, capital and associated data flows. The paper seeks answers to three sets of geographical questions about this form of financial intermediation that, by way of shorthand, we term the economy of 'platform finance'. First, what is the geography of platform finance? Platform finance is expanding rapidly within leading centres, but it has also grown rapidly in cities beyond the established heartlands of global finance. Second, to what extent is platform finance building new relational geographies of payment, investment and creditworthiness by constructing novel measures of risk assessment and hailing new financial subjects? The promises of big data are being explored by some platforms to identify a broader range of socio-economic and cultural markers correlated with financial performance and creditworthiness, while some platforms are seeking to appeal to affect and enthusiasm to better direct funds towards investments. Third, and finally, what are the regulatory affordances of platform finance? Many of the most prominent platform capitalist entities have become successful, at least in part, through their ability to efface space and sidestep some of the constraints of territorialisation, such as taxation and local regulation. The paper concludes by arguing that while many of the disruptive claims for platform finance are hyperbolic, and that are better seen as a longer run process of reintermediation, the prospect of the very large digital platforms moving into financial intermediation would lead to a significant change in competitive bases of the global financial system.

The influence of Brexit on locational behavior: A factorial survey analysis of London's FinTech Industry

Franziska Sohns - University of Greenwich | **Dariusz Wojcik** - University of Oxford

On 23rd of June 2016, a majority of the British voters voted in favor of leaving the European Union. As a consequence, the United Kingdom will leave the European Union in March 2019. By then the future relation between the United Kingdom and the European Union has to be negotiated. At the end of this negotiation process, different Brexit scenarios are possible - all of them having the potential for more or less drastically changing the institutional setting of the United Kingdom. As such fundamental changes in the institutional setting of countries in the Western World are rare events, Brexit offers the unique chance of analyzing this topic in real time.

Within London's entrepreneurial ecosystem, the financial technology (FinTech) has recently developed to one of the most innovative and dynamic industries. As empirical evidence has shown that entrepreneurship of the innovation-based approach fosters regional economic development, a politico-economic interest has developed to strengthen London's global position by encouraging entrepreneurs to start their FinTech businesses in London and by keeping already existing businesses in the city.

Against this background, analyzing how possible changes in the formal and informal institutional setting, triggered by Brexit, influence the behavior and decision making of entrepreneurial actors within the FinTech industry can be seen as an important contribution to not only the academic, but also the political discussions.

The project is based on a three step mixed method approach: First, exploratory qualitative interviews with entrepreneurial actors were conducted during summer 2017 to derive hypothetical Brexit scenarios. Second, these hypothetical Brexit scenarios were integrated into a multilevel factorial survey, being conducted in spring 2018. Third, the results of the multilevel factorial survey analysis will be verified by conducting a follow-up survey in the aftermaths of the withdrawal.

Beyond Fintech – how professional service business models are changing in light of the development of digital process management technology

Rebecca Riley - Birmingham Business School | **Chloe Billing** - Birmingham Business School

The technology revolution, Industry 4.0, has been changing business models and ways of working at an accelerated rate across all sectors. This paper identifies the emerging challenges and opportunities the Business and Professional Services sector is facing in light of the impact of technology on their services and client demands. Examples of the technologies include peer-to-peer lending/investment, online payments/transfer, big-data driven market research (Nathan and Vandore, 2014) and the automation/digitization of monitoring (Wójcik, D and Cojoianu, 2017). The research draws upon 34 interviews and 3 focus groups with financial and professional service firms based in the Greater Birmingham area, the "only full service offer outside of London". These interviews were conducted as part of a 'BPS sector deep dive', commissioned by the West Midlands Combined Authority, in response to productivity concerns and arising opportunities from the Industrial Strategy Challenge Fund. The paper outlines the emerging economic geography of the Birmingham sector, exploring its challenges in the context of the firms having to compete with the City of London. It focuses on hard-to-fill vacancies, labour market challenges (Dapp et al., 2014) and increasing competition (Brown and Lee, 2017). The paper concludes by exploring the wider significance of the research and identifying how professional service business models are changing in light of the development of digital process management technology.

Hatching the egg, populating the hive: Creating a fertile Fintech ecosystem in Brussels, Belgium

David Bassens - Vrije Universiteit Brussel | **Reijer Hendrikse** - Vrije Universiteit Brussel | **Michiel van Meeteren** - Vrije Universiteit Brussel

The post-crisis conjuncture might be defined as one of accelerating fusion between ICT and finance, as exemplified by the stellar rise of financial technology (FinTech). Spearheaded by technologies such as Blockchain, FinTech promises to radically overhaul financial intermediation. Manoeuvring this conjuncture, financial incumbents have begun to utilize FinTech as a tactical resource to counter competition from tech giants and start-ups alike. In practice, incumbents are rewiring their legacy ICT infrastructures into integrated data-driven platforms, and build entrepreneurial ecosystems around these to seduce FinTech start-ups to collaborate with them (Bassens et al., 2017). In this paper, we investigate how incumbents individually and collectively organize such ecosystems in Brussels, Belgium, and how, in the process, they marshal public and private resources. Brussels' position as an international financial centre has faded, yet political and economic elites seek to regain its bygone clout by jumping on the FinTech 'revolution'. Evolutionary economic geography suggests that regions endowed with Fin and Tech firms, like Brussels, have good

prospects to capture new innovative activities. The leverage for Brussels is provided by the cities' status as European capital, proximity to knowledge and capital available in London, and the historically-grown presence of incumbent financial infrastructure firms such as Swift and Euroclear – global players that are particularly feeling the heat from FinTech disruption. We set out a detailed mapping and analysis of the power and knowledge relations between incumbents, startups and other actors in this emerging ecosystem.

Financial technology (Fintech) and the spatial economy III

Will "Fintech" make regional banks superfluous for small firm finance?

Franz Flögel - Institute for Work and Technology Gelsenkirchen

The rating and scoring systems of banks represent one historical example for the convergence of finance and technology. As rating systems are deemed to withdraw the lending authority of banks from the local scale (i.e. the branch and its managers), their impact on banking's spatiality has been studied by geographers and others (Leyshon and Thrift 1999, Leyshon and Pollard 2000, Kalthoff 2003, Udell 2009). Presenting results from participant observations, i.e., a two-month full-time internship in a German savings bank, this paper argues that rating systems are only able to consider certain information. Technological and organisational challenges limit the consideration of so-called soft information by today's rating algorithms, though soft information gets deciding when lending to financially distressed small and medium sized enterprises (SMEs). Rather, personal interactions and/or decision-making authority of local employees is needed for the consideration of soft information in lending decisions to SMEs. Therefore, regional banks have advantages when it comes to SME-lending as numerous authors have stated (Agarwal und Hauswald 2007, Alessandrini et al. 2009, Lee und Brown 2017, Zhao und Jones- Evans 2017, Papi et al. 2017, Gärtner and Flögel 2017, Klagge et al. 2017). Building on these empirical and conceptual findings the proposed paper exploratively discusses what "Fintech" – with its block-chain and artificial intelligence technologies – may offer to overcome the stickiness of soft information in the near future; a critical question for banking's future spatiality.

Review and Prospects on Financial Geography

Zhenfa Li - Peking University | **Canfei He** - Peking University | **Mengran Xu** - Peking University

Financial geography is an important branch of economic geography, which is significant to improve the stability of financial industry that can promote the rapid and sustainable development of social economy. This paper firstly summarizes the developing process and major research fields of international financial geography in a geographical perspective. According to distinct mainstream research methods in different periods, the developing process can be separated into three stages that are embryonic stage, stage dominant by political economy and stage influenced by the culture turn of economic geography. By using bibliometrics, we can divide research field into traditional field mainly including space distribution and evolutionary process of financial center and financial subjects, and emerging field majorly composed of different levels of financialization and the interplay of financial network and regional development. Next, this study inspects the research progress of financial geography in China. Though it starts relatively late, its unique institutional context provides diversified explanations for specific financial landscapes. Finally, there are some prospects of financial geography in the future.

Raising Valueless Capital: Initial Coin Offerings and the Reorganization of Exchange

Matthew Zook - University of Kentucky | **Michael Grote** - Frankfurt School of Finance and Management

This paper elaborates the circumstances of blockchain-based "initial coin offerings" (ICOs) and their contribution to a reorganization of exchange within capitalist economies. To date there have been more than 500 ICOs in which coins have two, intertwined functions: (1) acting as a token, the so called proof of work that adds blocks to the chain, necessary for the function of a blockchain based business and (2) creating a private currency of speculative value that provides a new funding source for entrepreneurs. This latter function often overshadows the reputed business purpose of blockchain making ICOs less a cryptographic technology business solution and more an institutional revolution in exchange. In short, the coin often morphs from a supporting, technical role for business functions to the *raison d'être* and profit center of the ICO. Accordingly, we argue that the blockchain businesses behind ICOs are in fact innovations in the organization and spaces of exchange based on cryptographic proof rather than more traditional mechanisms such as contract law or trust. This is because blockchain-based coins construct a socio-technical assemblage (influenced by libertarian ideologies) that shifts the scale of currency from the state to the community network if not the individual. The new currencies lack any typical backing (such as gold, governmental power of taxation, natural

resources, capital equipment or military power) or governance mechanism (such as central banks) that support value. Instead they gain value via the speculative belief in their future exchange value, achieved via network effects as individuals, communities and institutions accept this new private currency. Of course, achieving acceptance is not guaranteed and many ICOs fail, rendering the associated coin and business worthless. We base our paper on a small series of case studies of ICOs from which we draw larger theoretical implications of how these practices are reorganizing the spaces

Session

Business services in financial globalisation

James Faulconbridge - Lancaster University | **Karen Lai** - National University of Singapore

Work on financial geography recognises the important ‘compact’ between financial services and advanced business services (ABS; such as accountancy, law and management consultancy). Put simply, financial globalization is not possible without this finance-ABS nexus. Yet, in recent years, the work that business services do within financial globalisation processes has arguably received less attention than the work of financial institutions themselves. Illustrative of this is the way the growth in interest in theorizing markets has occurred without fully theorizing the role of ABS. In this session we seek to extend discussion of the work that ABS do in financial globalisation. We are particularly interested in understanding the relationships between financial institutions and other business services, the flows of people, knowledge and market-making devices between these sectors, and the material and institutional effects of the work of business services in the production of global financial architectures. Studies outside of the Anglo-American sphere are especially welcome. Papers might address topics such as:

- The nature of relationships between financial institutions and ABS and the way these ‘lubricate’ or enable financial globalisation
- The role of ABS in financialization, markets and/or financial crises
- The work of ABS in the creation of global financial architectures
- The significance of ABS activities in reproducing institutional contexts and varieties of capitalism
- The maturation of ABS firms in Asia-pacific and interactions between Anglo-Saxon global business services and Asian business services firms
- The way technology is changing the role of business services in financial globalisation (including but not limited to FinTech)

The network boundary specification problem in the global and world city research: Can we trust empirical results from sampled networks?

Vladimír Pažitka - University of Oxford | **Dariusz Wójcik** - University of Oxford

Financial and business services (FABS) firms have been widely documented to form complex global networks by operating offices across the leading metropolitan areas around the world, controlling global portfolios of subsidiaries and engaging in inter-firm collaborative projects with other related firms. The study of these networks has revealed a substantial degree of connectivity among the world’s metropolitan areas and allowed researchers to uncover the contours of the world city network. Despite the well-known dependence of vertex and network structural parameters on network boundary specification employed by researchers, there has so far been effectively no discussion of this in the global and world cities literature. Given the reliance of empirical studies of urban networks on the specification of network ties and the sampling of underlying actors that form these networks by their activities, we consider it of key importance to examine the dependence of network centralities of cities on network boundary specification choices regarding both network ties and actors. We contrast results across three distinctive modelling approaches based on: a) office networks, b) ownership ties and c) inter-organisational projects in addition to considering the effects of network sampling. Our results indicate that differences among these modelling approaches persist for all sampling percentages and results from sampled networks can be reliable under some circumstances.

Transnational labor migration and the offshoring of knowledge intensive business services within global production networks: The case of a German automotive company in Turkey

Philip Müller - Osnabrück University | **Martin Franz** - Osnabrück University

Even though labor and services have gained more importance in recent GPN research, only little is known about the relations between labor migration and service offshoring in global production networks. This article examines the role and the impacts of highly-skilled (re-)migrants of Turkish origin who studied and/ or worked in Germany for several years within knowledge intensive business services (KIBS) offshoring. To do so we are analyzing the empirical case of a German automotive company

that has offshored KIBS from Germany to a captive offshore service center in Turkey. Based on our empirical material, we found that highly skilled (re-)migrants of Turkish origin are used as boundary spanners to efficiently and effectively manage the knowledge transfer from the onshore organizations to the service center in Istanbul. Thereby highly skilled (re-)migrants of Turkish origin help to mitigate the resistance and facilitate the dis- and re-embedding of knowledge within the offshoring process. The exploration of highly-skilled labor migration from a transnational perspective, contributes to the discussion about the role of labor in global production networks.

The finance-ABS nexus: intersection of law firms and investment banking in financial practice

Karen Lai - National University of Singapore

Financial geography research has noted the important relationships between financial services and advanced business services (ABS), such as accountancy, law and management consultancy. But while this finance-ABS nexus is fundamental to financial globalisation, financial geography research still tends to focus on financial markets and institutions rather than on relationships and interactions with business service firms themselves. This paper examines the relationship between law firms and investment banks in terms of how the latter actively shape the forms and processes of investment banking deals, and how knowledge and market-making devices flow between these sectors. The analysis is based on interviews with local law firms in Singapore and their vis-à-vis larger global law firm in investment banking deals. This finance-ABS nexus is vital for understanding market practices, modalities of power between firms, and developmental implications for building broader financial centre capacity.

Global law firms and the financing of production networks: the case of TNCs in South East Asia

James Faulconbridge - Lancaster University

Producer services, as ‘intermediaries’ providing key ‘inputs’ in the form of expertise and advice for their clients, play a significant role in global production networks. Yet the mechanisms through which producer service intermediaries influence the activities of TNCs have received little in-depth attention. This paper addresses this shortcoming and examines how global law firms play a role in the financialization of TNCs in Southeast Asia. It identifies two key mechanisms through which producer services configure the financial organisation of TNCs – i.e., influence the financial models and structures adopted. First, producer services articulate financial imperatives in ways that encourage the reproduction of Anglo-American models of financialized corporate structuring. Second, the analysis identifies how producer service firms deploy strategies designed to mould the governance of TNCs. The paper documents the power relations that underlie this moulding and which result in Anglo-American models of financialized corporate structuring being adopted by Southeast Asian TNCs, albeit with varying degrees of resistance and mutation. In particular, analysis reveals how across Southeast Asia variegated models of financial discipline develop as a result of the power relations between TNCs and producer service intermediaries.

Session

Finance and Geography

Phyllis Bussler - University of Cologne

The Great Recession and its impact on urban and rural economies - A multi-level analysis for European regions

Christian Hundt - Thünen Institute of Rural Studies | **Linus Holtermann** - Ruhr-Universität Bochum

In 2008/2009 Europe’s economies were hit by the hardest economic crisis for decades. In many countries this period was followed by a recovery starting in 2010. Numerous empirical studies using aggregate data at the level of countries, regions or industries have been published that contribute to our understanding of the economic developments during these turbulent times.

What is still lacking, however, are studies that a) explicitly integrate determinants from different spatial levels and b) distinguish between urban and rural economies.

This is surprising insofar as the recession spread out geographically uneven across both nations and regions, which has raised the question of a corresponding two-level structure of the underlying determinants.

Furthermore, different patterns at the regional level can be observed in particular between urban economies on the one hand and rural economies on the other hand. This finding points towards the relevance of density-related factor endowments and the according agglomeration economies.

The aim of our contribution is thus two-fold. First, we identify the driving determinants behind regional economic resilience in the EU-27. For this purpose, we examine variables from the regional level (like industry structure, diversity or export orientation) and from national level (such as debt-to-GDP ratio, size of government, or factor market (de-)regulation) within a multi-level regression framework.

Second, we examine to which extent different factor endowment of urban and rural regions can help explain regional variations in respect of economic resilience capacities.

Applying multi-level regression techniques enables us to estimate predictor effects from different hierarchical levels simultaneously. Also, cross-level interactions can be analyzed to reveal whether the impact of regional factors is additionally influenced by factors from the national level.

Real estate valuation and influence on spaces: Germany, Spain and Mexico in a debate on Financial accounting techniques

Eugenia Winter - Goethe University Frankfurt

This research focuses on the debate over financial accounting techniques through the lens of real estate valuations in order to identify the impacts on city spaces. Financial accounting techniques interact with the continuous change of markets, the strong influence of economic, financial and debt crises. Since the global financial and economic crisis, the interest in comparative valuation techniques has been increasing, with the International Financial Reporting Standards (IFRS) embodying a “manageable and comparable” global information instrument. Central to this is the attempt to classify real estate as an investment product and the extent to which financial accounting techniques can support this. This raises the question of the relation between IFRS and national standards of real estate valuation. Against this background, this work examines the process of property valuation within the framework of IFRS via a comparison between national finance-accounting standards. The cultural geographies of economies serve as the framework and the concept of financialization as the timeline perspective. The case of German financial institutions – which adopt both IFRS and national valuation accounting standards and which are actively playing a huge part in the Spanish and Mexican real estate market – is expected to reconstruct the value of real estate as an investment product and identify the impacts on city spaces in a global context.

Keywords: Financialization, IFRS, accounting techniques, real estate, financial performance.

Credit Ratings and Managing Crisis

Benjamin Rubin - City University of New York

Scholarship has begun to address ways that financial logics and institutions subordinate social well-being to financial goals, in part through processes which render only financial information legible, erasing or reducing material welfare in the process. However, the abstractions of financial measurements not only enforce financial goals, but also provide a way for financial actors—and state and capital elites who rely on them—to interpret concrete struggles such as strikes and lawsuits as risks to the profitability of investment, and to respond on those terms. My research examines the role of credit issuance and the limitations / inducements provided by Credit Rating Agencies (CRAs) such as Moody’s and Standard and Poors. Credit ratings have become central not only to the ability of publicly traded corporations to continue to finance their operations, but the increased reliance on debt through credit rated bond issues has made the CRAs vital shadow elements of state and municipal governance in the U.S. under neoliberalism, and of sovereign nations worldwide. Mayors, city councils, state legislatures, governors, presidents, and parliaments must all consider how government decisions will be understood by CRAs, and govern in order to maintain high ratings. The CRAs have downgraded credit ratings—triggering bankruptcies, fiscal crises, and currency devaluations—in response to governments acceding to union demands, energy price declines in extraction dependent states, lawsuits over toxic exposure and contamination, and bondholder worries that pensioner demands might affect their payment schedules. Credit ratings do more than reflect capitalist judgment of financial data; they help to translate messy, everyday conflicts into financialized knowledge, and thus produce a capitalist understanding of conflict. My project will use several case studies from the fracking industry and disinvestment in U.S. cities to explore these dynamics in more detail.

Lost in Monetary Space? Economic Geographies of Money and Finance without Macrofoundations

David Bieri - Virginia Tech

In the decade since the financial crisis, geographers and economists alike have enthusiastically re-engaged with different spatial aspects of the monetary-financial system. Yet, while an increasing number of these contributions are focused on the economic

geography of money and finance, I argue that monetary theory plays no more than a perfunctory role in this literature. Indeed, neither geographers nor spatial economists actively engage with the macrofoundations of modern credit theories of money. As such, the treatment of money in economic geography remains trapped between two opposing views, neither of which take “macro seriously”. Economic geographers proper tend to remain singularly faithful to the Marxist view of the urbanization of capital—famously embodied in David Harvey’s three circuits of capital. In opposition to this view is the contemporary canon of geographical economists that has enshrined the classical dichotomy, treating the spheres of money and production as analytically distinct. Effectively a branch of applied microeconomics, mainstream spatial economics thus has little to say about money and its spatial consequences. However, such a disengagement with regional macro-phenomena of money represents a break with the intellectual tradition of a long ancestry of spatial economists. This contention is illustrated by examining the monetary content August Lösch’s (1906–1945) lesser-known writings which contain overlooked spatial elements of credit theories of money, including the notion of a spatial non-neutrality of money, and the observation that money is created endogenously in a monetary-financial order that is inherently hierarchical. Viewed in this light, Lösch’s work emerges as one of—in modern parlance—empirical macroeconomics (in particular, business cycle analysis in space) rather than its conventional reception as the microeconomics of location choice; above all, his work was fuelled by an ambition to complete “Ohlin’s dream” with regard to the regional integration of trade theory and international macro-finance.

Panel Session

Ten years after the global financial crisis: critical reflections on finance and economy

Karen Lai - National University of Singapore | **Dariusz Wójcik** – University of Oxford

2018 marks the 10th anniversary of the collapse of Lehman Brothers, which many see as a watershed moment in the recent global financial crisis. What started as a loss of liquidity in the markets for complex and opaque mortgage-related instruments led suddenly to the evaporation of funding liquidity for intermediaries holding these securities and crises of confidence in many leading financial institutions. With a decade’s worth of hindsight, this is a propitious moment to review the causes, key actors and variegated impacts of the crisis. Did the global financial crisis reshape the competitive landscape of international financial centres? How should we evaluate the various government responses to the credit crunch, bank failures and damage to the wealth and livelihoods of everyday consumers? Has the global financial crisis changed the ways in which we conceptualise the role of finance in the economy and the economy as a whole? This panel session brings together leading financial and economic geographers to reflect on the contribution of geographical research on the global financial crisis, evaluate its theoretical, empirical and policy impacts, and consider how these studies might shape our future research for understanding the global financial system, financial crises, governance, financialisation, and intersections of finance with politics and society.

Ten years after the global financial crisis: Critical reflections on finance and economy

Marc Boeckler - Goethe-University Frankfurt

Panel speaker

Ten years after the global financial crisis: Critical reflections on finance and economy

Kendra Strauss - Simon Fraser University

Panel speaker

Money and finance after the crisis

Andrew Leyshon - University of Nottingham

Panel speaker

Ten years after the global financial crisis: Critical reflections on finance and economy

Jane Pollard - Newcastle University

Panel speaker

FINANCE AND FINANCIALIZATION II: STATES AND TERRITORIES

Session

Finance and financialisation in post-socialist Central and Eastern Europe

Martin Sokol - Trinity College Dublin | **Zoltán Gál** - Insitute for Regional Studies, HAS

Financialisation is recognised as a major force that is shaping contemporary capitalist societies and economies, as well as being a leading cause of the recent Global Financial Crisis. There is also growing evidence that financialisation plays a crucial role in (re)producing and exacerbating social and spatial inequalities at various scales. Financialisation thus could be seen as one of the key drivers of the dynamics in an unequal world. However, despite the pivotal role financialisation plays in contemporary economies (and the explosion of literature about it), our understanding of this phenomenon remains limited in many aspects. For one, much of the financialisation research has so far focused on the most advanced (and presumably the most financialised) Western capitalist economies. As a result, we know much less about how financialisation unfolds in other contexts and how these different contexts are interlinked with each other and how this reflects patterns of uneven development and/or economic dependency. Financialisation in Central and Eastern Europe represents a significant lacuna in this regard. Yet, the post-socialist context offers a unique opportunity to study financialisation and its social and spatial implications. Indeed, former state-socialist economies were previously built on a completely opposite logic to that of financialisation. The collapse of state-socialist regimes was followed by a dramatic re-organisation of the entire financial infrastructure and significantly shaped by the involvement of West European banking groups. The post-socialist context thus gives us a chance to study financialisation from a different perspective and to reveal its logics, and its implications, in an alternative light. This session welcomes both theoretical and empirical papers that will help to build a picture of financialisation in post-socialist Central and Eastern Europe and its implications for Europe and for the global political economy more broadly.

Finance and financialisation in post-socialist Central and Eastern Europe I

Dependent financialisation and uneven development of the housing market in Central and Eastern Europe

Zoltán Gál - Insitute for Regional Studies, HAS | **Erika Nagy** - Insitute for Regional Studies, HAS | **Zsuzsanna Pósfai** - Insitute for Regional Studies, HAS

The notion of dependent financialisation describes the peculiarities of financialisation in the European semi-periphery. Financialisation of the periphery was characterized by external capital dependencies and fragile financialized interconnectedness orchestrated by the foreign banks entered the region. The paper analyses the production of spatial inequalities on various scales on the European semi-periphery through the case of housing, which is one of the important forms of a spatial fix in financializing European economies. It mobilizes the notion of dependent financialisation in order to empirically support this argument through the case of the Hungarian housing market - examining the articulation of the dependent financialisation of housing first on a European, then on a national and finally on a local scale. The financialisation-based consumption model of CEE relying on short-term credit flows were reoriented towards households and had a limited role in corporate finance and economic development goals. It argues that the transfer of wealth does not only happen in terms of social class, but also in terms of spatial core and periphery, and that financialisation also inherently carries a logic of uneven spatial development. It argues that financialized housing regimes in CEE which unfolded in the years preceding the crisis channelled the resources of the periphery into the core and meanwhile pushed risks and shocks stemming from the financial system's logic to peripheral economies/spaces. The paper concludes that increasing inequalities and reinforced structures of dependencies on various spatial scales (European core/periphery; metropolitan/non-metropolitan; urban/rural; global/local) led to the loss of local control over local resources and contributed to the erosion of household assets accumulated under socialism.

Financialization and right-wing nationalist politics in Hungary - a case through housing

Csaba Jelinek - Hungarian Academy of Sciences | **Ágnes Gagyi** - University of Gothenburg | **Zsuzsanna Pósfai** - Collective for Critical Urban Research

Rather than a particular set of recent transformations in enterprises, households or the state, we understand financialization as a cyclically returning shift in the global regime of capitalist accumulation, where interdependencies within the global economy are increasingly articulated through the financial channel, specifically through the relation of debt. In our paper we look at the Hungarian state as an institutional actor embedded in and transformed by this shift in world-economic integration, which steps up as a manager of newly financializing relations of internal and external integration, to the benefit of a new state-based national capitalist class. The high presence of foreign banking groups has been highlighted as a characteristic of CEE financialization, thus the drastic decrease in foreign bank ownership in Hungary, achieved in the last few years by the current conservative nationalist government, could be considered as a sign of decreasing financialization and decreasing dependency. We will, however, argue that this is not the case, and the current restructuring in the banking, real estate, or other infrastructure-related sectors is mainly a reorganization of channels of capital flows, in an attempt to orient them towards a new national capitalist class. This is not a step towards a more just financial regime internally, as the government argues: the main financial source of the new nationalized banking sector comes from regressive redistributive policies which generated a significant volume of savings in the upper middle class. The development of new patterns and institutions of financialization of housing are embedded in this new constellation of financialized, state-driven national capital development. It strongly builds on and unfolds from previous forms of dependent housing financialization – both spatially and socially, through the pulsation of subsequent waves of financial overinclusion and exclusion. We analyze banking and housing policies together with the geographies of uneven development they extend

The role of financial services in spatial processes

Balázs György Forman - Corvinus University of Budapest

Three elements of financial services were examined in the territorial processes. These were the commercial banks' accounts and the ATM network, retail products and services, services to businesses, savings habits and investments in the population. The substitutability between different types of investment. forms of accumulation of assets are entrepreneurial capital or real estate investments.

One of the reasons for the slow development of rural areas is that relatives withdraw their income from businesses immediately. Thus, there is no capital accumulation in enterprises. Because of this, they are unable to grow, modernize and recruit new staff. Due to low capital supply, they will not be creditworthy in the long run, they will not be competitive.

In my opinion, the key to long-term development lies not in large-scale financial support, but in the development of financial awareness, entrepreneurship, and the exploitation of local resources in the effective competition regulation of local and regional markets.

Questionnaire survey was conducted in 5 target groups on financial awareness, knowledge and use of financial products. The following were the target groups:

1. Budapest students - economists and engineers
2. Small businesses in Budapest
3. Active people in Budapest
4. Businesses in a Békés county
5. Agrarian companies working in a Békés county
6. Workers of active age working in a Békés county

The most significant differences between Budapest and the countryside are not only capital adequacy, but behavior, mentality, financial knowledge and willingness to take risks.

Entry Timing and Uncertainty in Transition Economies: The Moderating Role of Host Country and Firm Characteristics

Thijs Nacken - Erasmus University Rotterdam | **Bas Karreman** - Erasmus University Rotterdam | **Enrico Pennings** - Erasmus University Rotterdam

Starting in the early 1990s, countries throughout Central and Eastern European (CEE) initiated fundamental reforms aimed at replacing an economic system based on central planning with an economic system guided by free market forces. Since a sound financial system is pivotal to the functioning of a market-based economy, many CEE countries liberalized their financial markets by reducing regulatory entry barriers and privatizing state-owned banks in an attempt to attract financial sector foreign direct investment (FDI). Financial sector liberalization in transition economies offered many new investment opportunities for foreign

banks looking to expand their operations into new foreign markets. However, despite the apparent opportunities, the business environments in many transition economies were highly volatile, especially during the early transition stages, and these conditions created considerable investment risk. Foreign investors thus faced a trade-off between postponing market entry and waiting for uncertainty to reduce and making an early commitment, despite the risks involved, in an attempt to secure early mover advantages and growth opportunities. Each entry strategy thus has advantages and disadvantages, and our main objective is to shed some light on the factors that determine how this trade-off is resolved. We address this issue in a theoretical framework that combines real option reasoning with notions from institutional theory and the resource-based view (RBV). We develop several hypotheses concerning how uncertainty in transition economies affects entry timing decisions and how host country- and MNB characteristics moderate this relation. To test our hypotheses, we collected data about the investments of 44 Western European banks in 17 transition economies between 1993 and 2008. Using survival analysis, we find that uncertainty induces MNBs to postpone entry and implement a wait-and-see strategy. However, the inclination to postpone entry under uncertainty depends on other factors including institutional conditions, competitive forces, MNB size and previous investment experience.

Finance and financialisation in post-socialist Central and Eastern Europe II

When Monetary Power Autonomy Matters: Political Economy of the 2014-15 Financial Crisis in Russia and Its Macrofoundations

Ilja Viktorov - Södertörn University | **Alexander Abramov** - Higher School of Economics

The article approaches the 2014-15 financial crisis in Russia using it as a case study to explore the limits of domestic monetary power autonomy in a developing and emerging market country (DEMC). Before 2014, Russia accumulated substantial international reserves. However, following a decline in oil export revenues, the country was unable to escape a deep currency crisis and a strong macroeconomic adjustment. A number of factors defined Russia's weak monetary power autonomy. The study investigates the negative outcome of Russia's participation in financial globalization and explains why enduring positive current account balance did not prevent a financial downfall. It also highlights three non-monetary factors that conditioned low adaptability of Russia's economy in face of external shocks. In addition, the article discusses how Russia's unsuccessful attempt to imitate a 'quantitative easing' monetary policy between 2012 and 2015 contributed strongly to the magnitude of the crisis and instability in the currency market. The main conclusion is that Russia had a weak 'power to delay' an adjustment of its foreign exchange rate in 2014. In a DEMC integrated into a world economy by means of high dependency on exports of raw materials, large international reserves alone do not provide sufficient guarantee against systemic financial crises.

KEYWORDS

international monetary power, Russian financial markets, financial globalization, Russia's monetary policy, currency crisis

Financialization à la Russe: Do banks benefit from economic meltdown?

Andrei Vernikov - Institute of Economics of the Russian Academy of Sciences

Did banks benefit from post-socialist economic meltdown? They did, at least in Russia, with regard to the negative correlation between the number of active banks and their profitability, on the one hand, and real economy performance, on the other. In 1991-1998, the array of newborn entities calling themselves 'banks' held amazingly low shares of productive loans in their assets while pursuing short-term speculation, hedging and asset seizures. Non-financial enterprises could not rely on bank financing, not least because of policy advice coming from abroad [Gabor, 2012]. The financial crisis of 1998 marks the beginning of a new stage. The number of operating banks is in a monotonous decline, bank profitability slows down. Nevertheless, the contribution of banks to economic development grows, which is captured by traditional methods and with the help of functional differentiation of credit approach [Schumpeter, 1983[1934]; Bezemer, 2014]. I link the reversal of destructive financialization to the ownership change, namely recovery of state-owned banks. Other things being equal, large state-owned banks are more likely to extend productive loans to non-financial firms than domestic private banks and foreign bank subsidiaries [Vernikov, Mamonov, 2015]. Public banks become an instrument of natural resource rent reallocation from the energy sector into investment funds committed to specific investment projects in manufacturing, infrastructure, etc. [Vanteeva, Hickson, 2015]. Empirical evidence from Russia supports the 'development view' and the 'helping hand' view, rather than the 'political view' and the 'grabbing hand view', of government banking [La Porta et al., 2002]. The growth of the public sector has its limits, however. My arguments rely on a unique database of public banks and analysis of Russian banking statistics.

Spatial aspects of the Russian banking system transformation and access to credit for firms in Russian regions including SMEs

Anna Mishura - Novosibirsk State University | **Svetlana Ageeva** - Siberian Branch of the Russian Academy of Sciences
Russia

We examine the role of Russian banking system in allocation of financial resources to Russian regions.

Over the past two decades there is steady decline in the number of Russian banks. It is a result both of the concentration and consolidation processes taking place in the industry around the world and of the Central Bank of Russia "cleaning" policy in the banking sector which again intensified since the second half of 2013. The issue is very contradictory since it is resulting in more and more Moscow-centred and state-oriented banking system with large banking networks at the expense of private smaller and regional banks.

We use information from CBR website to investigate the role of Moscow-based banking networks in lending to regional economies outside Moscow such as information on the loan portfolio and customer funds raised by the banks in the regions. We conclude that very specific Russian centralized economy is naturally complemented by very centralized banking system. Large network banks headquartered mainly in Moscow provide regular flow of financial resources concentrated in the capital to lending needs of other regions.

Reduction of this flow during the crisis period after 2014 is mainly due to increase in raised deposits of banks' customers in the regions but not due to 'flight to home' and unwillingness to lend in remote regions. This is because of the fact that large companies dominate the Russian economy and many large companies actually operating in the regions are registered in Moscow or has other close ties with the center. So regional economies are not 'remote' from the center despite the long distances.

However lending to SMEs and new enterprises remains very vulnerable in such situation.

Soft budgets and elastic debt: farm liabilities in the agrarian political economy of post-Soviet Tajikistan

Irna Hofman - Leiden University

Since Tajikistan's independence, market reforms and pressure from international donors have brought changes to the state's role in the economy. The official narrative holds that the post-socialist state reduced its control over agriculture, but there are still various mechanisms through which it exerts control over farming. In this paper, I examine Tajikistan's post-socialist agrarian change through the prism of farm debt. Farm debt used to be an accounting nuisance in Soviet agriculture as a result of so-called soft-budget constraints. In the political economy of post-socialist transformation, farm cotton debt has been transformed into indebted land. I classify this debt 'elastic' for its ambiguous nature. It ties farmers to land and makes farmers' independence illusory. With an in-depth analysis based on original ethnographic insights, I aim to provide a theoretical contribution to the way in which debt is conceptualised and politicised in post-Soviet Tajikistan.

Finance and financialisation in post-socialist Central and Eastern Europe III

Financial chains and new geographies of financialisation in East-Central Europe

Martin Sokol - Trinity College Dublin

One of the most fascinating, yet still relatively under-researched, aspects of financialisation is its operation and geographical implications in East-Central Europe. Following the collapse of state-socialism, a dramatic financial change occurred there. Spearheaded by Western European banks, the role of finance in post-socialist societies has been transformed. This paper aims to elaborate on the concept of 'financial chains' as a way of approaching new geographies of financialisation and uneven development both between the East and the West and within East-Central Europe itself.

Debt Collection Innovators or Extortionists? Foreign Debt Collection Agencies and Household Financialization in Croatia

Marek Mikuš - Max Planck Institute for Social Anthropology

Croatia has experienced a marked boom of household debt in the 2000s, resulting in one of the largest household debts (as a share of GDP) in Eastern Europe. Much of the lending has taken high-risk forms such as FX loans and variable interest loans and many individuals and households became overindebted due to weak regulation and irresponsible lending. In the setting of protracted economic stagnation after 2008, the incidence of arrears, defaults and distraint procedures increased markedly, compounded by a highly restrictive model of personal default and strongly pro-creditor distraint law. At present, eight percent of the population is under a distraint, so that a bulk of their income is being seized for repayment upon reaching their bank account. All this gives a specific flavour to the financialization of Croatian households, which continues to evolve as creditors strive to collect outstanding debts, debtors struggle to repay and restructure their liabilities, and social movements and politicians contest and advocate for reforms of lending practices and distraint law. In this paper, I focus on the growing presence of controversial foreign-owned debt collection (or 'receivables management') agencies, which buy up outstanding household liabilities from banks, credit card companies and other subjects. Based on publicly available data and interviews with managers and agents of several agencies as well as debtors and debt activists, I will analyse the often contrasting ways in which the different actors represent the agencies as progressive and professional innovators in the current system of debt collection, delivering win-win alternatives to the current distraint system for both creditors and debtors, or on the contrary as perpetrators of aggressive, invasive and unregulated practices of extortion. I will consider what novelties their increased presence introduces into the Croatian patterns of household financialization and draw comparisons with studies of debt collection practices elsewhere.

Geographies of finance and financialisation in East-European periphery: Preliminary reflections on subnational banking strategies in post-socialist Croatia

Sara Bencekovic - Trinity College Dublin

My research focuses on financialisation as one of the key, yet understudied, features of capitalist penetration into the East-European countries since the dissolution of the old state-socialist system. Aiming to explain the particular ways in which financialisation penetrates and manifests itself in the European periphery, my research examines sub-national banking strategies of West-European banking groups operating in East-Central Europe, with a particular focus on how the Croatian households are implicated in these new finance-mediated core-periphery relations. Recognising that Western banks in Eastern Europe are (re)shaping and (re)defining the West-East relations, my research aims at understanding the motivation of foreign banks to enter post-socialist economies, the mode by which they did so, and the geographies of financial services provision to households. The key is to understand social changes in places where finance and banking groups removed and replaced the old systems of authority and power, and to examine the ways in which they assumed the importance in cultural, social, political, and economic lives of East-Central European citizens. Conversely, I also ask in what ways have the local characteristics and post-socialist legacies influenced the form financialisation takes in these particular contexts. This paper provides preliminary reflections on these issues, with particular reference to Croatia.

Financialisation of Western banks in Central and Eastern Europe

Giulia Dal Maso - Institute for Culture and Society

As part of the Geofin project "Western banks in Central Eastern Europe, new geographies of financialisation," this paper aims to offer a preliminary overview of the different spatial and temporal penetration of major Western banks in the uneven geography of Central and Eastern Europe. It will capture the key modalities of Western capital infiltration through a narrative that purports the primacy of financial market axioms and which discredits any legacies from formerly planned economic structures. Specifically, it will situate Western major banks within the political and regulatory, often contingent, forces that characterise CEE's "impatient" financialization (Crotty 2003, Gabor 2011) through the proliferation of debt-driven growth (mortgages) and short-term (financial) profit maximisation. Such configuration will show how Western banks are involved in specific values chains that bind finance capital, state authority and households' indebtedness in an ever-increasing inextricable way.

Session

Finance and the territorial division of labor in Brazil

Fabio Contel - University of São Paulo | **Mónica Arroyo** - University of São Paulo

The purpose of this session is to present some of the characteristics of the financialization of geographic space, with emphasis on the evolution of the Brazilian territorial division of labor. Since at least the debt crisis in the early 1980s, a number of structural changes have taken place in Latin American countries, which has increased the importance and influence of finance in economic, political and geographical issues. The session intends to discuss some of these changes in the Brazilian territory, highlighting the following processes: the historical dependence of Latin American nations on financial resources from hegemonic countries and the subordinate position of peripheral nations in the international division of labor; the existence of dynamic financial metropolises in the national space, which commands the territorial (national) division of labor; recent privatization and denationalization of banking systems; the strong diffusion of technical systems such as data transmission networks, ATMs, credit and debit card terminals (POS), software and financial applications for smartphones, that have improved performance and expanded the capillarity of financial firms; the increase of the lower income population's indebtedness, which in turn boosted the process of financial exclusion in Brazilian cities.

Finance and the territorial division of labor in Brazil I

Production, finance and uneven development: implications on the territorial division of labour in Brazil

Mónica Arroyo - University of São Paulo

The primacy of finances in contemporary capitalism affects directly national, regional and local scales, with implications on territorial division of labour in Latin American countries. This paper intends to discuss some of these implications in the Brazilian territory, highlighting the following processes: the commodification of natural resources; the recent round of privatizations; interdependencies between economic activities and their financial investors; the increase of financial logics into manufacturing and services companies. Based on transformations over the last two decades, we focus our analysis on the spatial circuits of production linked to foreign markets (as iron ore, oil, soy, sugar, cellulose), contributing to the understanding of regional economic dynamics and their different degrees of internationalisation. Frequently firms are in risk of fusion and acquisitions; this fact may produce patrimonial changes that cause corporations' relocation or closure, in consequence, changes in their topology. The places are submitted to locational decisions from the big companies and, therefore, the value of the territory shows its relative and instable feature. Capturing this movement requires understanding the role of finance in productive circuits and the spatial inequalities associated with them. Our intention is to contribute to the debate about relationships between production, finance and uneven development.

Capital markets in Brazil and the financial centrality of São Paulo

Wagner Nabarro - University of São Paulo

São Paulo is today the most important financial center of the Brazilian territory. The city hosts the only active stock exchange in the country, which goes under the name B3 and has achieved a substantial role in the international financial market. A process of centralization through which São Paulo continuously attracts stock market institutions has shaped how the capital markets distribute over the Brazilian urban network. These changes have been sided by the transfer of the financial centrality from Rio de Janeiro to São Paulo, the first being the former capital of Brazil and having acquired a secondary role after the 1980s. We sought to understand the mechanisms behind this process, which have shown to include intents to internationalize and strengthen Brazilian capital markets. The close interactions between São Paulo's stock exchange and national financial regulatory institutions have allowed it to maintain its monopoly over the country's stock market even after the demutualization, a process through which the stock exchange became a self-listed holding. This inserted Brazil in the route of international financial investments and paralleled the growth of the national economy in the 2000s. On the other hand, it has overshadowed previous attempts on developing regional capital markets and overstated São Paulo's role in the Brazilian economy. The Brazilian capital market has become one of the most representative in Latin America. Nevertheless, evidences show that its investments are still very concentrated on a few big companies. This raises the susceptibility to reproduce market crises and hinders the development of medium and small-sized companies. Such stock market arrangement has also led to an intensified concentration of the companies' headquarters in a single metropolis, which increases uneven economic development in Brazil.

International migration and territorial division of labor in the state of Ceará, Brazil

Denise Cristina Bomtempo - Universidade Estadual do Ceará, UECE

Population movements have over time revealed the dynamics of the territory. In the current period, due to the metamorphoses of capitalism with a financial tendency, we have experienced the emergence of migratory flows that articulate geographic scales hitherto not interlaced. The Brazilian territory, which has been designed by hegemonic agents acting through verticals, faces a new territorial division of labor and, as a consequence, the emergence of new migratory flows. Among the migrations that have crossed Brazil in the 21st century, the international one, made up of refugees and migrants from different countries, stands out. Ceará is a state that, since the 1980s, has formulated a modernization plan that promotes, among other things, the encouragement of local investors and, above all, the attraction of foreign investments. The state is one of the Brazilian states that have received a relevant number of foreign migrants. They come from Latin America, Africa, Europe, Asia and the United States. This research aims to understand how the policy of Ceará modernization contributed to the emergence of territorial and population dynamics linked to some migratory movements in the early 21st century. For this purpose, we have as a reference point the works produced by several theorists who debate the population issue, as well as those that attempt to understand the economic and territorial dynamics associated with the theme. We also subsidized our analysis with data and information from IBGE demographic censuses (2000 and 2010) and other institutions such as the Ministry of Labor and Employment, Migration Observatory, IPECE, IPEA and JUCEC. The study can help us to understand the nuances of the migratory configuration in Ceará during globalization period, specially trying to understand how each migratory group presents its territorialities in relation to work, consumption, housing and leisure, besides the daily conflicts materialized in the landscape.

Financialization and types of industrial accumulation in Brazil: the curious case of contamination by mimicration

Edilson Pereira Júnior - Universidade Estadual do Ceará, UECE

The new capitalist reproduction relations favor the economic position conquered by the finances in the order of accumulation. The events in the recent years reveal that the capital valued as the form of financial investment, and that comes from the distribution of industrial enterprises profits, is increasingly presenting as the dominant fraction, having the condition of commanding other accumulation types and its different rates. This way, the new industrial world fits into the competitive finance logic, for which the short-term profitability and the liquidity guarantee will always have a hegemonic role. Consequently, the productive patterns change as a whole. Reacting by mimicry, the industrial activity takes on itself the goals and rhythms of accumulation with financial domination. The spatial effects of all these facts in Brazil redefine the capacity of productive areas, being able to integrate several territory portions which have different labor productivities and prices, opening possibilities of cost reduction for the capitalists. This text aims to raise some interpretations about the issues listed. By incorporating the current territorial and productive restructuring that dominates the globalization period, industry in Brazil is much more likely to absorb a new combination among territorial, productive, financial and service relations, indicating complex mechanisms of the contemporary industrial systems organization. Thus, through the established relationship between industry and finance (which reconfigures the terms of the productive economy and of the consumption of goods and commodities) and due to new relocation capacity of industrial production, the performances of financial management pressure the functioning of the industry as a whole. The compelling order is to ensure the profit maximization, mainly by taking advantage of the information technologies that are able to transform flexibility into new control strategies over work and territory.

Finance and the territorial division of labor in Brazil II

São Paulo as an international financial center: the territorial division of labor on the national and world scales

Fabio Betoli Contel - University of São Paulo

The present work aims to analyze the main elements that makes the city of São Paulo an important international financial center. The study is based on data about the national banking system, the local stock exchange (B3) and the corporate services that are consumed by financial operators. Depending on the selected criteria, the concentration of financial assets in São Paulo significantly exceeds the values moved in the other metropolises of Latin America (although they are much less values than those transacted by the global cities of the northern hemisphere). The study also sought to analyze the Brazilian banking topology, to show how São Paulo became the epicenter of financial phenomena within the Brazilian territory (thus becoming the gateway city for foreign

investments in the country). This concentration of facilities, agents and financial values also shows the primacy of São Paulo in the territorial division of labor that rules the Brazilian urban network.

The productive restructuring in the Integrated Development Region of Brasília (Ride-DF): modern agriculture and uneven development

Sergio Souza - Instituto Federal de Brasília, IFB

The productive restructuring process is responsible for recent modifications in the spatial production of some regions, especially by its current situation of fragmentation. Allen et al (1998) points to this trend done by the multiple social relations established internally and externally in the regions; Veltz (1996) explains it using the idea of the archipelago economy, in which the actual spatial organization of the economy is made by multiples centres and new spatial logics (not only extensive): punctual and in networks. In the case of Brasília, a first difficult is to think about this modifications in a metropolis called “tertiary” by Paviani (1986). But analysing its region, specially the Integrated Development Region of Brasília (Ride-DF), a legally formalized region, it is possible to view the occurrence of the productive restructuring, by the development of two specific process: the expansion of the modern agriculture and the integration of the Brasília-Anapolis-Goiania axis. The first process mentioned occurs with large support of the State, by its official credit lines and others specific public policies, and it is controlled by exogenous agents of the region. As consequences, the space of the Ride-DF is more fragmented, produced by external agents, imposing external logics, and it has more evidences of an uneven development. This work aims to analyse the influence of the modern agriculture in the uneven development of the Ride-DF space, by its sociospatial inequalities. To do so, it is used a methodology based on indicators of the National Policy of Regional Development (PNDR), adapted for the region in analysis. The results show an association of intermediary and low incomes with dynamic economies in spaces more linked to modern agriculture, with better situation of income in the municipalities which locally rules the process and with a worst situation in municipalities associated only with the productive process.

Government strategies in the 2008 crisis: production of space and financialization in the capital of Brazil and implications for socio-space segregation

Richard Siqueira - Instituto Federal de Brasília, IFB | **Camila Fonseca** - Instituto Federal de Brasília, IFB

This paper aims to discuss the role of space production as a government anti-crisis strategy in 2008 and its relationship with socio-spatial residential segregation in the context of the Federal District, capital of Brazil, in concomitance with the strategy of intensification of financialization. In this work, through the establishment of connections between historical, economic and geographic facts, we analyze anti-crisis government measures and their financial circuits, as well as the implications of these policies within a financial geography of inequality. An intense space production as a governmental response to the crisis in 2008 brought implications for the spatiality of the Federal District, and notably for the socio-spatial residential segregation, showing that the accumulation of capital in the Federal District is strongly linked to the commercialization of public lands and the production of space as well as the existence of a large number of public servants who help the local economy to maintain the demand for goods and services and to cool the most acute effects of the economic and financial crises. These public servants generally have a source of income that is more stable than the average of society and can obtain housing financing and loans at lower average interest rates of banks due to the lower risk of default, characterizing a circuit of socioeconomic inequality. This context contributes to the appropriation of local space by members of the state bureaucracy - and to real estate speculation, a process intensified amid the federal and district government stimulus with expansion of credit, urbanization and infrastructure works such as those that occurred from of 2008. This context made it difficult or impossible for poor people live in some localities because of rising rental prices or the impossibility of buy real estate.

Session

The Financialization of the State

Laura Deruytter - Vrije Universiteit Brussel | **Sebastian Möller** - University of Bremen | **Reijer Hendrikse** - Vrije Universiteit Brussel

Although the state has long been a relatively understudied domain in the burgeoning literature on financialization, over the last couple of years a growing body of empirical work has emerged on the financial entanglements and transformations of specific governments, state agencies, (quasi-) public institutions and their offshoots. This call for papers builds upon this work, and broadly seeks contributions which add empirical flesh to this growing subfield of financialization studies, as well as conceptual perspectives to make sense of the rise of finance – of its products, rationalities, techniques and so forth – in a growing set of public domains;

how and why governments and states have themselves been key accelerators of these developments, and how we should understand the ever-changing state-finance nexus. Research areas may include, but are not limited to:

The financialization of municipalities and the local state; the financialization of state regulations and sovereignty; unpacking specific government or public policies and rationalities as drivers of financialization; the links between new public management, or neoliberalization, and the financialization of states; the central role of public accounting, debt or treasury management; politicization of and resistance to the financialization of the state; comparative analyses of processes of state financialization (in space and time); the role of inter- and supranational organizations in pushing forward the financialization of the state; processes of financialization interacting with sub-national state rescaling and local entrepreneurialism; financialization and corporatization of local state enterprises; mechanisms and networks of private and public agents facilitating the diffusion of financialized state practices, and so forth. We are hoping for a broad range of contributions in terms of geographical scope, policy areas, theoretical approaches and methods.

The Financialization of the State I

Resistance to financialization of the state in peripheral countries: Argentina under the Kirchners’.

Gustavo Guntren - University of Buenos Aires

The rise of finance and the consequent financialization of the world economy during the last four decades was only possible due to changes in regulation of the institutional set-up at the national level. The Central Bank is one of the most important decision-making bodies of the state, and is usually one of the areas where such transformations take place. Although there is literature on the role of the state in the processes of financialization, most studies are based on the core capitalist economies and the actions of their national governments to enable financialization. We shall investigate, in contrast, the moments when peripheral countries resisted the financialization of their state. The theory of regulation will therefore allow us to recognize different types of financialization and explain policy changes that are determinant for the advance or reversal of these processes, placing the state as an active actor. Argentina has been a pioneer in the current phase of financialization as well as a protagonist of its deepest crisis. These contrasts promoted the adoption of alternative policies in times of economic malaise. The aim of this paper is to study the policies implemented by the Central Bank of the Argentine Republic in relation to the global financial system during the 2004–2015 period, to examine the Kirchners’ governments attempts to challenge the process of financialization, and whether or not these were successful.

State-led capitalist development and the limits to financialization investment funds in new developmental states

Adam Dixon - Maastricht University

In the wake of a weakened Washington Consensus and the rapid growth of illiberal economic powers, namely China, the state has reemerged discursively and materially as a key actor in development. While this trend recalls a pre-neoliberal era before 1980 when state intervention and market engagement had a more prominent role in many countries, if formally and functionally different and of varying intensity, contemporary manifestations are taking on what appears to be more financialized forms that reflect broader trends in the global political economy. State-owned investment funds are one manifestation of this movement. Generally referred to as sovereign wealth funds, most of these funds are oriented toward international investment. Yet a subset exist that have an explicit focus on domestic development, and are more aptly referred to as strategic investment funds or sovereign development funds. Formally and symbolically, these investment organizations bring modern finance and shareholder values to the state's industrial policy toolkit, with an aim of catalyzing private sector development and reform of the state sector. Notwithstanding the formal structures and functional practices of conventional financial institutions that these organizations afford the state apparatus, it is not clear whether this movement is or should be defined as financialization, or financialization of the state, given the focus on fomenting productive efficiency in the economy. Conversely, there are uncertainties over the promises of a statist finance-led development policy informed by the practices and values of financial institutions operating in advanced market economies, or the current experience and status of successful developmental states with mature strategic investment funds. This argument is developed empirically through an analysis of Kazakhstan's emulation of Singapore and Malaysia's development trajectories, and the role played by strategic investment funds in all three countries.

Financialising the State: Recent developments in fiscal and monetary policy

Marcos Centurion-Vicencio - Université Grenoble Alpes, CREG | **Ewa Karwowski** - Hertfordshire University

Understanding the nature of state financialisation is crucial to ensure de-financialisation efforts are successful. This paper provides a structured overview of the emerging literature on financialisation and the state. We define financialisation of the state broadly as the changed relationship between the state, understood as sovereign with duties and accountable towards its citizens, and financial markets and practices, in ways that can diminish those duties and reduce accountability. We then argue that there are four ways in which financialisation works in and through public institutions and policies: adoption of financial motives, advancing financial innovation, embracing financial accumulation strategies, and directly financialising the lives of citizens. Organising our review around the two main policy fields of fiscal and monetary policy, four definitions of financialisation in the context of public policy and institutions emerge. When dealing with public expenditure on social provisions financialisation most often refers to the transformation of public services into the basis for actively traded financial assets. In the context of public revenue, financialisation describes the process of creating and deepening secondary markets for public debt, with the state turning into a financial market player. Finally, in the realm of monetary policy financial deregulation is perceived to have paved the way for financialisation, while inflation targeting and the encouragement, or outright pursuit, of market-based short-term liquidity management among financial institutions constitute financialised policies.

Spaces of state financialization: a multiscalar perspective

Reijer Hendrikse - Vrije Universiteit Brussel | **Andrea Lagna** - Loughborough University

Over the latter decades, states in the developed world have unevenly yet increasingly financialized in a context of mounting public debt, structural austerity, privatization schemes and the growing influence of market-based finance. We view state financialization as broad transformations in state functions and policies which augment and anchor market-based finance, fueling its spread into non-financial public realms, including state spaces. Drawing on the literature on state rescaling, we categorize state financialization along three dimensions: external state financialization, denoting the upscaling of centralized state functions to supranational scales, accommodating the rise of globalizing market-based finance; internal state financialization, referring the downscaling of centralized state functions to the subnational scales, accelerating the spread of market-based finance across subnational governments and localized (quasi-) public institutions, and executive state financialization, that is the financial renovation of remaining centralized state functions which anchor market-based finance and the financialization of states. Our contribution is fourfold: we systematize the state-financialization literature by foregrounding a multiscalar framework; we address the financialization literature's relative neglect for (state) space, we continue towards unpacking the financialization-neoliberalism nexus, and we open up possibilities to integrate the key strands of the wider financialization literature.

The Financialization of the State II

Financialising city statecraft

Andrew Pike - Newcastle University | **Tom Strickland** - CURDS, Newcastle University | **Graham Thrower** - CURDS, Newcastle University | **John Tomaney** - The Bartlett School, UCL | **Peter O'Brien** - Newcastle University

Recognition has grown of local states as arenas and agents for financialisation: embroiled in a recursive process in which they are actively financialising and being financialised in their relations with other actors in socially and spatially uneven ways. Further work is required to understand how the agency of public and private actors shape the geographically and institutionally differentiated extent, nature and pace of financialisation over time and space. This contribution seeks to explain why, how, with whom, and where financialisation has moved on in certain places and spatial, temporal and institutional settings while in others it has been constrained and limited. A preliminary conception of statecraft at the city level is articulated to remedy accounts where the idea is invoked but not specified. Informed by a multi-actor and multi-scalar framework, city statecraft is defined as the art of government and management of state affairs and relations at the national and local levels within cities, in centre-local relations, and with other para-state and non-state actors in the private sector. Building upon characterisations of 'asset price', 'entrepreneurial', 'financialised' or 'managerial' urban governance, this formulation tries to support conceptualisation and theorisation of forms of city statecraft more capable of grasping and explaining the overlapping, co-existing, and mutating ways in which financialisation is ensnaring city governments in the current conjuncture in certain spatial, temporal and institutional settings. A wider contribution is sought towards more grounded, measured and balanced conceptions of 'financialisation-in-motion' that recognise its social, spatial and institutional constitution, unevenness, implications, and limits.

The financialization of municipal debt: Local governments and the brave new world of derivative capitalism

Sebastian Möller - University of Bremen

The recent financial crisis considerably increased the public and academic interest in financial market dynamics and various debt relations. However, while sovereign debt at the national level is at the heart of current debates, municipal finance, only plays a marginal role. In the shadow of academic and public interest, many municipalities all over Europe, have become more sophisticated debtors: Mostly consulted by financial service firms, local authorities have set up so-called active debt management policies including the purchasing of interest rate derivatives. Thereby, city budgets and local politics in general have become much more connected with rules, performances, and rationalities of global financial markets. City treasurers, for example, increasingly turn into market observers and investors. This extends and transforms traditional debt relations of subnational public entities and contributes to a seemingly boundless expansion of finance. In order to understand the evolution, consolidation, and spreading of this entanglement of local politics and global finance, the paper combines a focus on local administrative practices and particular public-private networks (microscopic) on the one hand, and a broader political economy perspective concerning processes of financialization, regulation and the transformation of business models (macroscopic) on the other hand. It follows Christopher's pledge to follow the money – in this case the derivative and illustrates changing debt relation in British, German and Austrian cases. The paper also discusses whether local governments constitute a special or distinct actor within the universe of debt relations and which conceptual apparatus is needed to capture the different relations at work at the everyday level of the state. Intermediation between global finance and local governance emerges as core theme from the respective fieldwork that underpins the paper.

Mobilizing finance within the Belgian local state: intermunicipal companies as special purpose vehicles

Laura Deruytter - Vrije Universiteit Brussel | David Bassens - Vrije Universiteit Brussel

Tying into recent debates on the financialization of the local state, this paper examines the exposure to and engagement with financial markets of a particular part of the Belgian local state: intermunicipal companies. Since the mid-2000s, we argue, intermunicipal companies—originally designed to seek economies of scale in service provision (e.g. energy and water)—are mobilised as special purpose vehicles to off-load debt and costs from municipal accounts. While the budgets of Belgian municipalities themselves are constrained and regulated, leading to a relatively limited and stable exposure to global financial markets, the size and diversity of debt and debt management products used by intermunicipal companies has risen significantly. This layer of government has until now remained largely underexamined, yet their changing role in the state apparatus complicates the municipal governance of financial exposures. Our discussion brings into dialogue literature from public management on 'shadow' government, fiscal sociology, as well as political economic studies on structural conditions of budget restraint, state restructuring and the consolidation state. In doing so, we aim to contribute to the debate about the different ways in which local state engages finance as a tool for governance.

Beyond Shock Politics: Bond Rating and the Normalized Financialization of Municipal Governance in New Jersey

Mikael Omstedt - University of British Columbia

American local governments have become increasingly dependent on financial markets, turning the attention of scholars towards the role of Credit Rating Agencies in municipal governance. This literature tends to read as a series of snapshots of the outbreak and resolution of budget crises, where rating downgrades help initiate a "shock politics" of neoliberal restructuring. While, as exceptions, such instances help us understand the more general rule of regulation by financial means it is necessary to step back from these if we are to understand the often smooth operation of normalized credit rating power, a form of municipal financialization which doesn't so much descended from above but in which localities are active agents. Empirically drawing on research with local governments in New Jersey, this paper examines the uneven co-production of policy norms of creditworthiness in the interactions between rating analysts, local public accountants and the municipal financial regulation of the state. New Jersey is often perceived as a particularly outstanding example of municipal financial prudence and rather than crisis-induced shock politics credit rating here take the form of a constrained "politics of limits" producing shared norms of what good public finance looks like through discourses of budget flexibility and financial expertise. And yet, also in New Jersey, crisis is always just below the surface. Thus, the paper concludes by discussing two recent instances where the limits to financialized municipal governance become particularly evident: the self-fulfilling rating crisis of the Town of Harrison and the failure of the state's municipal credit enhancement program.

The Financialization of the State III

Dispute over public resources for housing finance: the Brazilian government severance indemnity fund case

Luciana Royer - University of Sao Paulo

The study about credit, funding, and the financial architecture presents itself as fundamental for those interested in cities and urbanism in general.

The paper describes the relationships between the FGTS (Fundo de Garantia do Tempo de Serviço/Government Severance Indemnity Fund, 8% deposits of a worker's salary made by the employer and managed by the federal government – in 2015 the FGTS funds approximately US\$ 15 billion in urban policies) and the real estate-backed securities. The contracts undertaken with the FGTS resources since 2008 for the acquisition of real estate-backed securities resulted in the stimulus of the real estate bonds and securities markets in Brazil, constituting a mechanism that generates a minimum liquidity for its own operation. The investment logic of the real estate funds is the logic of investment return and gain, without necessarily focusing into a housing and urban development public policy geared towards the universalization of rights. The dispute of the FGTS resources and its role as a player in this market is discussed in the context of the insertion of Brazil in the financial capitalism.

The paper will be briefly presented the current context of the real estate credit in Brazil, the creation of the FGTS, its recent changes and performance. In order to discuss the entry of the FGTS into the bonds market, the paper will introduce some aspects of the recent evolution of the mortgage-backed securities in Brazil. The relevant role that the FGTS has in this market is the main topic of the final section of the article, which deals with the relationship between the Fund and the MBS.

Financial market actors as urban policy-makers: the case of Brazil's Real Estate Investment Trusts

Daniel Sanfelici - Universidade Federal Fluminense | **Ludovic Halbert** - Université Paris-Est

Focusing on the recent growth of real estate investment trusts in Brazil, the paper explores how financializing policy instruments intertwine financial markets and the urban built environment. Based on a mixed method research, the paper brings together three processes that are usually considered separately: i) how a network of public and private financial market actors coaxes state bodies into using their socio-legal regulatory powers and financial resources to treat real estate like a financial asset; (2) how the government-run financial market authority and retail banks lures wealthy urban households into investing their savings in so-called liquid real estate through marketing and education campaigns; and (3) how asset management companies are “applied economic geographers” (Lee, 2002, p. 347) as they channel pooled capital into a selected range of property assets in a small number of locations in Brazil. The active role played by financial market actors in the design, enhancement and implementation of such financializing policy instruments leads us to conclude on their contribution as full-fledged urban policy-makers.

The Financialization of Urban Planning Policy: Exploring ‘Commercial Viability’ as a Trojan Horse for the rewriting of Ireland’s Post-Crash Planning System

Richard Waldron - Queen's University Belfast

Drawing upon the case of Ireland, this article explores the interaction between the financialized economy and the urban planning system in conceptual and concrete terms. While a considerable literature has examined the financialization of real estate, land and infrastructure, it remains unclear how planning systems are being repurposed to facilitate a finance-led regime of growth in and through the built environment or how the real estate/ financial complex seeks to enact planning policy transformations that support its positional interests.

To address this, we examine how an epistemic community of financial and development actors have advanced the concept of commercial viability as a means of influencing the post-crisis re-regulation of Irish planning policy. This group has successfully argued that housing construction in post-crash Ireland is economically unviable given the high cost of development finance, onerous planning gain contributions and the lack of development certainty in the planning process. As such, housing construction has been at an all-time-low, leading to a new crisis in the provision of affordable housing. In response, a complicit State has enacted a dramatic liberalisation of the planning system and created new sources of stimulus for developers, often at considerable cost and risk to taxpayers. Empirical findings, based on semi-structured interviews with developers, lobbyists and planners, emphasise the importance of informal access to policymakers, the performative wielding of “expert knowledge” and econometric modelling and media management to co-opt the State into adopting financial logics and rationales within its planning decision-making apparatus.

Putting financialization in its financial context: transformations in state-led urban development in post-crisis England

Brett Christophers - Uppsala University

The burgeoning literature on the financialization of urban development has focused predominantly on the growing importance within this sphere of financial markets, motives and institutions. This paper starts from the observation that in seeking to account for such financialization, scholars have paid curiously little attention to the financial conditions under which those actors effecting it operate. Through a consideration of certain high-profile ongoing transformations in the property strategies of English local authorities, the paper argues that we need to put urban financialization – in this case, state-led variants thereof – in its financial context: it needs to be understood as a response, at least in part, to specific financial conjunctures. After several decades of effective withdrawal, many local authorities have assumed a resurgent role in urban property ownership and development in recent years, and especially since the global financial crisis. This resurgence is apparent, albeit selectively, in regard to both commercial and residential property. On the one hand, local authorities have been rebuilding portfolios of investment (i.e. non-operational) commercial property; on the other hand, they have been building new homes, typically not for social rent, through arm's-length housing companies. I argue that understanding these trends requires appreciation of local authorities' particular financial circumstances in the "post-crisis" era – their operation at the paradoxical and overdetermined intersection of devolved austerity, monetary indiscipline, ring-fenced borrowing, and lumpy landscapes of yield – and of the skewed institutional incentives that these circumstances shape.

The Financialization of the State IV

The Financialization of Oxbridge

Annalena Di Giovanni - University of Cambridge

For the past 6 years, Cambridge and Oxford have competed to issue increasingly substantial bonds for amounts of more than 1 billion GBP. Liquidities are intended exclusively for non-academic purposes, mostly real estate development, and by public institutions that already boast a moderate surplus thanks to their various branded subsidiaries – such as publishing houses, international certificates, and executive training.

The conceptual challenge posed by a tax-exempt, charity-registered public institution listed in the stock exchange market is intriguing as yet another entrepreneurial mutation of the boundaries between private and public. At the same time, the financialization of academic institution poses the question of what entanglements and contradictions may arise between corporate profile, knowledge production, and teaching.

This paper observes three aspects: the rating process, the bond prospects and the strategic actors. The categories of information requested during rating reviews provides insight on how corporate profile is constructed around Research Excellence Framework rankings and HEFCE forecasts (e.g. Government funding for research) and, conversely, how university resource allocation is conscious of image and marketing demands. This contradiction between 'stock market appeal' and production of knowledge becomes even more apparent when comparing financial statements, bond prospects and risk registers, where higher tuition fees and pension schemes are instrumental for market appetite. Finally, mapping the networks of auditing consultants, external advisers and, more crucially, those investment managers who migrated from London Stock Exchange to university governance via Government appointment, situates the phenomena of 'financialized Oxbridge' into the larger reconfiguration of financial markets after 2008.

Budgetary rationalization of drought in Sub-Saharan Africa

Leigh Johnson - University of Oregon

In an era of changing climate risk, governments in the Global South are increasingly pressured to calculate and manage financial exposures to extreme weather events. Multilateral institutions and the insurance sector have championed ex-ante financing arrangements for disaster relief as more timely, reliable, and objective models that can incentivize preventative and adaptive actions and protect state relief payments from neopatrimonial channels of resource distribution. This paper traces risk-based financing practices as they are translated into public sector drought management in Sub-Saharan Africa. I identify the global institutions, tools and networks that increasingly shape the budgeting and distribution of drought finance, and then use two case studies to explore the diffusion of – and impediments to – budgetary rationalization within national treasuries and disaster management. In the first case, the Kenya Livestock Insurance Program, the Government of Kenya fully subsidizes private insurers to cover thousands of pastoralists in the country's remote northern rangelands with index-based insurance contracts intended to help keep

animals alive. In the second, the African Risk Capacity agency (ARC) of the African Union, sovereign governments pay premiums to a multi-country insurance pool which makes payouts to members according to modelled estimates of the drought-affected population. Although both mechanisms have marginally transformed some contextual vulnerability into bundles of risk held by financial actors, their abilities to govern at a distance, to render technical, or to construct new avenues for accumulation are at present limited.

Inter-governmental transfers, political alignment and pork-barrelling: A panel analysis of distributive politics in Greece.

Tasos Kitsos - University of Birmingham | **Antonios Proestakis** - European Commission, Joint Research Centre

Electoral politics and clientelism are not new notions. Yet, the, often suspected, pork barrelling activity has been difficult to identify until recently. A relatively recent trend involves studies utilising publicly available data on resource allocation and electoral results and being able to econometrically derive evidence of political considerations in the allocation of resources.

This paper examines the role of political partisanship and the electoral cycle in the allocation of funding from the central to local government in Greece between 2003 and 2010. A panel dataset which combines data from the Greek local and national elections and municipalities' budgets for the period 2003-2010 is used to run a fixed-effects model specification. In this way, it is possible to test whether the political alignment between the local and national government as well as the stage of the political business cycle impact on the allocation of government grants to municipalities.

The findings suggest that municipalities which are politically aligned to the national government receive more grants in the run-up to national elections. This is evidence of pork barrelling and the political business cycle considerations in the allocation of resources. The results call for greater fiscal decentralisation in order to reduce the dependency relationship between the local and national government levels and eradicate the use of intergovernmental transfers for political gain.

Ceci n'est pas un Capital Markets Union. Re-establishing state-led financialization in the EU.

Nina Haerter - VUB

In the nearly 10 years since the outbreak of the financial crisis, the EU has introduced many policy initiatives directed at the financial sector, the most recent one being the Capital Markets Union. As the project's name indicates, the official aim is to integrate various European financial markets, therewith connecting investors with investment opportunities more efficiently, "financing growth". By analyzing the various different policies that make up the Capital Markets Union, this contribution aims to show that the common threads running through these projects have little to do with market integration, but rather with softening the rules intended to reduce systemic risks and incentivizing financial market deepening across the EU. It is therefore suggested that the Capital Markets Union is not much of a market integration project, but rather the re-establishment of state-led financialization.

Session

Contemporary austerity and the changing state

Mia Gray - University of Cambridge | **Anna Barford** - University of Cambridge

Contemporary austerity policies have had profound effects on cities, regions, and nations across Europe and North America. Likewise, many countries in the global South have undergone severe bouts of austerity during the 1980s and 1990s. Many scholars argue that neo-liberal politicians and strategists have used fiscal austerity and discourses of austerity to attack the scale and scope of the welfare state (Peck, 2014; Donald et al, 2014). The resultant shifts in the state's role can be seen in the selective cuts to social programmes, the reduction in public sector jobs, underfunded infrastructure, the selling off of public sector assets, the weakening of regulatory authority, and the overall diversion of resources to the private sector through other forms of privatisation. However, at the same time, some parts of the national and local state have expanded their scope and remit, for example parts of the "security state."

These changes, of course, are uneven. The changes in the state, and in public service provision, have shown highly differentiated effects in terms of geography, class, race, gender, and age. Additionally, there has been a reassertion of the core-periphery model in Europe as the southern countries of Spain, Portugal, Italy and Greece are in a much weaker position than their Northern European counterparts like Germany and Austria (Kitson, et al, 2011).

This session will explore the changing state at times of austerity, and ways in which these changes affect how the state functions and for whom. We invite papers on any of the above themes. Please contact Mia Gray (pmg27@cam.ac.uk) or Anna Barford (ab423@cam.ac.uk) if you have any questions about this call. Abstracts (maximum 250 words) should be submitted online through the conference website until March 15, 2018.

Local government on a shoestring: how and where to cut a budget?

Mia Gray - Cambridge University | **Anna Barford** - Cambridge University

Since 2011, the UK central government has successively reduced local government budgets. Despite some common approaches, local governments show a variety of strategies when forced to reduce spending in order to balance their budgets. These mechanisms come with distinctive political philosophies of local government, as well as divergent effects upon the extent and quality of council services, accountability, and financial sustainability. This variety of responses can be conceptualised as passing on work and responsibilities to (1) the private sector, (2) the third sector, and (3) to individuals. These mechanisms include contracting out service provision and requiring individuals to provide for more of their own care needs. These first three mechanisms fundamentally shift the relationship between local government and residents by increasing the contradictory nature of service provision and by reducing or removing services altogether. Another mechanism is (4) sharing services or even merging local governments to benefit from economies of scale as well as reducing office overheads and staff. The last mechanism is (5) reasserting the role of local government, for example using cheap loans to spend on capital projects to rejuvenate an area and boost the local economy.

Whilst recent changes have been theorised in terms of state shrinkage, our case studies of nine English councils show some examples of local government being proactive in adopting policies that have the potential to be socially progressive, despite austerity. Building on our findings we propose conceptualising this in terms of a continuum between fragmentation and consolidation of the role of local government. Having categorised mechanisms and analysed their effects on the changing state, we finally consider the reasons behind the variety of mechanisms employed. This detailed study of English councils under austerity conceptualises and makes sense of these diverse responses.

Public space at a time of austerity

Anna Barford - Cambridge University | **Mia Gray** - Cambridge University

Contact points between citizens and local governments often function as unacknowledged public spaces. Many of these public spaces have been a victim of austerity, with government offices becoming merged into centralised locations, often moving away from the neighbourhoods they once served. In many cities, libraries have taken on great symbolic importance as public space which embody the tensions between the need for community resources and as the subject of austerity cuts themselves. While libraries have expanded some of their functions (provide meeting rooms, yoga studios, cafes, council services, services for the elderly, and jigsaw clubs), they themselves have been the focus of budget cuts and spatial reorganisation – leaving many neighbourhoods with depleted or non-existent services. This paper explores these changes in organisation, the symbolic and material resources the library embodies, uses by the community, and the labour used to produce these spaces.

The idea of the library as an open and non-commodified urban space is being challenged by these changes. There is a growing tension between older ideas of the library as public space which offers self-improvement, edification, and access to culture and the uses of the newly organised, often partly privatised, library spaces. As part of this, new funding models have proliferated which emphasize money-making activities and which increasingly rely on a shrinking professional staff aided by a growing volunteer labour force. In particular, we examine one of the new functions in libraries which encourages users to behave as “neoliberal subjects” as libraries enable many to conduct the onerous job searches required to receive public benefits.

Austerity and rescaling of state power: Means of fixing marginality in peripheral economies of Europe?

Erika Nagy - Hungarian Academy of Sciences | **Gabor Nagy** - Hungarian Academy of Sciences

Peripheral economies were included in the unfolding system financialized global economy in a highly dependent way that manifested in financial instability and an acute shortage of capital in the productive sectors under the 2008/11 crisis. Although, indebtedness, fiscal problems and economic meltdown hit European peripheries unevenly, austerity was a general recipe for consolidation imposed on such economies. In the eastern periphery, it was a second wave of austerity; the first one related to the transition process resulted in a general roll-back of the state agency that occurred along with rescaling state power (duties and financial means) from central to municipalities, to manage the consequences of neoliberalization of post-socialist economies and promote democracy locally. The recent crisis raised conflicts related to rescaling (recentralizing) state power through austerity schemes – yet got along various scenarios within the eastern periphery depending on the depth and modalities of financialization of the state. Our key argument is that it was a mechanism to throw the consequences of the crisis to peripheries/marginalized groups at sub-national scale as it weakened municipalities as last resorts of managing social crisis, and thus, fixing marginality in space. We rely on Hungary as a case study/yet an extreme in this process, where rescaling/centralization hollowed out local scale step by step by limiting financial scope (access to credit and centralizing state revenues) and functional shrinking. We develop our

argumentation along critical political economic approach and the related concept of uneven development (thus, understanding the state and global processes as mutually constitutive) yet shifting its dominant macro-focus to local scale to understand, how socio-spatial inequalities are reproduced at crisis time across (yet interrelated) scales, and how subsequent crises and related austerity schemes and their socio-spatial consequences are entangled.

Youth labour markets in an era of austerity: a just outcome?

Karenjit Clare - University of Cambridge

Austerity is an increasingly important feature of urban society in Western countries. This paper argues that certain segments of society have borne the brunt of the restructuring of labour markets, particularly young people who now 'feel paralysed by their circumstances and crippling self-doubt' (Princes Trust Youth Index 2017). 'Global' cities are becoming more unequal and disconnection and deprivation is rife. Our study examines the 2012 Olympics legacy in relation to youth and employment opportunities in London's East End. The former Olympic grounds is an inner city industrial area that has been marketed as a site of 'creativity', 'entrepreneurship' and 'innovation' with great promises for young people. Yet, this paper illustrates the precarious outcomes (inequalities, alienations and injustices) for young people through examining the issues of equity on the Olympic site. As Valentine (2013) rightly argues, 'the discipline has been slower to consider young people on the cusp of childhood and adulthood: those aged 16-25'.

FINANCE AND FINANCIALIZATION III: INEQUALITIES AND PERIPHERIES

Session

Banking, firm finance and (uneven) regional development

Franz Flögel - Institut for Work and Technology | Jane Pollard - Newcastle University

25 years after Richard O'Brien predicted the "end of geography" in finance we witness substantial changes in the regional provision of finance. On the one hand, the relevance of decentral financial systems and regional banks for firms' access to finance and balanced regional development is increasingly recognised. In this line, calls for the (re)establishment of regional banks in the UK and elsewhere intensify in response to the credit crunch during the global financial crisis of 2007–2008. Some calls take Germany's banking system with its more than 1400 regional savings and cooperative banks as a role model. On the other hand, traditional banking is under pressure due to tightened bank regulation and the low interest rates, which caused a strong decline in the number of (regional) banks and branches in most countries. Advances in the financial industry like crowdfunding, fintech, mobile money (i.e., a new round of digitalisation) further question the intermediary function of traditional (regional) banks. Therefore, it is time to revisit banking and its geographical conditions and implications. To this end, the session welcomes empirical, theoretical and conceptual papers on banking, firm finance and regional development including the following topics:

- (Retail) banking:
 - spatial development of branches and head offices;
 - access to finance, personal lending / (new forms of) redlining;
 - mortgages finance;
 - digitalisation of banking (e.g. online banking, credit scoring, fintech, mobile money);
 - central bank policy;
 - bank regulation;
 - stability and profitability of banks;
 - Firm finance:
 - firms' (spatial uneven) access to finance (e.g. supply and demand analysis);
 - banks' lending practices to firms;
 - new banking theory, information asymmetries and credit rationing;
 - functional and operational distance;
 - venture capital, crowd funding, alternative finance etc.;
 - Uneven regional development:
 - finance and its interlinkages with aspects of regional development;
 - polarisation and post-Keynesian theories
-

Banking, firm finance and (uneven) regional development I

The impacts of the global economic crisis upon the hierarchy of banking centres in Europe

Jiří Blažek - Charles University | Tereza Hejnová - Charles University | Hynek Rada - Unicredit Bank

This paper aims to unravel the impacts of the global economic crisis upon the hierarchy of the banking centres in Europe on the basis of the evolution of key economic indicators such as total assets, profitability and the level of risk of their banking sectors. Overall, the first-tier banking centres displayed a high level of resilience, which contrasts with the evolution of the second-tier centres, where economic performance clearly lagged behind the European triad of banking mega-centres. This is a counterintuitive finding, as the activities of the first-tier banking centres have traditionally been skewed towards operations in capital markets, rather than credit provision. Therefore, while the recent global economic crisis did not result in dramatic shifts in the position of particular banking centres, the crisis deepened the polarity between the first- and second-tier centres and, to a lesser extent, also between the third- and fourth-tier centres.

Banking Systems of Germany, the UK and Spain

Stefan Gärtner - Institute for Work and Technology | **Franz Flögel** - Institute Work and Technology

This paper re-visits the state of decentralised banking in Germany, Spain and the UK. The cross-country comparison we conducted has identified Germany as having the most decentralised banking system, followed by Spain and the UK, as expected. The development of regional and dual-purpose banks, i.e. savings and cooperative banks, mainly account for the differences in the degree of centralisation. Whereas no such bank exists in the UK any longer and real savings banks in Spain have almost disappeared, two decentralised banking groups with more than 1,400 savings and cooperative banks dominate business finance in Germany. Our comparison has identified three factors of success contributing to the persistence of decentralised banking:

I. Short operational and (especially) functional distance and embeddedness in supportive regional bank associations.

II. The development of “real” decentralised universal banking. Here, the time when regional savings and cooperative banks received the right to lend is crucial

III. The interplay of the regional principle (regional market segregation), regional embeddedness and a national system that balances regional disparities. Together, these three factors help to make regional banks sufficiently successful, even in weak regions, and hinder competition between banks, thereby supporting meaningful cooperation in banking associations and relationship lending.

Savings banks have never been as important in business lending in the UK and Spain as they are in Germany. Though large commercial banks dominate business lending in both countries, some (partly newly established) banks tend to specialise in lending to small enterprises at shorter distances there. To support short-distance lending, this paper suggests a compensation scheme for screening and monitoring costs. Such a scheme may stimulate banks to shift, or preserve, their lending decision processes to the regional level and reduce the need for standardisation, centralisation and bank mergers in times when interest rates are low.

Changes in the financial geography of Russia as evidence of institutional changes

Svetlana Ageeva - Novosibirsk State University | **Anna Misshura** - Siberian Branch of the Russian Academy of Sciences
Russia

We examined regional differences in the placement of Russian banks between 2000-2017 in federal districts, republics and their capitals. The study is based on data from the Central Bank of Russia. A three-stage periodization is proposed for the regional banking systems emergence depending on institutional changes and the role of the state in the banking sector.

According to our calculations, until 2009 the number of regional banks depended on whether a federal district center was present in the region. The diversity of political forces in the region was a major factor as well. Since 2010, these two factors affect the number of branches of Moscow banks, while the role of regional banks continued to decline. The most important changes for the period were liquidation of captive regional power banks, decline of banking business localization in the regions and its concentration in Moscow. The share in profits attributed to Moscow banks increased to 93%, while the share in assets - to 90% in 2017.

In 2014 the introduction of sanctions on state Russian banks have further increased geographical disparities in the banking sector. Data shows that due to their monopolistic position in Russia, sanctioned state banks have to some extent adapted to sanctions by 2016. For purposes of lending, banks have increased borrowing on the domestic market from Central Bank, the Ministry of Finance, domestic bonds market. The outflow of internal liquidity in favour of state-owned banks affected the survival of regional banks. Thus, the geography of the banking business in Russia points to the increasing nationalization of the banking system.

Reorganisation of the Belgian banking sector

Maëlys Waiengnier - Université Libre de Bruxelles - Vrije Universiteit Brussel

As elsewhere, the Belgian banking sector has been subject to change since the 2008 financial crisis. The financial crisis has modified financial institutions's working and challenged the existing economic paradigms. Digital economies have become omnipresent affecting all actors of the financial sphere. These evolutions put pressure on the relevance of a retail banking service of proximity. Does this translate in a general decline in retail banking service provision or rather in a common trend of the market economy searching for cost reductions where possible? Our hypothesis is that the geography of retail banking is more influenced by cost-reduction logics with the introduction of new technologies as a step in the standardisation of retail banking services which is not completed yet. Using national statistics data on the spatial distribution of banking activities, we trace the evolution of the banking sector distribution between 2008 and 2014 in Belgium. Traditionally strongly concentrated in the Brussels Capital Region, the Belgian banking sector has decreased by 9% of employees in 6 years – differently within the three Belgian regions. The weight of the banking sector decreased in Brussels and the periphery of the Walloon Region, and shows contrasted situations in the Flemish Region. We suggest that these patterns illustrate the beginning of retail banking activities reorganisation as well as strong changes in the structure of the banking headquarters.

Banking, firm finance and (uneven) regional development II

Soft Information and the Geography of SME Bank Lending

Tianshu Zhao - University of Birmingham | **Kul Luintel** - Cardiff University | **Kent Matthews** - Cardiff University

This paper is aimed at two strands of the literature in banking. First, it tests for the geographical dimension in SME lending and the relevance of relationship banking for SME lending. Second, it tests for the view that large institutions with complex organisational structures are more able to filter ‘hard’ information than ‘soft’ information. We estimate a panel model using data on individual bank lending to SMEs and mortgage lending by postcode area for 120 localities in Great Britain for the period 2013(2)-2014(4). We conjecture that as the same bank makes SME loans and mortgages to the specific postcode area, it would utilise common organisational structure and informational technology. We find strong support for the geographical dimension and a vindication of the conventional view that SME lending requires the transmission of ‘soft’ information through the intermediation of a Relationship Manager.

Dynamics of Retail-Bank Branching in Austria

Johann Burgstaller - Johannes Kepler University Linz

This paper examines branch exit from and entry into local banking markets in Austria from 1999 to 2012, as well as changes in concentration and several bank–borrower distance measures. Results from spatial regression models reveal that especially less developed and functionally distant municipalities suffer from branch withdrawal and financial desertification. Bank variety, and thus, choice decreases, for example, in (the vicinity of) communities with ageing population. Most examined processes are found to exhibit spatial correlation and so being geographically extensive. Potential adverse consequences of structural change for non-urban markets should, thus, receive more attention from economic and regional policy.

Geographical patterns of the Italian banking system across borders

Silvia Grandi - University of Bologna | **Umberto Rosati** - University of Turin | **Christian Sellar** - University of Mississippi

Geographical patterns of the Italian banks in the global arena are slowly becoming apparent but these are still controversial. Behind the veil of apparent continuity, Italian commercial banks have been reworking its international strategies balancing growth and crisis cycles in uneven patterns. This paper asks the following question: what are the main strategic behavior and drivers of Italian commercial banks towards the international markets?

After a spatial distribution analysis, this paper, first, models the main strategic organizational processes of the Italian banking system occurred in the late decades highlighting the relationships with internationalization, trade flows and other factors. Second, it clusters Italian banking groups according to drivers of internationalization and it describes trends in strategic behavior.

The results are showing uneven patterns. In major Italian banks two main strategic organizational processes occurred in the late decades: merging & acquisition (M&A) by international groups and the M&A by clustering among Italian banks. Next to these cases, middle and small size banks operated strategies that can be depicted as: proximity expansion, finance city focus and exploratory expansion. These choices, moreover, affect the type of bank’s services, its sourcing (internal or outsourcing) and risks. This study also shows that trade flows and internationalization behaviors of Italian firms are only one of the factors influencing location choices of Italian banks, others are related to autonomous sectoral growth, diversification strategies, the willingness to co-locate into international highest international financial centers or emerging ones as well as the behavior of institutions of the home country or of the headquarters’ region entrepreneurial culture. Taken together, banks and firms have partially overlapping international networks, due to the open interactions of banks and manufacturers who tend to build arm length relationships rather than longer term, contract bound relationships.

Session

Finance, international capital flows and uneven development

Britta Klagge - Universität Bonn | **Hans-Martin Zademach** - Catholic University Eichstätt-Ingolstadt

Financial actors and markets as well as international flows of capital have been recognized as important drivers of economic as well as social development. Although the theoretically given unlimited fluidity of money – the foreign exchange market for

example is deemed to be the most liquid market in the global economy –, they are regularly tied to specific geographical scales. Likewise, the implications of financial sector operations apply to all levels from the global to the local, albeit with different impacts. Hence, local and regional economies are differently integrated into global capital flows and circuits, resulting in uneven financial developments which can, for example, take the form of agglomerations (in financial centres) or marginalisation (e.g. in some peripheral areas).

The session aims to address these differences and connections by bringing together conceptual and empirical contributions that might address, but are not limited to, the following topics:

- The international financial system and the Global South
- Capital flows between / within North and South (including the investigation and visualisation of these flows)
- Financial actors (e.g. banks, stock exchanges) and the Global South
- Technology and financial markets in low-income and emerging economies
- Financial institutions and regional development in the Global South
- Agriculture and rural finance in emerging and low-income countries
- Financial inclusion / exclusion in the Global South
- Alternative / diverse economies and spaces of finance
- Capital market integrity and financial market stability in low-income and emerging countries
- Emerging and low-income economies in the investment strategies of investors.

Please contact Britta Klagge (klagge@uni-bonn.de) and/or Hans-Martin Zademach (zademach@ku.de) if you have any questions about this call. Abstracts (maximum 250 words) should be submitted online through the conference website between November 15, 2017 and March 15, 2018.

Remittances and the Financialisation of Development in Nepal

Lekh Nath Paudel - University of Lausanne | Lekh Nath Paudel - University of Lausanne

In the last decade, IFIs and ‘development’ agencies have framed remittances as a source of ‘development’ financing for developing countries. The migrant worker’s money sent back to their families and communities, generally from countries in the Global North to the Global South, has become a key component of development policies and projects as well as a lucrative market to tap for private financial actors. As a result, remittances have become linked to global financialisation processes expanding geographies of financial markets and deepening financial logics to ‘unbanked societies’. In mainstream development discourse, the financialisation of remittances is often portrayed as a win-win-situation for the financial industry located in the global North and migrant workers’ families in the global South. Critics have argued, this process has contributed to sustain uneven development, fortifying the global division of labor that reproduces the labor force required for the Global North. Nepal is not an exception to this phenomenon. The country has experienced emigration and the inflow of remittances for over two centuries and remittances have been implicated in shaping broader politico-economic and sociocultural dynamics in Nepal. Remittances have also shaped different ways of understanding and practicing ‘development’ in the country. Academic and policy debates often focus narrowly on the productive use of remittances as a source of development financing, ignoring the broader political economy and socio-cultural dimensions of the financialisation of remittances, which has created seemingly de-politicized understanding of development. This paper explores the politics of the financialisation of remittances and development in Nepal, analyzing how the financialisation of remittances has shaped understandings and practices of ‘development’ in Nepal. Theoretically, this paper builds on the Gramscian concept of ‘common sense’ combining it with insights from financial geography and postcolonial literature to unravel the links between development and the financialization of remittances in Nepal.

Foreign Direct Investment and Industrial Agglomeration: Evidence from India

Renjith R - Indian Institute of Technology | Nadia Doytch - Brooklyn College | Subash Sasidharan - Indian Institute of Technology

The subject matter of economic geography since its inception tried to explain the unevenness in the geographical distribution of economic activity. Differences in natural endowments, labour pool & scale economies are often cited by the previous studies to explain agglomeration of economic activity. It is evident from the empirical works that the unevenness persistent in the geographical distribution of economic activity is also observed in the distribution of Foreign Direct Investment (Guimaraes et al, 2000; Chung & Alscer, 2002; Mukim & Nunnencamp, 2012). Therefore, this study examines the influence of FDI on the regional concentration of industries in the context of an emerging economy, India. India is an interesting case to study since it is one of the leading recipient of the FDI flows. Surprisingly, very little is known about the spatial distribution of FDI in the context of India. Baring, Mukim and Nunnencamp (2012) which analysed district wise FDI in India, there is hardly any empirical study exploring the spatial aspect of FDI. Mukim and Nunnencamp (2012) report more than 50 percent of the inward FDI is concentrated in just six districts. In this context, the proposed study intends to identify the effects of this uneven distribution of FDI on the concentration

of manufacturing activity. We propose to use Annual Survey of Industries database and FDI intelligence data from Financial Times Ltd to construct industrial agglomeration index and FDI concentration index respectively. We employ Ellison-Glaeser index as a measure of geographic agglomeration of manufacturing industries during 2006-2014. Extant studies on the spatial distribution of FDI focus on the location where the inbound FDI is concentrated. They failed to explore the sectoral composition of FDI. Distinct to these studies, we try to capture the concentration of FDI in specific industries in specific regions by incorporating spatial and sectoral aspects.

Bridging the gap between Expectation and Reality: Foreign Investment Absorption for Promoting Agricultural Development in the Global South

Yangfen Chen - Chinese Academy of Agricultural Sciences | **Xiande Li** - Chinese Academy of Agricultural Sciences | **Lijuan Wang** - Zhejiang Academy of Agricultural Sciences

There are close to 1 billion people living in extreme poverty, mainly distributing in the Global South. Overseas investment is expected as one of the most important financing sources for sustainable development. At the same time, however, whether and how the foreign agricultural investment will act as the expected role still lacks enough empirical evidences. In this paper, the finance demand, the attractiveness, and the risk facing by most countries in the world are evaluated and inter-compared by constructing composite indicators. Then China's role in global land acquisition, as a crucial source of foreign investment, is checked by a detailed analysis based on media data and peer-reviewed articles. Results show that there exists great finance demand in most developing countries comparing the developed. Investment risk in the Global South is generally high, especially in sub-Saharan Africa and Latin-America countries. Among these countries, some have high attractiveness on foreign investors, while others are not. Measures and incentives for attracting multinational enterprises and promoting local agricultural development thus should be viewed separately. As one of the most important investing countries, China's role in global land acquisition is greatly exaggerated and even distorted. Meanwhile, Chinese companies have already brought double-edged impact on local food security, labor employment and agricultural systems.

Development Financing and South-South Financial Cooperation

Gaëlle Despierre Corporon - Université Grenoble Alpes

The purpose of this article is to assess the consistency of some alternative development financing models with regard to the urgent need for a more sustainable financing of the process of development. In this aim, the article puts the emphasis on South-South financial cooperation as a possible relevant alternative way to provide development with more stable and bearable financial conditions. In order to have a good grasp of the long-lasting issues related to the financial conditions of development and developing economies, this article first gives a comprehensive account of the major characteristics of market-based capitalist economies focusing on the way monetary and financial markets usually operate. This analysis then raises the question of whether profit-seeking financial markets and development-seeking long-term needs may be compatible with each other in order to let financial market mechanisms take care of the development process without constrained state intervention and public organisation. From the same perspective, similar questions come into the picture about the mode and aims of South-South agreements related to the constraints through which developing economies evolve in their catching-up process. The analysis of this article then leads to the conclusion that the search for a durable relevant alternative financial structure for development requires some specific conditions which could not be spontaneously fulfilled through market mechanisms. Hence, it calls for more coordination and cooperation among different stakeholders to deal with the structural weaknesses of concerned economies and with short-sighted speculative strategies of financial markets.

Session

Financial Geographies of Inequality: Tracing the Circuits, Scales, Sites and Relations of Financialization

Jane Pollard - Newcastle University | **Emily Rosenman**

Economic geographers have made important contributions to theorising the role of finance and, more specifically, processes of financialization, in the global trend toward increased economic inequality. Topics central to recent scholarship on financialization include the global prevalence of austerity, ongoing attempts to privatize social security, the erosion of labour standards, and the penetration of financial logics, metrics and practices into the nooks and crannies of everyday life. Scholars across the social sciences have also shown how women, the elderly, immigrant populations and racialized minorities have been disproportionately affected by the financial crisis.

A decade on from the 2008 financial crisis, this session seeks to explore the uneven manifestations of finance-led growth and development. We seek papers that explore the circuits, scales, sites and relations of financialization in order to understand how inequality is replicated, reconfigured or entrenched. Inequality is inherently a relation of unevenness; in seeking to trace the social and spatial inequalities produced by financialized capitalism, we seek papers that attempt to capture the particularities of the variegated nature of financialization. Following Katz's (2001) formulation of the countertopographies of globalization, we encourage papers that draw connections between the places and processes of financialized capitalism.

We welcome both theoretical and empirically-based papers that address themes including (but not limited to):

- Credit/debt relations
 - Spaces where inequality appears and where it is occluded
 - Financial inclusion and exclusion
 - The unequal distribution of wealth
 - Conceptualising finance and inequality: units of analysis and/or scales at which the relationship between finance and inequality is understood – individual, couple, household, family, neighborhood, city, region?
 - Financing social welfare, the built environment or social reproduction
 - The privatization of profit and the socialization of risk
 - The spatial fix of financial capital
 - The normalization of financial logics- speculation, share-holder, interest/yield
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Financial inclusion, taxation, and direct distribution – how can policy reduce wealth inequality in times of financial sector transformation?

Hanna Szymborska - The Open University

This paper reviews and evaluates policy measures to reduce wealth inequality in the context of financial deregulation, financial innovation, and financialisation of the state. We argue that differences in household balance sheet structures induced by financial sector transformation since the 1980s pose a challenge to traditional policy responses to wealth inequality through taxation and financial inclusion. We show that as households at the bottom of the distribution become capital owners through homeownership and financial inclusion policies, while rich households accumulate highly liquid wealth, redistribution of wealth through e.g. property or inheritance taxes places uneven burden on low-income households and risks to deepen rather than alleviate inequality. To develop this argument, we scrutinise policy strategies to reduce wealth inequality that have been put forward in the literature (Piketty 2014, Atkinson 2015, Galbraith 2016, Stiglitz 2012) and draw examples from policies implemented in the USA to additionally examine the implication of these measures for racial, gender, and intergenerational inequality. We advocate that explicit wealth taxation could be particularly effective if complemented by policies affecting the distribution of market outcomes (through sustainable asset ownership, personal debt relief programs, financial regulation, and corporate taxation). Given the current political economy context, we discuss potential obstacles to implementing these distributional policies.

Accumulation through care? Financialization in the eldercare sector in Vancouver and Shanghai

Kendra Strauss - Simon Fraser University

This paper examines the logics, processes and mechanisms that underlie the financialization of eldercare in two urban centres. Vancouver and Shanghai are increasingly linked by flows of goods, people and capital, and the recent take-over of the Canadian company Retirement Concepts by Chinese insurer Anbang spotlights the interlinkage of those flows with state-led strategies of accumulation. The implications for workers and clients have started to attract media attention in B.C., but the relationship of this particular take-over to broader policies of privatization – or what Harvey has called accumulation by dispossession - remains largely in the shadows. Moreover, an examination of the financialization of eldercare begs several questions of theories of production and social reproduction that treat reproductive labour as epistemologically distinct.

Making Sense and Cents of Austerity: Privatization, Financialization, and the Politics of Public Budget Management

Heather Whiteside - University of Waterloo

Processes of public sector privatization and financialization are played out through the politics of budget management, and the austerity context brings these dynamics to the fore. This paper engages in qualitative budget analysis aimed at identifying how continuity and transformation in public expenditure documents narrate stories of unevenness, exclusion, and inequality associated with private for-profit activity within the public sector at different scales of governance – local, regional, national. Spain, Denmark,

Ireland, and Canada are selected for their historically divergent varieties of capitalism and more recently variegated exposure to economic crisis and marketization. Using official sources and supportive documents such as budget briefs, auditors' reports and those produced by special commissions and consultants, news backgrounders, government announcements, and speeches to the legislature, this paper will uncover how avenues for privatization and financialization are created through budgeting procedures, new or different revenue composition and fiscal governance, and the ideational framing of burden and responsibility redistribution (particularly vis-à-vis indebtedness and social reproduction).

Financialisation of Charity: Turning Sadaqah into Credit for the Urban Poor in Istanbul

Umut Kuruuzum - London School of Economics | **Çagla Diner** - Kadir Has University Istanbul

Our proposal is to place peripheral financialization within the context of microfinance, a financial technology advancing the reach of credit into poor households by using social bonds and kin network as collateral. The research is based on multi-sited ethnography following the microfinance from financiers, the microfinance institution in Turkey called TGMP (Turkey Grameen Microfinance Programme), to the loan takers, women who do not have access to credit in the formal financial system in Istanbul. First, we focus on TGMP as an institution and explore how microfinance programme entangles with the Turkish political and economic landscape. The institution whose main objective is poverty alleviation started its activities in 2003 with the support of the AKP government. Instead of sadaqah (charity) and direct state support as a solution to poverty, the programme emphasizes that the poor should pull themselves out of poverty through entrepreneurship. Then, we studied how microcredit is empirically incorporated into people's everyday life in the two neighbourhoods of Istanbul – Karagümruk and Tarlabasi. In most cases, we have found that credits were spent on daily necessities for life – food, clothing, doctor's bills, weddings, food, and rent. At this stage of research progress, we argue that far from turning women into entrepreneurs to pull themselves out of poverty, microfinance turns household into a site of accumulation and debt. In contrast to its objective of poverty alleviation, TGMP acts similar to a bank in minimizing the risk of default and maximizing the sale of credit. However, as different from a bank, the institution finances itself through charity, acting in contradiction with the discourse it utilizes.

Session

Financialization, uneven regional development and labour

Michael Miessner - Georg-August-University of Goettingen | **Stefanie Huertgen** - Universität Salzburg

The financialization of the economy has been widely discussed in academic discourse since the economic crisis that erupted in 2007. Already 2008 Pike and Pollard (p. 30) emphasized 'that financialization provides a strong impetus to embed finance in the heart of our understanding of economic geographies'. Nevertheless, the crisis also demonstrated important limits of recently very influential regional development approaches stressing endogenous resources (Hadjimichalis and Hudson 2014). In sum, it can be said that studies on regional uneven development and financialization remain limited, and in particular regional work and production – once at the forefront of regional development theory – still need more attention.

Ten years after Pike and Pollard's analysis, we would like to investigate the implications of financialization for regional development, with a special focus on labour and production processes.

We invite papers focusing the following or related issues:

- (1) Is financialization a 'profoundly spatial phenomenon' as French et al (2011: 800) argue? Hence, how can we investigate the spatial implications of financialization?
- (2) How is financialization connected to the production and labour process? What does this mean for 'labour geographies' (Herod 1997)?
- (3) How are labourers included in the financial system? Does the growing 'debtfarism' (Hembruff/Soederberg 2015) of labourers implicate any spatial consequences?
- (4) What do the financialization of the production and labour process as well as the inclusion of labourers in the financial system entail for regional development? What kind of 'spatial division of labour' (Massey 1995) do we face?

Labour, financialisation of housing and the rescaling state in Hungarian second-tier cities

Márton Czirfusz - Hungarian Academy of Sciences | **Ágnes Gagyi** - University of Gothenburg | **Tamás Gerócs** - Hungarian Academy of Sciences | **Csaba Jelinek** - Hungarian Academy of Sciences | **Tibor T. Meszmann** - Central European Labour Studies Institute | **Zsuzsanna Pósfai** - Collective for Critical Urban Research

Global cycles of capital accumulation are driving uneven development on various spatial scales. Our paper addresses how this process is articulated in Hungary. We focus on the points of juncture between the new spatial divisions of labour resulting from

the post-crisis global industrial relocation, the financialisation of housing, and the way the state mediates capital-labour relations. Geographically, we focus on second-tier cities in Hungary defined as intermediate spaces in uneven national accumulation processes. We apply the concept of 'intermediate spaces' to various aspects. First, in the production process, enterprises located in these cities are typically in lower hierarchical positions in global supply chains, employing a larger share of unskilled labour. Fluctuations in the production process result in a larger pool of the industrial reserve army, or more precarious employment relations in segmented local labour markets, as well as more profound out-migration processes. Second, second-tier cities are spaces where the housing market fluctuates the most, according to the availability of housing credit and of related state subsidies to homeownership. In these places the volatility of housing financialization can best be grasped. Labour market intermediaries increasingly link the aspect of labour and housing by investing into real estate, in order to offer a place of living for their employees, and to invest surplus capital. Third, the rescaling state mediates between global and local forces. On the one hand, public policies mobilize and discipline the reserve army by a mix of interventions into housing, labour market, and policing. On the other, the state incorporates the sometimes colliding interests of domestic and international fractions of capital in its ongoing negotiations in the accumulation process. Moreover, the shift in the international arena from predominantly Western industrial interests to more diverse fractions pushes the state to operate in a new intersection of global dependencies.

Financial investors and the new spaces of insecurity

Christoph Scheuplein - Westphalian University of Applied Sciences

Private equity is a buy-to-sell business model, and the new owners of companies that have been taken over are investors whose business objective is to resell the company at as high a price as possible. The presentation focuses on the automotive supplier industry in Germany to illustrate the extent to which financial investors have taken over companies in the past 15 years. Many companies have entered a cycle of uncertainty: many of them have been taken over by financial investors several times; a large number of companies have gone bankrupt; and the exits of financial investors have attracted a large number of owners from emerging markets. Private equity is a form of investment that releases the companies from their regional production commitments in various different ways. The presentation draws on interviews with works councils to show how this puts employees in a state of permanent insecurity.

Capital and spatial shifts in the era of financialisation

Costis Hadjimichalis - Harokopio University Athens

The paper discusses the *longue durée* of uneven geographical development in Europe, which, since the late 1980s, is marked by several capital and spatial shifts under the dominance of financialisation. Among them, I mention the shift from productive activities towards rent seeking activities; a global shift towards the Far East; an intra-European shift from southern regions to former socialist regions; and an inter-regional shift towards mainly urban agglomeration. These shifts transform socio-spatial relations and produce new victims, the new precarious classes, while established centers of command and control retain their strength and power.

Session

Global Finance, Development and the New Peripheries

Leigh Johnson - University of Oregon | **Patrick Bigger** - Lancaster University | **Stefan Ouma** - Goethe University Frankfurt

This session examines the significance of financial relations and transactions in spaces of the global South that have typically been figured as "marginal" to, if not altogether excluded from, the operations of global finance. As finance relentlessly seeks to identify further spatial fixes and revenue streams, this session will probe the particularities of integration. What assemblages and legacies – (post)colonial and otherwise – characterize these spaces? What are the regional coordinates of integration, and the concrete social, political and material landscapes it produces? The optic of "peripheries" – with its roots in dependency theory – highlights the relations of power, subordination and exploitation produced through finance's expansion and experimentation at its frontiers. As certain places are linked to global flows of capital, they can become peripheralized in new ways. Yet as some "financial innovation" originates in the South and travels to the global North (e.g. mobile money and microfinance) and the South more generally becomes a source of capital (e.g. sovereign wealth or pension funds), existing understandings of peripheralisation must be reexamined. How can the dependent and extravered notions of development suggested by the term "periphery" be reworked to make a place for heterogenous forms of economic self-fashioning? How might other concepts such as extraction, dispossession, value grabbing, disarticulations and expulsion help render intelligible the new peripheral operations of finance and the place-making projects that emerge from them? We especially invite papers making conceptual advances using empirical cases on topics including but not limited to: Financial inclusion and adverse incorporation; New sites of experimentation and product

development; The financialisation of development; Multiple frontiers of peripheral financialisation (e.g. land, nature, housing, manufacturing, IT...); Macroeconomic policies, links between micro and macro scale finance; Relationships between global and “indigenous” financial practices, institutions, and discourses; Rethinking the core(s) of global finance

Global Finance, Development and the New Peripheries I

The conflictive travels of green municipal bonds: Comparative perspectives on the expansion of financial markets to Southern cities

Hanna Hilbrandt - HafenCity Universität Hamburg | **Monika Grubbauer** - HafenCity Universität Hamburg

This paper traces the work of travelling ideas in the globalization of financial markets and their effects on urban development in Southern cities. Particularly since the financial crisis of 2008, much has been written about the growing influence of finance in the urban development of EuroAmerican cities (Aalbers 2008, 2015; Christophers 2012). Today financial markets also appear to be expanding southwards, into the ‘rising’ cities of Asia, Africa or Latin America (De Magalhães 2001; David 2012; Soederberg 2015; Rouanet & Halbert 2016). Empirical research on the influence of global finance in Southern cities remains limited, though (but see Sanfelici & Halbert 2016; Kutz & Lenhardt 2016).

In this context, we contribute a comparative account of the conflict-ridden integration of Southern cities into global financial economies. More particularly, the paper examines the travels of a novel financial tool, Green Municipal Bonds (GMBs). GMBs are debt instruments that allow cities to raise capital through the issuance of bonds that is solely to be invested in certified sustainable projects. Since the World Bank started issuing GMBs in 2008, the use of this instrument has quickly gained momentum. First employed by European and North American cities, the paper examines its spread to Johannesburg, Mexico City and Delhi, the first Southern municipalities to issue (or prepare the issuance of) GMBs.

Based on the analysis of strategic and legal documents, government reports and preliminary interviews with international advocates, we inquire into the ways in which this travelling policy was introduced, altered and implemented through local policy, but in interactions with global actors in the three case study sites. In particular the paper highlights the role of international Standards Setting Organisations that work with local governments to certify GMBs, thereby circulate knowledge, foster market transparency, minimize economic risk, and, more broadly transnationalize and privatize regulatory environments.

The contested nature of the financialisation of the remittance landscape in Senegal and Ghana

Vincent Guermond - Queen Mary University of London

Remittances have come to be seen as one of the most important tools to finance development in countries of the global South. From this consensus has emerged a “global remittance agenda”, whereby remittance senders and recipients as well as the remittance process and remittance landscape have been progressively financialised, under the name of the supposedly all-beneficial financial inclusion agenda (Kunz, 2011, 2012). Critical analyses of this global remittance agenda have either focused on the macro scale, looking at states’ and international organisations’ practices, ideologies and discourses (Hudson, 2005 ; Cross, 2015 ;

Bakker, 2015), or on the micro-scale, engaging with migrants’ diverse behaviours in relation to remittance sending in host countries as well as their incorporation in commercial banking (Datta, 2012 ; Zapata, 2013). Critical engagement on the meso scale of organisations which mediate, design and even nudge the financial flows which underpin migration – namely remittances, is however lacking. Drawing upon research with institutional actors involved in the remittance industry as well as with remittance recipients in Senegal and Ghana, I make three key arguments. First, I put a light on the technical, everyday operative dimensions of the “remi-finance” capital formation. Second, I unpack the different types, strategies and investment structures of actors that are involved in the newly financialised remittance landscape and argue that this helps us thinking through the connections and disconnections between financialisation processes occurring in different northern and southern spaces. Third, I show how the praxis of capitalising migrants, remittance recipients and remittances encounter obstacles and can be domesticated, subverted or resisted.

Land and financial capital in the Center-North agrarian frontier in Brazil

Marta Inez Marques - University of São Paulo

This paper analyzes the action of publicly traded companies, controlled by foreign investment funds or domestic capital, that invest in developing lands in the Center-North region of Brazil - more specifically in the Maranhão state -, and also their impacts on the agricultural production, land market and the agrarian question in the region. In the last decade companies as Brasilagro S.A. and

SLC Agrícola Brasil S.A. have exhibited a very expressive expansion, controlling over 1 million hectares by acquisition and leasing, using it for cultivation as well as for speculative purposes.

The Center-North encompass parts of the states of Maranhão, Tocantins, Piauí and Bahia. It is considered the last Brazilian agrarian frontier. Besides some hundreds of thousands of farmlands, the region has 46 conservation unities, 35 indigenous territories, 781 agrarian reform settlements, and several recognized and unrecognized remnants of quilombo communities. Nevertheless, since the end of 90's, the Center-North has been facing an intense change due to the extensive agribusiness territorialization, privatizing and concentrating land to cereals, cotton and eucalyptus production, eliminating other forms of production and ways of life. It is based on a conflicting and violent process of dispossession that has severe impacts on indigenous peoples and peasant communities living in the region, as well as the Cerrado biome, triggering resistance struggles and social movements.

Thus, the main aim of this research is to understand how this already complex agrarian configuration has been affected by the growing presence of capitalist companies searching for real state appreciation in order to remunerate interest-bearing capital coming from different origins in the global financial market. The paper presents the first findings of this research.

Keywords: agrarian frontier, Brazilian Center-North, accumulation by dispossession, land market, financial capital, struggle for land

Discussant for "Global finance, development, and the new peripheries" (CB)

Christian Berndt - University of Zurich

Session discussant

Global Finance, Development and the New Peripheries II

On the Terrorism of Money and National Policy-Making in Emerging and Frontier markets

Ilias Alami - The University of Manchester

Is national state policy-making more constrained by capitalist value-disciplines in emerging capitalist economies (ECEs) than it is in advanced capitalist countries? In order to explore this question, this article offers a spatialized form-analysis of the imperative that the capital relation imposes upon the form of the state in ECEs. The approach, grounded in the Marxian critique political economy, integrates crucial insights from radical economic geography and Post-Keynesian/Minskian economics. I show that despite growing integration into the financial world market, ECEs have retained a subordinate positionality in what I call the relational geographies of money-power, and which are constituted by two overlapping sets of geographies: the geographies of the global monetary system, and the geographies of the global financial system. As a result, the contradiction between capital, money and the state takes a more acute form of realization in ECEs than in advanced capitalist countries, making the management of monetary and financial affairs more difficult for the capitalist state. This, I argue, constitutes an additional layer of social determination on national policy-making in ECEs. More concretely, this manifests itself as a systematic volatility of exchange rates and a tendency to high real interest rates, enhanced scrutiny of national policy-making by international investors, rapidly shifting financial reputation and high pro-cyclicality of money-capital inflows, the build-up of specific forms of external vulnerability, brutal money-capital flight during financial distress, and heavy dependence on monetary policy in advanced capitalist countries. This is crucial to understand the extent to which ECEs are continuously (re)produced as a frontier.

I kindly ask to be included in the panel 'Global finance, development, and the new peripheries'.

'Getting farmers insurance-ready' – Financial inclusion in the context of index-weather micro insurance in Kenya

Luisa Hoffmann - Goethe Universität Frankfurt

Changing weather patterns and the limited availability of products that offer coping strategies for smallholder farmers have paved the way for the introduction of weather-index micro insurance schemes in Kenya. Farmers purchase insurance against weather-risks such as floods or droughts and payouts are triggered based on previously calculated indexes.

During the empirical phase of my research I spent time at the offices of an insurance surveyor in Nairobi. Doing research in an organizational setting, I chose institutional ethnography as my methodology. My research mainly consisted of 'observant participation' – actively taking part in organizational processes such as attending meetings and conferences and engaging in conversations with the different departments and employees.

Financial inclusion has stood out as a fundamental driver of the micro insurance apparatus – the introduction of a ‘village champion model’ being one example. It is aimed at training and recruiting farmers with the ultimate goal of increasing the uptake of insurance products. ‘Champions’ are chosen based on profiles of trust and reliability, trained, and rewarded on a commission basis. In my presentation I am embedding the example of ‘village champions’ in a wider context of financializing life worlds to nuance the portrayal of micro insurance as a solely inclusionary intervention. I ask how the penetration of financial integration in the agricultural sector is linked to a broader apparatus of global finance and what that implies for a critical evaluation of the micro insurance apparatus.

Green Structural Adjustment in the World Bank’s climate city

Patrick Bigger - Lancaster University | **Sophie Webber** - The University of Sydney

The World Bank has long been invested, figuratively and financially, in responding to climate change. From the 2010 World Development Report on Development and Climate Change and its first Massive Open Online Course, to new regional disaster risk pooling insurance facilities, the Bank's investments have focused on creating knowledge products and new financial instruments, and thereby creating climate as a ‘bankable’ issue. Despite these investments, however, climate change remains largely on the periphery of the Bank's activities, for instance, relegated to grants rather than loans. Indeed, many of these activities are premised on creating the conditions for bankability, rather than bankability itself. As a result, the Bank continues to experiment with new knowledge and financial tools, especially for adaptation.

We examine a new, expansive suite of projects and products that focuses on mitigating urban climate risks and building resilient cities. Drawing from analyses of World Bank documents and policies, grey literature, and interviews with World Bank officials, we examine the logic and effects of these attempts to make climate change adaptation bankable in cities across the Global South. In particular, we suggest that the Bank, as a lever and enabler of private sector finance, is relentlessly prodding for new sites and scales at which adaptation might be rendered bankable. These activities operate with the assumption that, by opening new frontiers for interest-bearing capital across scales and places, Bank investments can be leveraged to achieve the capital flows necessary to meet adaptation challenges. However, by necessity many of these competencies will remain the domain of the state, as large-scale infrastructure, landscape restoration, useful hydrological data, or responses to extreme weather events are difficult, if not impossible, to delegate entirely to the private sector. The Bank's flagship ‘climate actions’, therefore, more resemble green structural adjustment than the financialization of adaptation.

Discussant for "Global finance, development, and the new peripheries" (EM)

Emma Mawdsley - University of Cambridge

Session discussant

Session

The Role of Finance in Uneven Development

Ewa Karwowski - Hertfordshire Business School | **Nadine Reis** - University of Bonn

The role of finance in uneven development of countries and regions across the globe is central as recognised by leading structuralist and dependency thinkers. With the rise and growth of financial sectors across rich countries since the 1980s, i.e. financialisation, adverse effects of financial innovation and financial sector growth have been increasingly neglected by policymakers and economists. So-called financial development has been promoted as growth-enhancing by orthodox economists and the international financial institutions (IFIs) (Levine & King 1993, Levine 2005). In contrast, heterodox scholars argued that financialisation is a new major dimension of unequal development on an international scale, since it has affected developing regions in ways that differ from those of centre economies (Soederberg 2004, Lapavistas 2009, Paineira 2009, Becker et al. 2010, Bonizzi 2013, Powell 2013). While the empirical track record suggested that poorer countries are exposed to financial and exchange rate crises when increasingly integrated into global financial structures (Dymski 1998; Arestis & Glickman 2001) it needed a fully-blown financial crisis in rich countries to force a rethinking amongst mainstream economists and IFIs (de la Torre and Ize 2011, Arcand et al. 2012, Cecchetti and Kharroubi 2012, Sahay et al. 2015). Arguably, even this rethink was rather superficial because the possibility of financial dependency and uneven development driven by finance is rarely explored in mainstream policy and academic discourses. This session questions the benevolent and growth-enhancing role of finance in development. It will reflect on the links and interaction between finance, financialisation and development. It addresses (but is not limited to) the following questions:

What is the role of finance in creating and perpetuating uneven development and inequality?

How does financial dependency play out in the relationship between global South and global North? □
How do financialisation and financial deepening relate and differ?

The Role of Finance in Uneven Development I

Finance in the peripheries: a structuralist theory of financial development

Andrew Fischer - Erasmus University of Rotterdam

This paper seeks to move towards a structuralist theory of financial development. Mainstream theories of financial development – both neoclassical and Keynesian – can be broadly characterised as based on a modernisation view that economic development works in synergy with financial development, as expressed most essentially by (formal) financial deepening. The Marxist literature arguably holds a similar view, except with an emphasis on the exploitative character of these processes, inverting and reframing financial deepening as financialisation, although with a similar assumption that external financialisation leads to domestic financialisation. This is possibly the case in some of the major ‘emerging market economies’, such as Brazil, South Africa and Turkey, although it is questionable whether it applies more generally to lower and lower middle-income countries. An alternative is that external financialisation actually exacerbates the pre-existing polarisation within domestic financial systems inherited from the colonial period (or their equivalent in non-colonised areas). This alternative structuralist reading derives from the stylised fact that formal financial sectors in most developing countries were already established and controlled by colonial powers at the time of decolonization and, indeed, in some cases financial decolonization never happened, such as in the case of the CFA region of French West Africa. Hence, as one key aspect of the centre-periphery system, the formal financial systems of peripheries are generally characterised by strong external orientation and strong degrees of polarisation and segregation with the ‘vernacular’ economy. In this context, the centrifugal tendencies of the formal financial system result in little tendency for formal finance to deepen. Indeed, this latter point is an important justification for regulation and development finance, although these ironically became criticized in the 1970s as the cause of problems, such as ‘financial repression’. Nonetheless, the neoliberal solution of financial liberalisation and privatisation only exacerbated the underlying tendency.

QE and the global South: The harmful impact of European monetary policy on developing countries

Rodrigo Fernandez - SOMO / University of Leuven | **Pablo Bortz** - University of San Martín | **Nicolas Zeolla** - University of Buenos Aires

Given the record of debt crises in developing countries, with profound and long-lasting socio-economic and political consequences, we must be alert for signs of a new period of ‘lost decades’. History has shown that sovereign debt crises are a mechanism to generate private gains and public losses on a large scale, with Greece as latest example. QE in developed economies has had many unintended side effects, one of which is the rise in capital flows to developing countries, with the risks of recreating the type of environment that led to debt crises in the past. Since QE policies lie at the heart of post-crisis stabilisation attempts by central banks in core countries, and given the undemocratic character of central banks with a very narrow mandate that excludes consequences for developing countries, we cannot expect central banks in core countries to be guided by the impact their policies have on the global south. This means that protective measures need to be built into in other parts of the global financial architecture.

Changing lending patterns in Sub-Saharan Africa – Financial deepening or financialisation?

Ewa Karwowski - Hertfordshire Business School

Financial deepening and financialisation are sometimes used interchangeably (PwC, 2013; Tori & Onaran, 2017). Measures of financial sector growth (e.g. credit extension or private-sector outstanding credit) are used by both, proponents of financial deepening and critiques of financialisation. This paper argues that the two phenomena need to be clearly distinguished, otherwise financialisation becomes in fact a vacuous concept (Christophers 2013). Much of financialisation theory that refers to corporate and financial sector changes imply a structural change while financial deepening tends to gloss over such change. The phenomenon of financialisation goes along with structural change that is potentially destabilising for poor countries, e.g. facilitating the build-up of household debt and asset price inflation. The paper illustrates this argument reviewing changing patterns in credit extension in a sample of twelve Sub-Saharan African countries, which have experienced fast growth in bank lending over the past two decades. Successful financial deepening over the past decade or so, has mainly benefitted the service sectors in these countries at the expense

of the manufacturing credit share. While it is too early to call any of these countries financialised, worrying signs of potential financial fragility building up can be observed.

A city-level reassessment of the finance and growth nexus

Stefanos Ioannou - University of Oxford | **Dariusz Wojcik** - University of Oxford

One of the most widely investigated relationships in economics is that between finance and economic growth. The contradictory nature of finance as a means for supporting investment on one hand, and as a source of economic instability on the other has long attracted researchers from various theoretical traditions. Mainstream economists would traditionally be the ones to highlight the beneficial aspects of finance. Interestingly however the crisis of 2008 has caused the watering down of the previously held views on the benefits of financial expansion, with several mainstream scholars nowadays arguing that there can be a situation of “too much finance”. This is a very interesting finding, and it is one that opens the space for additional research. Our paper picks up the empirical methodology of relevant studies and explores the ways in which the relationship between finance and growth has changed at a city and regional level. We use a large pool of city-level data from Oxford Economics, covering a wide range of developing and developed countries. Our approach enables us to test the strength and direction of such relationship by concentrating separately on capital and regional cities, on cities that are classified as global financial centres, and on non-urban areas. In addition, we broaden our analytical account by encompassing not just financial firms, but also the advanced business services that surround and support finance.

The Role of Finance in Uneven Development II

New patterns in capital flight from South Africa

Susan Newman - The University of the West of England | **Samantha Ashman** - University of Johannesburg | **Ben Fine** - School of Oriental and African Studies

This paper analyses the role of capital outflow from South Africa, i.e. capital flight in the context of the country’s financialisation. The article updates the results on illegal capital flight from South Africa for an earlier contribution by Ashman, Newman and Fine that covered the period to 2006. But this is much more than simply adding figures for later years. Rather, the article also covers the impact of the Global Financial Crisis on such issues both for South Africa and more generally, how popular debate, policy and scholarship have moved over the intervening period, the relationship between financialisation and capital flight, and the implications of capital flight for developmental prospects and progressive alternatives to neoliberalism. The role played by capital flight in the trajectory of the South African economy in the post-apartheid period is identified, both as cause and effect, drawing out common characteristics with capital flight elsewhere in the world as well as those peculiar to South Africa. This also allows for some understanding of how and why post-apartheid stability is unravelling over and above failures in the economic domain. The analysis sheds light on how financialisation is intensifying the combined and uneven development of the world economy, and uneven development within South Africa.

Variegated Financialisation and Pension Funds in Latin America: the Case of Colombia and Peru

Bruno Bonizzi - University of Winchester | **Jennifer Churchill** - Kingston University London | **Diego Guevara Castañeda** - Universidad Nacional de Colombia

Despite their considerable growth in the past two decades, the significance of pension funds in emerging economies remains, with few exceptions, under-recognised. In this paper we study the development of private pension funds in emerging economies, using Colombia and Peru as case studies. We analyse this process in relation to financialisation, understood as a structural transformation of the global capitalist economy, whose manifestations are different across countries, a view that has come to be known as “variegated” financialisation. We argue that private pension funds have been central in determining the path of financialisation in Colombia and Peru, through the particular ways in which they have shaped the demand for financial assets. Two factors are crucial in these respects. The first is the particular structure and design of the private pension system, which is highly concentrated in the hands of very few large companies, and still competes with a parallel unfunded public pension system. The institutional actors and their interests are therefore very different compared to pension funds in advanced economies, with important implications for financial investments and their regulation. The second factor are the constraints in the effective supply of investable domestic financial assets. We show how the export-led growth model followed by Colombia and Peru, as well as their growing openness

to a subordinated process of financial integration, has resulted in a shortage of assets for domestic pension funds, and a consequent decline in their rates of return. The combination of these factors has pressured pension funds into demanding new assets, sparking financial innovation and deregulation, and as such being a primary determinant of the particular shape of financialisation of the Colombian and Peruvian economy.

The Effect of Central Bank Independence on Financial System's Strength: Some Evidence from a developing Country

Ali Nassiri Aghdam - Allameh Tabataba'i University

During the last four decades, under the influence of policy prescriptions of both international financial institutions and mainstream economists, central banks have become more independent. The main purpose of CBs independence is enabling them to stabilize unstable economies and lead their economies towards great moderation through lessening fiscal dominance of government and making independent monetary policy possible. In addition, by product of the public debt control is the expansion of private debt which in turn deepens financial system and thereby facilitates economic growth.

In this paper, by providing evidence from Iran, as a developing country with de jure independent central bank, I am going to evaluate the effects of the abovementioned policy prescription. The results of this case study indicate that (1) CB independence is impossible de facto; (2) the amount of money have been expanding, despite Iran CB's commitment to control high-powered money to hit its inflation target; (3) most of the money expansion has occurred as the increase of bank's debt to private sector rather than to public sector; (4) this flow of money to private sector has financialized economy rather than deepens financial system: while real sector who contributes in GDP expansion have been suffering from severe lack of money, enough money is available for financial transactions which has made economy unstable. Despite the fact that the return of the former approaches to zero, the later earns more than 30 percent in average. (5) As a bank based financial system most of the firms relies on bank's credit extension to finance their businesses, but the market interest rate and the cost of finance is very high and CB is not able to reduce it because of both deposit holders demand for higher interest rate and the believe of central bankers that credit extension requires saving.

A Post Keynesian (and Minskyan) explanation for the bank-lending driven expansion and credit-less recovery in Spain and the Eurozone

Carlos J. Rodriguez-Fuentes - Universidad de La Laguna (ULL) | **Sheila C. Dow** - University of Stirling | **David Padron** - Universidad de La Laguna (ULL)

This paper studies the differences in regional credit availability within business cycles. The paper approaches this issue by studying the cyclical patterns of bank credit both for the Spanish regions and the Eurozone countries from an empirical perspective. In the case of the Spanish regions, the sample employs yearly data for bank credit and Gross Domestic Product (GDP) for the 17 NUTS-1 Spanish regions. The sample for the Eurozone countries, which considers 12 economies (the 11 countries that started in 1999 plus Greece, which joined the Eurozone two years later), ranges from 1998 to 2017 and tracks the same variables (bank credit and GDP rates of growth) but in quarterly terms. In both cases, Spanish regions and Eurozone economies have been pooled into different groups according to their relative GDP per capita indices in order to study (quantitatively) the differences of bank credit cycle sensitivity across the different groups. The empirical analysis conducted consists in the estimation, by means of a panel regression, of the response (sensitivity) of the rate of growth of bank credit to the rate of growth of GDP over the business cycle. Our preliminary (and provisional) results suggest that poorer regions (in Spain) and countries (in the Eurozone) show stronger fluctuations in credit growth throughout the business cycle, with particularly stronger contractions in recessions.

The Role of Finance in Uneven Development III

Explaining Dependent Financialization in Georgia

Ia Eradze - University of Kassel

The end of the Soviet Union marked a beginning for turbulent times for a number of countries. Georgia has been no exception as it has also gone through radical political, economic and social changes. After almost three decades of so called transition process there is no consensus among academic scholars what kind of capitalism has emerged in Georgia. The character of the Georgian state also remains puzzling as the state of contradictions. Even though post Rose Revolution (2003) reforms have been praised for their 'progressive' and liberal character and the country has been named as a role model in the region, a number of authors have labelled the post revolution Georgian state as something between authoritarianism, neo-bolshevism and liberalism. However,

financial system remains as the most successfully developed fields in the transition process. This segment of economy is by now up to 80% dependent on foreign capital (also most of the banks in foreign ownership) and the economy of the country is highly dollarized (financial dollarization rate almost 70%). The development of the financial system in Georgia went hand in hand with mass and aggressive credit policy of commercial banks and microfinance organisations along weak or non-existing regulatory framework. The Currency crisis since 2014 has been clearly demonstrating the fierceness of dollarization not only for the macroeconomic stability but also for a number of households, indebted in dollar while their income remains denominated in the Georgian national currency Lari.

This paper discusses Georgia as a peripheral state according to Joachim Becker's approach and focuses on the process of dependent financialization. This process is analyzed in relation with financial dollarization and the linkages between these two phenomena are searched for.

Big Money: A Monetary Geography of Power, Debt, Crises and Inequality

Jayson Funke

The Great Recession of 2007-2009 led to calls among economic geographers for a need to clarify modern money and to place money at the heart of financial analyses in order to better understand uneven development and the proliferation of debt, crises, austerity and inequality. This requires a framework sensitive to modern money in all its forms as well as one that links capitalist finance with the "real" economy of services and production. This paper advances this agenda by outlining a critical analytical model, herein referred to as the Big Money framework, which may be generalized to include all forms of capitalist finance across multiple scales. This framework combines the inherent hierarchy of capitalist money and finance with a Marxist analysis that focuses on the institutional functions and contradictions of capitalist money and finance. The Big Money framework is then applied to an analysis of the international monetary and financial systems in order to demonstrate the function and results of U.S. dollar hegemonic monetary power and its effects on class relations as manifest in the proliferation of debt, crises and inequality.

Nudging subjects at risk: Social Impact Bonds between financialization and compassion

Manuel Wirth - University of Zurich

In their attempts to reshape funding models for third sector activities, policymakers in the United Kingdom increasingly draw on an impact investment instrument called Social Impact Bond (SIB). Designed around a payment-by-results mechanism and financial valuation techniques, SIBs aim to transform social service interventions by linking charities closer to financial market actors and sparking an entrepreneurial ethos. This article elaborates on these transformations from a marketization perspective (Berndt & Boeckler, 2012; Çalışkan & Callon, 2010). It seeks to explore the various ways in which valuation devices or outcome metrics enroll social workers and beneficiaries and how service interventions are affected. Based on empirical material collected during fieldwork in three English charities working in the field of youth homelessness and unemployment, it is argued that the SIB, as a particular socio-technical agencement, unfolds its marketizing effects in ambivalent ways, depending on socio-spatial contexts and actors. This is reflected in interventions marked by discourses and strategies of choice, empowerment, informality and compassion, on the one hand. On the other hand, however, what also can be witnessed is that concrete means of social service delivery often remain "suffused with economic logic and behavioral change technologies" (Newman, 2017, 24). This can be seen, for instance, in systematic risk assessments of "clients", attempts to create risk classes of "clients" according to the probability of achieving outcome targets and the use of incentive payments. Following Jupp et al. (2017, 3), this double play is indicative for an emerging emotional style of government that both governs "more humanly, in sometimes highly personal and interventionist ways" and governs "less – by rejecting the modernist social contract between state and citizen, renouncing the notion of a highly rationalised state bureaucracy in favour of personalised forms of self-government."

Impact of financialization on the economic growth of the regions of the countries - an attempt to measure the phenomenon

Agata Gemzik-Salwach - University of Information Technology and Management in Rzeszów

The intense debate on the impact of the growing financial sector on the economy has been ongoing for two decades. The debaters concentrate on showing these dependencies in relation to the economies of individual countries as a whole while completely ignoring the regional perspective. Meanwhile, the results of analyses at the regional level may completely differ from the results at the country level. A niche area was identified in work on the relations between the development of the financial sector and economic growth: the lack of a regional approach. In the manuscript, regional research results using the example of Polish regions, and further possibilities of using research from a regional perspective are presented. The results obtained at the regional level lead

to different conclusions than those at the national level. National surveys indicate that Poland is a country in which the level of development of the financial sector is optimal. Regional research provides knowledge of Poland's regions, where further development of the financial sector remains beneficial. The presented methodology can also be applied to the analysis of regions of other countries, and the present research constitutes the verification of research tools for international analyses.

FINANCE AND FINANCIALIZATION IV: CRISES AND REGULATION

Session

The geo-economics and geo-politics of global financial networks

Sabine Dörny - Luxembourg Institute of Socio-Economic Research (LISER) | **Dariusz Wójcik** – University of Oxford

Contemporary financial capitalism calls for a thorough and profound investigation of finance and finance-related industries, and their distinct spatial impacts and manifestations across scales. Geographies of finance are expressed, among other manifestations, through a dense and powerful archipelago of international financial centres (IFCs), their urban concentrations of firms in the financial and business services sector, financial ‘arbitrage spaces’ between off- and onshore IFCs operated by powerful global services firm networks, and far-reaching alterations by the digital revolution. Global financial networks understood in this way have crucial implications for growth and innovation, social and spatial inequalities, economic stability, and sustainable development at large.

This session invites conceptual and empirical paper contributions that seek to broaden our understanding of both the geo-economics and the geo-politics of contemporary finance. This includes, for example, analyses of the underlying causes – including financialisation, the global financial crisis and the Eurozone crisis –, as well as key agents – like the state, regulators, financial and business services, offshore jurisdictions, and fintech firms – that have been shaping and responding to, but also affected by, the instabilities and unprecedented dynamics of global finance. How is the map of global financial networks being redrawn, and with what effects on the development of cities, regions, countries and globally? Can we observe or should we expect that the new financial regulation, the rise of the Global South, and the digital (r)evolution in finance, to name but a few major trends, generates new forms of global, national and local financial governance?

Geo-politics and financial networks: placing Renminbi internationalisation within global monetary transformation

Sarah Hall - University of Nottingham

This paper uses the case of Chinese currency internationalisation (renminbi) to call for a fuller understanding of the geo-politics of global finance. In particular, the analysis explores the extent to which a focus on financial practices and relations within and between financial centres can be used to develop more nuanced readings of power and authority within the international financial system that have typically emphasised forms of state power, domination and control. Drawing on research conducted into the development of offshore renminbi markets in London's international financial district, the paper identifies the important but often neglected role of: inter- personal relations, financial lobbying organisations, private sector financial and legal service firms as well as state actors concerned with financial policy in facilitating London's development as the first western offshore renminbi centre. In so doing, the paper concludes by reflecting on how the changing geo-economic and geo-political power geometries within global finance can be productively respatialised, firstly by focusing on finance at the meso-scale and secondly by considering financial networks that emanate from beyond the Global North.

The Small-World Approach of Goldman Sachs to Management of its Global Financial Centre Networks

David Meyer - Washington University in St. Louis

A few global financial centres—London, New York, Hong Kong, and Singapore—are the pivotal management bases for leading financial firms. Among these firms, investment banks play a key role in decision-making about financial exchange within and among centres. These banks, however, face challenges maintaining and adapting their organizational management across financial centres in a dynamic global economy. Not only must they reward and promote their elite employees, competitors often target these individuals as recruits. Global economic change also may require that investment banks relocate top bankers in order to strengthen their business and to stay competitive with other banks. This paper examines Goldman Sachs' small-world approach to managing its investment bankers across the leading financial centres. While New York is the firm's global headquarters, its decision-making reveals a small-world strategy of positioning its top bankers in the other leading financial centres—London, Hong Kong, and Singapore, and, at times, relocating them among these centres. These bankers, therefore, operate as intraorganizational network pivots in the small world linking the major offices of the firm. At each office they build their internal small-world networks, and when they relocate they carry these networks with them to another office, reinforcing the small-world of the firm's networks.

Occasionally, Goldman Sachs recruits from outside the firm at the senior level, and these hires typically bring significant network access within the financial centre and/or in the world region in which they have been operating, strengthening the small world of the firm's networks. Consequently, the small-world organizational management of Goldman Sachs' top investment bankers exhibit a systematic strategy of using London, New York, Hong Kong, and Singapore as the firm's pivotal centres from which they run their global business. Their positioning and repositioning of their elite bankers undergirds global financial centre integration.

Piercing the offshore veil: A 3D map of global FDI

Daniel Haberly - University of Sussex

In recent years, there has been greatly increased academic and public interest in the use and abuse of offshore shell companies, which have been linked to a range of issues from corporate tax avoidance to illicit financial flows. The scale of shell company use is enormous; far from a peripheral distortion of the map of global foreign direct investment (FDI), these networks of "paper" entities in many respects are the map of FDI, accounting for as much as half of the world's entire FDI stock, and well over half of the FDI of many developing and transition economies. So large is the scale of this investment that it not only poses problems in relation to issues directly associated with offshore / tax haven use, but also, even more fundamentally, acts as a veil that prevents us from seeing the true shape of the global economy. In this respect, even the best existing datasets only reveal the proximate rather than ultimate origins of FDI entering countries via specific offshore conduit jurisdictions. This paper presents the findings of a project that seeks to fundamentally change this situation, by using a novel methodology to construct the first global "3D" FDI database that cross-disaggregates inward investment by destination on both an immediate and ultimate source country basis. Significant insights include the finding that "round tripping" is not only a major feature of offshore FDI patterns in developing and transition economies, but also in the developed world as well.

Geo-finance: conceptualising financial power in the world economy

Dariusz Wojcik - University of Oxford

The term geo-finance or geofinance has surfaced in literature and media for a long time, but with many different and rather loose definitions, and has never been treated seriously. Charles Goldfinger in his book *Geofinance* (1986) referred to it simply as the world of finance. Sam Woods, the Head of Prudential Regulatory Authority in the UK recently used the term geofinance in the title of his speech and described it as the 'impact of borders, location and distance on the shape of banks, insurers and financial regulation'. Some consulting firms describe geofinance as a combination of geopolitics and finance and focus on it as a major source of risk affecting investments.

This paper reviews the usage of the word geofinance, and suggests that while the marriage of finance and geography should be referred to as financial geography, the term geo-finance could be used to describe the global distribution of financial power, and a study of this distribution, in a way comparable to geopolitics and geo-economics. As such, the term could encompass such phenomena as the geography of leading currencies and the geography of global financial centres, interacting with each other. From a historical perspective, it could be shown that geo-financial transformations follow rather than lead geo-economic and geo-political changes, and geo-financial orders tend to outlive geo-economic and geo-political orders on which they are built. This inertia manifests itself in both the international monetary system and in the global hierarchy of financial centres. Lessons can be drawn for the rise of the Chinese currency and financial centres.

Session

Financial regulation and governance in a world of geofinance

Gary Dymski - University of Leeds | **Sabine Dörny** - Luxembourg Institute of Socio-Economic Research (LISER)

Soon after systemic financial crises exploded in 2007-08, a patchwork of financial reforms was put in place. The US Congress passed the 2010 Dodd-Frank Act, the UK approved the Banking Reform Act of 2013, and the Bank for International Settlements intensified reporting and recommended capital-adequacy standards. The European Commission's 2009 Larosière Report led to the 2012 European banking union; the recommendations of the European Parliament's more far-reaching 2014 Liikanen Report have not been implemented. Despite these initiatives, or perhaps because of their inconsistency and the resistance they have generated, the question of what forms of financial regulation and governance can generate stable and economically functional banking and financial systems remains open. Indeed, the consensus of a September 2017 CEPR "10 years after" conference in London was that far too little has been done: global finance still hangs on fragile threads. Financial systems today are characterized by multi-layered spatialities; so geography is at the centre of this question. Sam Woods, CEO of the UK's Prudential Regulation

Authority, emphasized this in a speech on 4 October 2017. Woods defined geofinance as “the impact of borders, location and distance on the shape of banks, insurers and financial regulation. Put simply: the impact of geography on the geometry of finance, a dynamic we might call geofinance.”

We welcome paper proposals on the following geofinancial topics:

- The ring-fencing of retail banking
 - Exchange-traded vs over-the-counter trading of derivatives
 - Electronic trading platforms
 - The past, present, and future of the “money markets” and shadow banking
 - The creation and transfer of risk
 - Capital requirements
 - Systemic risk and lender-of-last-resort capacity
 - Complexity and opacity in megabanking
 - Offshore vs onshore financial operations and income
 - Financial openness of developing countries
-

Liability driven investment and Pension fund exposure to emerging markets: A Minskyan analysis

Annina Kaltenbrunner - Leeds University Business School | **Bruno Bonizzi** - University of Winchester

This paper explores the determinants and implications of the growing allocation of insurance companies and pension funds (ICPF) to emerging market assets. The key contention put forward is that in today’s investment environment liabilities are at the core of the portfolio choice mechanism of ICPF, and that this has important consequences for the stability of asset demand. The paper supports this contention with a theoretical framework based on the theory of Hyman Minsky, and the results from 22 semi-structured interviews with European ICPF executives, managers, investment consultants, and asset managers. It argues that ultimately emerging market assets cannot be used to face institutional investors’ liabilities, which means they are bound to remain part of a return-seeking strategy. This, in turn, causes ICPF’ demand for these assets to be more volatile and often entirely independent of conditions in these countries. By stressing the inherent financial (in)stability implications ICPF liabilities have for EM asset demand, the paper contributes not only to the growing literature on ICPF investments in EM, but also bridges the gap between those which have noted the increasing importance of liability conditions for ICPF portfolio decisions and the literature that points to ICPF’ systemic implications for financial stability. Moreover, by basing itself on a Minskyan theoretical framework, it responds to recent calls for a more systematic incorporation of heterodox economic thought into financial geography.

The institutional frames underlying operations of shadow banking in Poland

Katarzyna Kurzępa-Dedo - University of Information Technology and Management in Rzeszow

After the global financial crisis of 2007 the Polish legislator wanted to minimize a risk of another possible breakdown in the financial sector and not only introduced macro-prudential oversight upon its functioning, but also imposed strict prudential standards, in reference to the banking sector. Consequently, the risk of another breakdown in the banking sector was reduced, but side effects of these changes included decreased availability of traditional banking products for the disadvantaged part of the society. The latter were replaced with options on offer from many lending companies operating without the supervision from the state, and classified as the so-called shadow banking. Analysis of the data for 2008-2017 published by the Conference of Financial Companies in Poland shows that the value of loans given by these firms is systematically growing.

The main purpose of the paper is to review the institutional frames underlying operations of lending companies (institutions) in Poland; it is also designed to assess the related overall economic outcomes for sector of lending companies and banks in Poland. The main thesis, which is going to be verified, assumes that operation of lending institutions in Poland is mainly based on the Act on Freedom of Conducting Business Activity and the Consumer Credit Act and their financial services are not subject to prudential regulations which are as strict as those applicable to banks. Due to the necessity to ensure stability of the country’s financial system perceived as a public asset, and on the other hand, to strengthen protection of clients in order to increase their financial security, it is necessary to increase prudential oversight of these institutions by national bodies. The considerations will also focus on verifying the statement claiming that properly supervised development of financial sector, including shadow banking, may lead to economic growth in specific regions of Poland.

Financial integration in Europe, a geographer's perspective

Michiel van Meeteren - Loughborough University

In the last thirty years, the different national financial sectors of European Union member states have gradually coalesced toward a single integrated European financial space. This contribution analyzes this process of financial integration as a state scalar project on the level of the European Union. It chronicles the literature on financial integration in Europe from Jacques Delors' single market project until the recent Capital Markets Union with a specific emphasis on the work of financial geographers therein. By utilizing a version of Lefebvre's 'thick' conception space instead of the 'thin space' perspective prevalent in the financial industry, in combination with geographical theories on scale, the paper recasts the large literature on financial integration in the EU theoretically. In view come a set of distinctive conjunctures of scale building where the spatial practices of financial actors evolve in lockstep with the futures that are painted by the European Union and the directives that are proposed and adopted. The different epochs, interrupted by the early 1990s recession, the dotcom crisis, and the North Atlantic financial crisis reveal remarkable patterns of continuity and change. On the one hand, the last three decades show an increasing geographical and organizational centralization of European megabanks co-evolving in lockstep with the increased power of the European institutions. On the other hand, there is a remarkable repetition in the EU's financial integration policy cycles. Finance is assumed to be the solution to Europe's economic woes from the 1980s, 1990s, 2000s and the 2010s and despite radical growth of dominance of the financial sector, Europe's future is rendered to be dependent on even more financial integration.

The political economy of adoption of global capital standards in Kenya

Radha Upadhyaya - Institute for Development Studies

Global banking standards have been adopted unevenly by many developing countries even though these standards were not designed with developing countries in mind. This paper shows that Kenya is relatively high adopter of global standards. I argue that Kenya is a high adopter of these standards as there were unique circumstances that allowed the alignment of donor, government and private sector from 2003 onwards. Kenya's Basel adoption is driven by internationally oriented regulators. Its shows that in Kenya, the global agenda does drive the local regulation agenda as regulators are internationally oriented. Kenya's Basel incorporation is embedded in a government strategy that combines the goal of high financial inclusion and the promotion of Nairobi as an international financial hub. The local private banks that were keen to expand into the region viewed adoption of international standards positively. The paper shows that while Kenya is a high adopter of standards, enforcement of some components of these standards has been weak but there has been an increased effort at enforcement since 2015. The paper argues that the case of Kenya shows that international financial standards are compatible with high financial depth and financial inclusion. However international standards and a financial sector that adopts these may not be useful for structural transformation as the level of savings in Kenya is very low and the level of lending to key sectors such as industry and agriculture is very low. The paper argues that Kenya government's aims to develop Nairobi as an international financial centre may not be compatible with having a financial sector that supports the real sector.

Session

Finance: Locating Power, Risk and Alternative Values at Global and Local Scales

Bas Karreman - Erasmus School of Economics | **Sabine Dörny** - Luxembourg Institute of Socio-Economic Research (LISER)

Quantifying the GPNs of finance: changing architectures in global banking and location choices of financial services firms

Bas Karreman – Erasmus School of Economics | **Sabine Dörny** - Luxembourg Institute of Socio-Economic Research

This paper links with the emerging body of GPN research on the finance industry, which seeks to better comprehend the processes of both functional fragmentation and global integration of financial production. The GPN literature builds overwhelmingly on qualitative empirical evidence, for example with regard to strategic location decisions of multinational financial firms and their dissimilar value-added business activities over time. This paper introduces a complementary quantitative analysis. It scrutinises patterns of a range of clustered banking activity along their GPNs anchored in different financial centres. More specifically, we examine the location choices of an extensive sample of new investment projects made by a diverse set of financial services firms between 2003 and 2016. They include retail banking, corporate & investment banking, investment management, and insurance. In particular, we emphasise within-firm business activities that constitute the geographically fragmented value chains of financial

production and, consequently, allow location choices to vary by headquarter activities, business services, sales marketing & support, and shared services & support centres. While our preliminary results unsurprisingly confirm that knowledge-intensive and high value-added activities are mainly concentrated in prominent financial centres, and low value-added functions spatially match relatively low labour-cost locations, unexpectedly, the degree of locational concentration of more recent financial investment activity is less pronounced than in the past. While the banking sector can still be characterised as truly global, this finding suggests that the financial production process in the banking sector has become subject to even further geographical fragmentation over the past decade. We discuss these co-evolutionary processes of clustering and connecting through the GPNs of finance across different financial industries and seek to provide a more systematic view of the changing architectures of global finance by exploiting large quantitative data.

Making complex finance work (better): Brexit and the shifting loci of geo-financial risk

Gary Dymski - University of Leeds | **Sabine Dörny** - Luxembourg Institute of Socio-Economic Research

Discussions of the financial impacts of Brexit have centred on the future of the UK in the single European market, on Brexit-related shifts of financial institutions from the City of London to other European financial centres (FCs), and on the competition among European FCs themselves. These discussions have overlooked a central impact of Brexit: the shifts it will induce in the distribution of global financial risk-sharing and risk-taking, and in FCs' capacity to absorb such geo-financial imbalances. The 2007-8 GFC demonstrated that global competition among highly leveraged financial entities can result in catastrophic crises, whose costs are borne by millions of citizens. The complex governance and control challenges posed by a continually evolving system of global finance were starkly revealed. Efforts to meet these challenges – the Dodd-Frank reforms, the establishment of the G-20, etc. – centre on establishing global guidelines for risk-taking based on balance-sheet standards and requirements for channeling different classes of trading through financial exchanges. What these efforts have overlooked, however, is that maintaining the fragile global financial system, with its mixture of regulated and unregulated participants, located inside and outside national regulatory borders, depends on the day-to-day coordination of the risk-taking and risk-sharing activities of the highly leveraged financial firms at the centre of these markets. The coordination of risk-sharing/-taking requires entities in financial centres willing and able to make markets for risk balance on a real-time basis. This risk-absorption aspect of the global financial system did not come to the surface in the 2007-08 crisis because the geo-financial nexus of FCs was undisturbed. Brexit, however, threatens to disrupt the fragile capacity of FCs to manage the risks generated on an everyday basis by today's superleveraged financial markets. This problem, flagged by Brexit, will be further posed as new shadow markets and cryptocurrencies are coming online.

Local Infrastructure Assets and the Creation of Alternative Values through Industrial Symbiosis and the Circular Economy

Aksel Ersoy - Delft University of Technology | **John Bryson** - University of Birmingham | **Ellen van Bueren** - Delft University of Technology

Cities are complex entities consisting of interwoven capital-intensive infrastructures that rely in turn on financial infrastructure. While infrastructure investments are based on specific measures, there is a need to understand alternative values related to infrastructure system interdependencies that would benefit the wider economy and society. This paper explores the application of industrial symbiosis and the circular economy to the development and management of local infrastructure assets through the analysis of four cases (two UK and 2 Dutch) that challenge conventional approaches. This paper explores the development of these holistic approaches including an analysis of values, finance and funding and the creation of alternative local infrastructure symbiotic business models.

Sustainable economic system development in the central ecological zone of Lake Baikal

Sergey Kirillov - Lomonosov Moscow State University | **Mikhail Slipenchuk** - Lomonosov Moscow State University

Lake Baikal is a UNESCO World natural Heritage Site and very interesting place for tourism development. In the Baikal region there is difficult environmental, economic and social situation associated with the protection of the Baikal natural territory and the need to conduct economic activity in the region. An analysis of the current environmental situation within the Baikal region and the forecast of its development in terms of increasing economic activity with the account of climate change showed that without changing of management system preservation of water quality in Baikal is impossible.

Special regime of environmental management under federal law "On Protection of Lake Baikal" causes damage and losses of profit for the region's economy. Charges for using water resources in Baikal basin 1.7 times exceed the average rate for Russia. Charges for the negative impact on the environment are 2 times higher. Agriculture carries losses because of the requirements limiting the use of fertilizers and pesticides. All this creates difficulties for economic activities and people living conditions. Some problems are solved through the implementation of the State Program "Protection of Lake Baikal and the socio-economic development of the Baikal natural territory" and attraction of private investments, including foreign ones.

Main problem is the weak tourist infrastructure. Special attention is given to the formation of tourist and recreational cluster and economic zones. The prospects for future development of the territory are connected with the creation of the Special economic zone of tourist and recreational type "Baikal harbor" in the Republic of Buryatia and "Gates of Baikal" in the Irkutsk region. The creation of such clusters in the Lake Baikal Region will help to realize effective interaction between all stakeholders: public authorities, organizations, tourism industry, academia and civil society organizations. The reported study was supported by RFBR, research project No. 16-05-01045.

CREATION OF VALUE

Session

Between co-production and political consumption: New perspectives on the role of consumers and consumption practice in the creation of value

Felix Müller - Leibniz Institute for Research on Society and Space | **Martin Hess** - University of Manchester

Researching the agency of consumers in economic value creation presents a fundamental challenge to economic geography, ontologically and epistemologically. Work in Cultural Economy has taken up the notion of 'co-creation' of value by consumers, often employing flat ontologies to study places and performances of value creation (Crewe 2016). A bias towards creative and high-end products is evident. Political Economy approaches tend to remain centred on production and labour theories of value. From this angle, consumption can itself be understood as labour (Goss 2006). Such structuralist ontologies fail at fully appreciating the potential of consumption-driven value creation.

Methodologically, the role of consumption in economic value creation is difficult to grasp. Through the lens of a given product, firm or production network, it is possible to identify and frame the buyer as 'the consumer'. More recently, consumption practice as a more holistic notion has come into the focus of research, encompassing the intricacies of everyday decision making of consumers (Mansvelt 2010). Likewise, a shift has taken place from ethical consumption as a matter of individual responsibility to the entanglements and distributed agency of political mobilization in consumption (Evans, Welch & Swaffield 2017).

In this session we invite conceptual, methodological and empirical contributions on consumption and value creation in Economic Geography, as well as critical reflections upon avenues of intervention, expression, emancipation and activism involving consumers.

Crewe, L. (2016): Placing Fashion: Art, space, display and the building of luxury markets through retail design. *Progress in Human Geography*. 40(4)

Evans, D., Welch, D., J. Swaffield (2017) Constructing and mobilizing 'the consumer': Responsibility, consumption and the politics of sustainability. *Environment and Planning A* 49(6)

Goss, J. (2006): Geographies of consumption: the work of consumption. *Progress in Human Geography* 30(2)

Mansvelt, J. (2010): Geographies of consumption: engaging with absent presences. *Progress in Human Geography* 34(2)

Consuming narratives, creating value(s): focus group discussions and public engagement on cocoa sustainability.

Judith Krauss - University of Manchester

The 21st century is characterised by ever-increasing availability of commodified information and images, and an ever-growing fragmentation of production across stakeholders and borders. From a consumption angle, these interdependent processes have also promoted ever-increasing interest among responsive consumers in the socio-environmental circumstances surrounding their everyday choices. Consequently, this article reflects critically on consumer roles and consumption practices in terms of creating value(s), and the relevance of public-facing representations within that nexus especially for initiatives bridging the global North-South divide in the name of sustainability.

As part of research into three cocoa sustainability initiatives with an environmental focus, focus group discussions with responsive consumers were conducted to ascertain consumers' positions on sustainability particularly in cocoa and representations. The sessions revealed considerable interest in ethical buying, but also sizeable confusion about what standards, seals and commitments entailed what value(s), a question inextricably linked with public-facing representations. The article will take this reflection one step further by also examining subsequent experiences as part of knowledge-building public engagement encounters around climate change, cocoa sustainability and ethical consumption.

In problematizing the role of both individual and structural factors in informing production-consumption connections especially between global North and global South, the article will draw on this wealth of focus group discussion and observation data to highlight how this research on cocoa sustainability speaks to broader debates on representations and ethical consumption. It will argue that researchers have a key role to play in terms of building capacity among consumers to analyse representations on sustainability and make informed consumption choices, reflecting critically on the degree to which these roles have been filled in the past.

Geographies of qualification in the global wine industry

Gerhard Rainer - Katholische Universität Eichstätt-Ingolstadt | **Christian Steiner** - Katholische Universität Eichstätt-Ingolstadt

The rejection of essentialist understandings of product quality is a unifying characteristic of recent pragmatism-inspired contributions from economic sociology. As a result, the research interests shift towards the social construction of value and economic agents' efforts in attributing and stabilizing certain product qualities. Following Callon et al. (2002: 201) "consumers are just as active as the other parties involved [...] in the process of qualifying available products [...] [as] it is their ability to judge and evaluate that is mobilized to establish and classify relevant differences." By referring to the 'economy of qualities' it is this reflexive dynamic of markets that Callon et al. (2002: 212) have in mind: "competition turns around the attachment of consumers to products whose qualities have progressively been defined with their active participation". On the one hand, every good has to be made comparable to other goods and, on the other hand, it has to be singularized in order to stand out. Hence, qualification is necessarily a paradoxical process. Using as a case study the global wine industry, the goal of this paper is to put at the center of our discussion an aspect that is only tackled in passing by economic sociologists: the geographies of qualification. We argue that geography is central for the process of wine's qualification: from the micro-geographies of the winery building and its arrangement to wine's global positioning. Drawing on empirical research with wine producers in various wine regions (South Tyrol/Italia, Salta/Argentina, Marlborough/New Zealand), our aim is to show how that 1) Qualification strategies are always geographically contextualized, 2) The construction of spatial differentiation is a crucial qualification strategy that, nevertheless, can take quite different forms 3) producer's knowledge/imaginings of consumer preferences in target markets strongly influence qualification strategies – being it through attaching or dissociating certain characteristics from the

The Contradiction Between The Representation of Space and The Space of Meaningful Experience: Case of Simit Sarayı

Ceyda Kurtar Anlı - Ankara University | **Nuri Yavan** - Ankara University

Globalization and the accompanying speed culture have led to a rapid change in the meaning of the old in a never-before-seen temp, and new meanings and structures. Everyday life and the things it contains were also affected by this change. In Turkey, here our subject of research 'simit' (a kind of bagel) which can be counted among these items, while it has been a part of everyday life since the old times, it is important to continue to maintain its presence nowadays in a new way. Simit is part of the individual experiences as well as being a public food consumed in many areas of everyday life (at work, at home, on the street, etc.). Simit's meaning in everyday life is not limited to its being a food that is mostly described by its sesame, shape, smell and taste. Its real meaning and prospect is that many components of everyday life make it possible to be together like tea, seagull, sea and vendor's "crispy, hot simit" sounds and create a different image in every human being, something more than just a consumption item. However, this perception is changing in our current rapid globalization wind. The first change takes place in the form of selling simit. Simit, thus, passes another baggage from the simit stands and from the vendor's-trade. With the establishment of the company "Simit Sarayı", simit undergoes a spatial transformation and begins to be sold in a space. At the same time, this means that the simit starts to spatialize. When spatialization is taken as a beginning, it causes a great change in the processes of production, marketing and consumption. The (new) space created as a result of spatialization, while leaving behind the simit's original meaning backplane, has begun to bring symbolic items to the foreground. Because the representation of space and spatial sensation that emerged with the spatialization of the simit, that is, for the purpose of the producer and the consumer's tendency operates in a different way. The purpose of this study is to show that despite the overlap of the spatial sensation and the representation of space in many global brands, the situation at Simit Sarayı it has a different function. In order to provide empirical evidence, the discussions and discourses on Simit Sarayı made in the social media (facebook and instagram) between 2013-2017 were examined. Also, survey and interviews were held with consumers in Simit Sarayı in Istanbul at June 2017. As a result, the space that Simit Sarayı wants to create contradicts with the individual perceptions or meaningful experiences of the consumers.

Key words: Consumption geography, space, conceived space, perceived space, simit, simit sarayı.

Geographies of dissociation: Value creation through omission in the global fur industry

Felix C. Müller - Leibniz IRS | **Oliver Ibert** - Leibniz IRS | **Jana Kleibert** - Leibniz IRS

How do goods receive value? Why do we pay € 20 for one bottle of wine and only € 4 for another? More recent contributions at the intersection of economic and cultural geography conceptualize the value of goods as outcomes of processes of social construction. Value, the argument goes, is created if brands and products are associated with positive, extra-economic values: the association with a famous athlete makes a pair of trainers appear desirable. Such associations often mobilize spatial images, too, such as fashion from Milan and wine from Bordeaux. In this paper, the focus will be on dissociative practices in social constructions

of value. Dissociations entail the oppression of negative associations as well as the blurring of relations to 'dark', undesirable aspects in the production and consumption of goods. Dissociations also have a geography which, however, follows its own patterns. Building on this premise, a geography of dissociations shall be developed empirically using the example of the global fur industry. The main theses address the increasing invisibility of fur as a material, the obscuring effect of brands, the scapegoating of China for problematic aspects in global fur production as well as the relationship between complex global divisions of labor and strategic ignorance.

Session

The Geographical Transfer of Value – An Underresearched Dimension in Commodity Chain Research

Christof Parnreiter - University of Hamburg | **Christin Bernhold** - University of Zurich

Much of today's economic geographical research is realized within the frameworks of global commodity or value chains or global production networks (GCCs, GVCs and GPNs). While the origins of these concepts lie in an interest in uneven development (Gereffi/Korzeniewicz 1994; Henderson et al. 2002; Bair 2005; Yeung/Coe 2014; Werner 2016), wealth transfers across space as a prime example of the asymmetrical relations driving the world's 'unequalization' have not been investigated comprehensively in economic geography. Tracking value and its allocation in GCCs/GVCs/GPNs thus remains an unresolved undertaking (Coe et al. 2014).

In the context of this research gap it is worthwhile to return to Hadjimichalis' (1984; 1987) concept of the "geographical transfer of value" (GTV) which refers to a process through which value produced at one location is transferred to and realized in another. GTV thus leads to and intensifies differences in localized accumulation processes, what in turn increases inter-regional inequality. Contributions should focus on actors, their practices and the geographies of the GTV. Actors include private firms from different sectors (including producer services), governments (permitting monopolies, for example) or international organizations (administering the architecture of cross-border economic flows). As regards practices of the GTV, in addition to violent methods, direct (e.g. FDI, profit repatriation, transfer-pricing) and market-mediated (e.g. achieving rents through temporary monopolies) means may be distinguished. Concerning the geographies of the GTV, while global cities presumably stand out as locations for its organization (Parnreiter 2017), we think of various scales of value transfers, including the rural-urban, the inter-urban, the regional (e.g. EU), or the global.

We welcome papers with a theoretically guided case study approach; that propose conceptual tools to analyse the GTV (e.g. engaging with the labor theory of value in geographical terms); and that develop methodological foundations for agency-focused research on the GTV.

The Geographical Transfer of Value – An Underresearched Dimension in Commodity Chain Research I

Argentinian agribusiness, upgrading, and value transfer

Christin Bernhold - University of Zurich

Much of today's research on global value chains and production networks attaches great importance to economic upgrading as a development strategy. By contrast, this paper argues that firms in peripheral regions can shift to higher profit activities without improving the conditions for achieving socio-economic equality. Capitals' upgrading strategies may not only be related to the development of productive forces and differentiated growth, but also to different forms of (geographical) transfer of value (GTV), defined as the process through which value produced by workers under the control of capital at one locality is (partly) transferred elsewhere – to other locations and/or adding to the profits of other capitals (Hadjimichalis 1984).

My argument is based on interviews held with Argentinian agribusiness companies and associated petty capitalist producers. The analyzed capital strategies include, for instance, firm-level upgrading to the provision of management services on behalf of European investors – therewith contributing to direct GTV enjoyed by capitalists overseas.

Another example concerns the particular management of an agribusiness production network, which enables the local lead firm to appropriate a share of the value produced by workers who are employed elsewhere (by petty capitalist partners). In this context, both the specific formation of local class structures and the capacity to adapt diverse capital functions under the roof of a single company are important.

My paper indicates that uneven development both shapes and is shaped by the GTV. It argues that the question of who is capable of organizing GTV (and to who's benefit) is a political economic question, and therewith also a question of interclass and intraclass struggle over the production and appropriation of surplus value.

Exploitation in and through global production: theories, critiques, empirics

Jonathan Pattenden - University of East Anglia | **Elena Baglioni** - Queen Mary University of London | **Liam Campling** - Queen Mary University of London | **Alessandra Mezzadri** - SOAS, University of London | **Satoshi Miyamura** - SOAS, University of London | **Benjamin Selwyn** - University of Sussex

Concerns about labour exploitation are back on public and academic agendas. This paper discusses the contribution of Global Value Chain Production Network (henceforth simply production network) approaches to explaining dynamics of exploitation in and through globalised production. While in the past production network analysis has tended to overlook processes of exploitation, this has begun to change over the last decade or so. Building on and contributing to these critical studies, this article outlines the concept of the circuit of exploitation, supported with empirical examples from ongoing research into production networks in South Asia, Latin America, Sub-Saharan Africa and across the world's oceans. It argues that exploitation is rooted in capitalist social relations, that its dynamics extend beyond the productive sphere (the workplace), and that the formation and reproduction of circuits of exploitation represent the bedrock of contemporary global capitalism.

Shoring-up the Archipelago: changing sites and technologies enabling the geographical transfer of value

Jana Kleibert - Leibniz Institute for Research on Society and Space | **Michiel van Meeteren** - Loughborough University

The transfer of value over large distances is a centuries old phenomenon. Uneven terms of exchange and extraction of raw materials exemplify (neo)colonialism; labour exploitation in production arrangements within global commodity chains characterize globalized industrialisation; and financialised capitalism excels in wealth-transfer through immaterial flows of capital and knowledge. While the mechanisms of the geographical transfer of value have varied, relying on changing sites and technologies, there are nonetheless important continuities in their contribution to uneven development at multiple scales. All three forms have in common that value transfer can be described through the spatial metaphor an archipelago. The archipelago describes a space where value extraction in nodes/islands of the archipelago is combined with transferring value at longer distances. This contribution unpacks the different spatial technologies and infrastructures that generate these 'island effects' and enable the long-distance value transfer. We argue that the spatialities of the geographical transfer of value require more thorough theorisation and analyse these infrastructures as tightly globally-integrated but locally disembedded enclave structures that support value-transfer regimes through their boundedness and semi-permeability: ports and free-trade zones; special economic zones; and corporate (offshore) offices and digital platforms. We illustrate our argument by comparing economic geographic literatures that describe different archipelago effects, including global commodity chains, world city networks, critical logistics, financial geography and literature that analyses processes of bordering and (de)territorialisation at the urban and regional level. This results in an understanding of continuity and change in the spatial organization of geographical transfer of value throughout technological shifts.

Cities and the Geographical Transfer of Value

Christof Parnreiter - University of Hamburg

Cities are today generally praised as drivers of economic growth and as milieus of social upward mobility. Their very characteristics such as density, diversity and external relations are held responsible for various positive effects on human development (e.g. Jacobs 1970; Glaeser 2012; Taylor 2013; Scott/Storper 2014). The role of cities and the urban in the production and reproduction of uneven development has, however, received little attention. In current debates in urban studies on the proper manners and geographies of theory making, neither advocates of a general, universal theory of the city (e.g. Scott/Storper 2014), nor its postcolonial studies critics (e.g. Robinson/Roy 2015), nor promoters of the Planetary Urbanism thesis (e.g. Brenner/Schmid 2014) have much to say about how cities and their characteristic properties – agglomeration economies and external networks – enable economic elites to shape wealth flows in a way that they take centripetal forms (but see Walker 2016). On the other hand, economic geography analyses concerned with uneven development – often in the context of global commodity chain or global production network analyses (e.g. Gereffi/Korzeniewicz 1994; Henderson et al. 2002; Coe et al. 2008; Bair 2014; Yeung/Coe 2015; Werner 2016) – do generally not address the city as a key space and setting for the implementation and carrying out of a geographical transfer of value (Hadjimichalis 1984).

Against this backdrop the paper seeks to shed some light on the role of cities and the urban in the production and reproduction of uneven development. Referring to examples from cities in different places at different times, the paper shows how urban features have nurtured urban elites' capacities to mobilize and appropriate resources from hinterlands at various scales.

The Geographical Transfer of Value – An Underresearched Dimension in Commodity Chain Research II

Dynamics of production and value transfer in the tobacco leaf sector in Southern Africa

Helena Perez Nino – SOAS University of London

Both ‘firm-centric’ and ‘labour-centric’ commodity chain approaches struggle to account conceptually for production undertaken in global commodity chains by units of production that combine the class position of capital and labour, as is typically the case of household-owned and household-operated workshops and farms. Importantly, these kinds of producers dominate some key sectors in the Global South. This paper traces the articulation of the spheres of production and circulation in the case of tobacco leaf exports from the Southern Africa region, the second largest exporter of tobacco in the world. Tobacco there is predominantly produced by small-scale farmers producing under contract for transnational tobacco leaf traders. It is argued that in these frontiers of commodity production the rubric of upgrading is irrelevant as a framework of analysis, but conversely that the focus on the opposition between labour and capital belies a more complex class structure. The paper traces direct and indirect forms of geographic transfer of value and intra-regional differentiation in terms of class structures and prevailing conditions of production as a way of conceptually and empirically articulating the local dynamics of commodity production with the global dynamics of commodity circulation.

Value creation in slow fashion as a spatially based combination of material and immaterial elements

Marco Copercini - Universität Potsdam

The concept of “fast fashion” is used to criticize specific practices in the fashion production and consumption system, and especially the low-end market, characterized by rapid changes and intense consumption. These practices are criticized as unethical and not sustainable. As a reaction, the concept and practices of “slow fashion” has recently been introduced, stressing reduced consumption, high product quality and durability, as well as fair working conditions.

This paper focuses on value in slow fashion and specifically on how value is created and understood by fashion designers in slow fashion small and medium enterprises (SME). As most literature about value creation in slow fashion focuses on the customer’s role, this paper focuses instead on the designer’s role and understanding of how value is created in SME. The empirical research is based on an interview series conducted with Berlin-based fashion designers.

In this paper, it will be presented how value results as a combination of material and immaterial elements that codify the specific statement of the designer through the product, which is both physical and symbolic. Both these elements of value creation reflect specific strategies of designers to address unethical and unsustainable practices in fast fashion. Furthermore, the value creation in slow fashion restructure the material and symbolic geography of the product, its conception and its perception, therefore it comes out that value creation in slow fashion is reflected in a different spatial configuration of production.

Session

What kind of value? Geographical engagements with fashion’s diverse futures

Taylor Brydges - University of Bern | **Felix Müller** - Leibniz Institute for Research on Society and Space

The study of the places and spaces of fashion has attracted interest from cultural and economic geographers (see for example: Hauge et al. 2009; Rantisi 2004, 2014; Tokatli 2009, 2014), but also practitioners, teachers, and scholars of fashion design. It has become a stage for exchanges on technology, business models, creative practices and mediation through online networks. As the industry continues to undergo significant transformations – from new sourcing patterns to the growing use of technology in production (such as 3D printing) and retailing (online shopping and the rise of “see now, buy now”) changing consumer markets – there is considerable room for geographers to engage with the fashion industry as a case to examine key economic processes. Challenges to ‘business as usual’ grounded in considerations of sustainability and ethics are prominently voiced in the field of fashion, providing an additional angle for engagement.

In this session, we seek to build upon and explore these dynamics, which not only cross disciplinary boundaries, but have produced a diverse range of investigations into the different possible future modes of value creation in fashion. We welcome contributions from studies of fashion within or in relation to economic geography, which explore the spatialities of fashion – may they be material, relational, topological, territorial, virtual, temporal, mediated across distance or bodily experienced at close quarters. Specifically, we invite contributions to theorize how and what kind of value is created, through time and space, in the fashion

production, design, consumption and/or appreciation of fashion. In this session, we look forward to diverse – and indeed, conflicting or controversial — perspectives and a lively debate on the role of ethical values, identity, sustainability, economic rationalities, technology and transformative/alternative practices.

Leveraging the Landscape: How Canadian fashion firms use place-branding on Instagram

Taylor Brydges - Stockholm University/University of Bern

Fashion is a globalised, image-intensive and highly-competitive industry that is undergoing a period of significant restructuring. In this context, fashion firms are developing a variety of strategies to generate value and brand loyalty. While some emphasise the quality of material elements such as inputs, local production and design, others focus on immaterial aspects such as symbolic value and exclusivity. In recent years, place-branding has become an important way to create connections between people, places, and products. Yet, the processes behind this type of branding remain poorly understood. In particular, limited attention has been paid to the ways in which landscapes - in all their forms - are being incorporated into place-branding practices. Drawing on 87 interviews, participant observation and an innovative analysis of Instagram accounts, in this presentation, we bring together the economic geography literature on place branding and the cultural geography literature on landscape and identity in order to examine how a range of Canadian fashion firms, including established national champions and independent upstarts, leverage the landscape to create and communicate brand identities, distinction and values. In doing so, we also highlight how landscape-centric branding can be combined with broader value creation strategies such as local production.

Fashion and crowdfunding: a successful marriage for value creation?

Mariangela Lavanga - Erasmus University Rotterdam | **Carolina Dalla Chiesa** - Erasmus University Rotterdam | **Alina Pavlova** - Erasmus University Rotterdam

Alongside traditional business models, an increasing number of entrepreneurial initiatives use crowdfunding to test the market and access financial resources from “the crowd”. Crowdfunding is a growing phenomenon spread amongst approximately 1.250 websites worldwide that reached a transaction volume of US\$ 34 billion by the end of 2015. New business models are emerging where in-demand features are combined with a Two-sided market. However, while crowdfunding for Music, Games and Comics tend to have quite successful rates, in fashion industry it has lower results. In a professional article by Business of Fashion, crowdfunding is recognized as a “powerful concept — but one that has rarely worked in practice for fashion labels aiming to crowdfund their growth” (Sherman, 2016). While general success factors in crowdfunding are already discussed, we need a more nuanced understanding of success factors in a diverse range of creative industries and across different types of online platforms. Our paper aims at fulfilling this gap by understanding the extent to which crowdfunding works in fashion. By selecting projects in niched platforms (e.g. “I Am La Mode”) and non-niched ones (e.g. “Kickstarter”), we want to develop a content analysis of fashion crowdfunding campaigns from the designer, product and production perspectives. What is the role of place (e.g. working location of the designer, production location) and what kind of values are promoted in crowdfunding? In doing so, we will provide an analysis of success factors of fashion crowdfunding projects. We expect that the ‘emotional durability’ of a fashion good (Chapman, 2009), in particular, can act as a key factor in explaining success, revealing a possible path for new sustainable and innovative products. In conclusion, our research contributes to the analysis of the usage of crowdfunding to support the value creation, production and distribution of cultural and creative goods.

Fashioning safety: moto-mobilities, technology and value

Suzanne Reimer - University of Southampton | **Philip Pinch** - London South Bank University

This paper takes as its central focus the development of safety functions and technologies in motorcycle clothing. The materiality of fashion is of heightened importance to the motorcycle-rider; and extends beyond leather and abrasion-resistant fabric through to airbag technologies and body armour. The paper develops understandings of the symbolic and the material in fashion value creation through a consideration of how specialist safety garments have been designed, developed, marketed and consumed, enrolling motorcyclists into new types of understanding of the rider-body. Popular understandings of motorcycle fashion have often rested on a particular element of clothing: ‘the black leather jacket’. The once functional or utilitarian ‘biker jacket’ has now become a style icon within both luxury and ready-to-wear fashion markets. However, this paper seeks to tell an alternative story about motorcycle fashion. In advanced industrial markets, motorcycle clothing is increasingly marketed using the language of safety, risk and protection; and more effective, technologically-developed proactive clothing (such as the rider airbag) has come to the fore within product development.

Whilst one would normally associate the development of rider safety with government legislation, characteristically in the case of compulsory helmet laws, this paper demonstrates that more complex networks—encompassing firms, motorsport regimes and consumer markets—underpin the fashioning of motorcycle safety.

**Conspicuous funding - insider knowledge in the search for authenticity and identity.
Crowdfunding as pretail market for fashion boutique brands**

Anders Rykkja - Inland Norway University of Applied Sciences | **Atle Hauge** - Inland Norway University of Applied Sciences

E-commerce and other technological changes has a disintermediating effect on retail channels for fashion items (Crewe, 2013), signifying increased competition for money and attention (Hracs et.al, 2013). Emerging into this market we notice what Currid-Halkett (2017) define as an aspirational class, the post creative class identifying themselves through spending on behaviours and goods not necessarily conspicuous or material. There is a vast body of literature on co-creation, inclusive symbolic value produced and consumed (Grahber and Ibert, 2018, Hauge, 2015; Jones et al 2015), with few papers specifically addressing financing of fashion production. Crowdfunding, an alternative method for funding projects and ventures uses the principle of requesting funds from many geographically dispersed individuals, in return for future products or seed capital (Agrawal et.al, 2011, Mollick, 2014). Data collected from 1300 successfully funded crowdfunding campaigns within the Cultural and Creative Industries in the Nordic countries from 2010 to 2016 shows that projects within the fashion category (ten percent of no. of projects) grossed 25 percent of the total funding raised. This indicates a burgeoning pretail market for clothing and accessories and exemplifies how some entrepreneurs raises funds for production via social network market (Agrawal et.al, 2010, Potts et.al, 2008, Hartley, 2009), effectively bypassing traditional on- and offline retail channels through direct b2c sales. Authenticity is fashionable (Smelik, 2011), and many of the items funded are presented with narratives emphasizing unobservable conspicuous qualities such as artisanship, ethically sourced and locally produced materials. For the backer/buyer they may constitute what Zeynep & Thompson (2011) terms a field-dependent identity investment – acquisition of quality items relative to their aspirational identities and class traits. To understand the process, value exchange and creation, taking place between backer (funder) and project promoter (fundee), we propose a qualitative study based on selected cases and online ethnography.

CREATIVITY, CREATIVE PRODUCTION AND CONSUMPTION

Session

Creative and cultural industries in Latin America

Alejandro Mercado-Celis - UAM-C | **Guillermo Ibarra** - Universidad Autonoma de Sinaloa

Creative and cultural industries are an essential part of Latin America's metropolis economy. As in the global north, these industries have a relevant and visible impact in all dimensions of their urban economies, their social life, and their built environment. However, the economic and social dynamics of these industries in Latin America have different characteristics from elsewhere. Part of these differences come from the national and local institutions but also from their interaction with dominant creative and cultural centers in the north and the strategies pursued to enter international markets. This session invites all researchers working on creative and cultural Latin American industries on a diversity of issues, as well as in different geographic scales to present their work. The objective is to discuss the current state of knowledge and to find common lines for future research. Empirical, theoretical and policy-oriented papers, as well as single country or comparative studies, are welcome.

Playing with the south: dependency in the video games software development in Chile

Sebastián Baeza - The University of Manchester

This paper analyses the state of the video games software development in Chile its particularities. Discussions about the economic position of Latin America in the world has taken the academic and political agenda during the last thirty or forty years in this continent. Dependency theory and the “periphery” discourse has been popular in the Latin American academic environment during the 70s and the 80s but with little emphasis today. However, relatively new industries like Video Games software development show unique particularities that emphasise global economic disparities and roles; gatekeepers, geographical and cultural distance and the organisation within the video games industry itself, reveal that video games developers in Chile and the periphery face old dependency problems in a globalised and “virtual” world. The article focuses the attention on those particularities, reviewing the way in which the video games industry works, looking at the question: Does the video games sector present dependency patterns in its organisation? The initial analysis shows that, regarding production, dominant actors constraint the game content and Intellectual Property (IP) on selected franchises (Dyer-Witthford and De Peuter, 2009). On the other hand, publishers control and restrain the access to global markets, leaving local developers a few options to sell their games on their own. Despite those problems, Chilean developers have a special place in this multimillionaire industry with highly creative games that stand out in the Latin American and the global context. The flourishing of this sector can be explained by recent governmental policies and programs that are part of the public effort for a more diversified economy in the context of high dependency on raw materials and the mining industry.

Between participation, identity and practice: The consumer of Mexican design .

Susana Gómez Hernández - Universidad Autónoma Metropolitana

During the last 10 years, Mexico City has undergone significant transformations with the emergence of new spaces of consumption related to the growth of the creative industries, as an example a lot of Design Bazaars are appearing on the urban landscape, the first initiative emerged in 2003, in one of the most known neighborhoods of the City, La Condesa. Nevertheless, since 2010 those markets have been multiplying exponentially throughout the whole city. The bazaars take place only on weekends and territorially these temporary clusters are located mostly in the central districts associated with gentrification processes. They are settled in old houses, streets, parks, squares, museums, buildings' roofs and cultural centers.

They promote a communal and collaborative atmosphere in order to boost local development through the imaginary of Mexican design, the recognition of the craft process, the symbols contained in the pieces and the quality of them. Those markets are conceived as a platform for peer-to-peer resource sharing where the producers themselves may distribute their own products to open the prospect of non-marketized social relationships.

This research took the form of a qualitative study, data were collected through interviews, document analysis and observation, that aims to investigate through the lens of the term communities of practice, as a driver of learning and knowledge generation, how the consumers are constructed and construct themselves in the Mexican design appreciation and consumption of it.

This paper is structured as follows: Firstly, a brief review of the history of the Design Bazaars, their territoriality, origin and current situation. Secondly, the broader socio-cultural context in which this particular kind of community is embedded, which is generating changes on how the local, economic and cultural development should be. Finally, the relation between participation, identity and practice in the construction of Mexican design consumer.

Creativeness on the street? Marisquerías in Culiacan

Guillermo Ibarra Escobar - Universidad Autónoma de Sinaloa

Cultural and creative industries are the new ensembles of the cognitive capitalism: biotechnology, fashion, digital industries are the icons. The labor displayed in their production is creative, belong to a creative class, and working in a creative field; this requires talent and inspiration from the chefs. In this paper, we identify the food industry as "creative". Some cuisines are an authentic "melting pot" of tastes, cultures on the culinary field, based on traditional and international recipes, mixing all kind of ingredients. We shall analyze the seafood cuisine in Culiacan, Mexico. Culiacan displays a cultural hybridization between endogenous with cosmopolitan values, which is reflected as styles of eating on the street. As a coastal city, Culiacan has a sophisticated seafood cuisine. Eating out on the street is a kind of joyful pleasure. It occurs in decorated open spaces, and promotes new ways of socialization. In the last decades, they had spreaded out a variety of seafood restaurants where it comes a peculiar innovation in flavors, recipes, colorful packaging and ludic milieus. We shall characterize Culiacan as a gourmet city, both in restaurants and street stalls. Our argument is that the local cultural geography of the production and consumption of seafood is a creative industry. Seafood street chefs are part of a new urban creative class that produces a meal that reflects the city character, the popular imagery derived from the urban folklore. Our approach is a two-sided geographic explanation: 1. A "theory of consumption (that is also) a theory of culture and a theory of social life" (Douglas and Isherwood, 1996); 2. A theory of human action as a production of spatiality (Lefebvre, 1974; Harvey, 1990; Molotch, 1996; Soja, 2000). The consumption of mariscos in Culiacán is embedded in a new kind of happiness, and it generates a vernacular creative industry.

Working Abroad and Investing in Mexico. Mexican Star Film Makers' Trajectories

Alejandro Mercado-Celis - Universidad Autónoma Metropolitana

Project based organization of creative industries creates the opportunity for star creative laborers to work for and invest in different projects in different geographical locations. Our research question is if through this process star creative workers are creating links among competing clusters and in particular if they generate positive spillovers from advance into less developed clusters among countries. Competing clusters relationships are tackle mostly from the manufacturing / high tech industries perspectives, the particularities of creative industries and how they affect the links between clusters are less studied, the interconnections among creative industries in less developed and developed countries also need proper attention. To analyze these connections, I followed the labor (directing, acting) and investment (producing) trajectories of five creative star workers from Mexico in the film industry; three directors, Alejandro González Iñárritu, Guillermo del Toro, Alfonso Cuarón and two actors, Diego Luna and Gael García Bernal. The subjects chosen show a relevant and continuous relationship with the Mexican film industry although their central source of work is concentrated in other countries mostly in Hollywood. Their sustained production of Mexican films has helped to inject new dynamism into the Mexican cluster.

Session

The Economic Geography of Creative Industries

Chun Yang - Hong Kong Baptist University | **Robert Hassink** - Kiel University

During the past decades, economic geographers have become increasingly interested in creative industries, the creative economy, creative cities, as well as the creative class. In addition to this increasing academic interest, testified by several recent special issues in economic geography journals, also policy-makers at several spatial levels (urban, regional, national, as well as supranational) try to find ways how to foster creative industries. Many studies focused both on the economic functions of creative industries, mainly in terms of labor, value-added production, and exports, as well as on their current organizational features. From a geographical perspective, this session aims at two main strands of papers. First, it invites papers exploring the agglomeration and clustering of creative industries, as well as papers explaining the evolution of these creative industry clusters. This strand of papers also deals with labor market issues, project ecologies, temporary clusters, field-configuring events, co-working spaces and creative labs, creativity and knowledge production, and creative cities and creative regions. Secondly, it invites papers analyzing creative industries from a globalization or global production networks' perspective. These papers might deal with TNCs and foreign direct investment and creative industries, strategic coupling and creative industries, the position of creative industry clusters in global production networks, and international migration and creative industries. We welcome both empirical, theoretical, as well as policy-related papers. The focus can be both on creative industries in general or any individual creative industry, such as publishing and literature, performing arts, music, film, video and photography, broadcasting, design, fashion, visual arts, advertising, computer games and interactive media, as well as on creative jobs.

The Economic Geography of Creative Industries I

The Geography of Curation

Patrick Adler - UCLA

In this paper I argue that curation is crucial to the functioning of the contemporary economy and that curation tends to be agglomerated. Defined as the act of choosing between symbolically differentiated products, curation transcends the arts. In sectors as diverse as speculative finance, fashion, design, and film, substantial economic value is attached to choosing ‘the right’ (i.e. economically valuable) inputs. The final consumers of these products are similarly confronted with the imperative to choose correctly among products with little in the way of objective quality differentiation. Even within supposedly non-creative sectors like auto manufacturing, there are actors for whom curation is a core economic responsibility. The look and feel of a sedan is the product of hundreds of symbolic choices which help to set the product’s horizontal and vertical positions in the marketplace. I suggest that recent technological changes have, by uniformly lowering barriers to the creation of symbols, made curation ever more important. Symbolic products markets have grown as they have become more globalized, forcing curators to choose among even more products. Simultaneously, economic development has tended to be accompanied by the rise of (post-scarcity) values systems which place more emphasis on the symbolic aspects of goods and services than their material base. In the main of the paper, I propose that curators in a field will tend to agglomerate near each other and near related producers. There is a well-developed literature which establishes why related economic actors would locate near each other in space. I quickly show that many standard explanations can credibly explain agglomeration among curators and curated producers. In more detail, I connect the spatial clumping of curation to unique micro-foundations, particularly the ability of curators to influence how symbolic products are evaluated. To support my argument, I draw on study of the geography of

Firm location and global innovation networks (GIN): the case of the video games industry in southern Sweden

James McKeever - Lund University | Cristina Chaminade - Lund University | Roman Martin - Gothenburg University

This paper explores the nature of global innovation networks in the video game industry of southern Sweden. The aim is to understand knowledge sourcing mechanisms used by firms, types of knowledge sourced, reasons for global knowledge sourcing, and the role of the regional environment in facilitating global knowledge sourcing. Whilst the literature on regional innovation systems acknowledges global knowledge exchange, little is understood about the mechanisms which facilitate these global interactions. The paper is based on data collected through a survey and interviews of firms developing video games in southern Sweden to gain insight into their global and regional networks, through which different knowledge was sourced. Network data was analyzed via social network analysis. The findings suggest that firms engage in global innovations for several reasons; to access international senior talent, offset the lack of closeness in geographical proximity, and to gain international competitiveness. Furthermore, the geographic proximity and type of knowledge needed were contingent on not only the institutional thickness of the region and knowledge base of the firm but also the market type and business strategy of the firm. The firms engaged in these innovation networks in a variety of ways; temporary proximities, virtual spaces, and key actors who act as gatekeepers to international networking. The findings suggest the firms' market type (product and location) impacted the geographical proximity of the global innovation networks.

The creative clusters outside and within metropolitan areas. A comparative analysis

Diego A. Barrado-Timón - Autonomous University of Madrid | Ana Isabel Escalona-Orcao - University of Zaragoza | Severino Escolano-Utrilla - University of Zaragoza | Belén Sánchez-Valverde García - University of Zaragoza

The main aim of this communication is the study of the relationships established between territory and cultural activities in small and medium size Spanish cities, establishing a difference between those located outside and within metropolitan areas. The hypothesis is that there will be important differences in terms of clustering of cultural activities, depending on whether the studied cities are located in metropolitan areas or in extra metropolitan/sparsely populated spaces.

With these assumptions, the communication will shed new light on some of the most significant theories of economic geography in terms of the analysis of creative industries, and in particular of economic activities around culture. Special emphasis will be placed on the role of some of the drivers that produce the clustering of this type of activities, especially agglomeration economies. In fact, most of the studies and theories about clustering processes have been developed in the context of large cities, so this analysis will allow us to advance in the knowledge of these processes in other urban models; and, significantly, in the differences that occur when the city is inserted in a metropolitan context or peripheral areas of low demographic density. The starting point will also

allow checking the role of other drivers, such as the institutional environment, since the same economic activities will be analysed in cities with different institutional profiles: headquarters of regional governments, universities, etc. Finally, we must point out the importance that the communication gives to the comparative case studies, contrasting the weight and clustering processes of the same cultural activities in medium and small cities whose main difference is their extra or intra-metropolitan character. In this way, it will allow us to advance in the knowledge of the role that geographical variables represent in the development and clustering of cultural industries

The Rise of China's Indigenous Firms in the Global Mobile Game Production Networks: Tencent and Development of Game Industry in Shenzhen

Chun Yang - Hong Kong Baptist University | **David Yuen-tung Chan** - Hong Kong Baptist University

Existing literature in economic geography on creative industries has been conducted from the perspective of "industrial districts" or "clusters", which has recently been challenged by the Global Production Networks (GPN) framework for over-emphasizing the importance of localized production clusters at the expense of extra-local connections. Notably, an emerging body of literature has been developed to explore the restructuring of global production networks and/or global value chains in the era of digital economy. Relatively little has however been conducted on the subsequent effects on the local development of creative and cultural industries in the global south. Taking Tencent, China's biggest internet company by market value in Shenzhen as a case, this study examines the rise of China's indigenous firms in the global mobile game production networks in the digital economy. Drawing on the intensive on-site investigation and in-depth interviews with various game developers, publishers and platform firms in Shenzhen during 2017 and 2018, this paper argues that China's indigenous firms, e.g. Tencent, have "plugged" into the global mobile game production networks, through publishing the games by the global game developers via the Android app platform on the one hand, and developing their own mobile games (e.g. Kings of Glory) and in-app platforms with WeChat app and social network while bypassing Apple's app stores on the other hand. Particular attention is paid to the salient institutional contexts in China and Shenzhen in particular in which China's indigenous firms like Tencent have been nurtured into the world's largest game company. The study pleads for more empirical studies to better understand the changing dynamics and restructuring of global production networks of creative and cultural industries in the era of digital economy.

The Economic Geography of Creative Industries II

A Comparative Study of Chinese and German Film Industry Based on Social Network Analysis

Xiaorui Xin - Zhejiang Gongshang University | **Ivo Mossig** - University of Bremen

Networking is a key feature and trend of the film industry. However, the research of film industry network has some deficiencies. In the literature of the film industry especially in studies about Hollywood the role of political institutions is underrepresented. But the example of the film industry in China and Germany shows that political institutions influence the networks producing and distributing films in many ways. In the case of China some major state-owned companies as well as some formal regulations have an important influence on the formation and structure of the networks. On the other hand in Germany a financial support system is established. Some public financial funds facilitate the expansive production costs for movies in German language for the relative small German speaking market.

To fill these gaps, we introduce the social network analysis to track the evolution of production and distribution network of Chinese and German film industry. We compare the effects of these two different government strategies and their effects on the networks producing films.

The state transformation in the branding process of product design industry in Taiwan

Cheng-Yi Lin - National Taipei University of Education

The branding of design industry is embedded in a locally spatial association which presents an uneven and geographic differentialization of inward branding process. However, this argument has relatively neglects that dynamic branding processes of design industry are inescapably involved with the state-led strategic coupling, which presents an outward branding under the geopolitic context of East-Asian cities. This paper aims to explore the strategic coupling between state and international design fairs in the branding process of product design industry under the geo-political context of Taiwan. Drawing on qualitative research method, this paper based on semi-structure interviews to unpack the dynamic relationship among international design fairs, state, and branding of design industry. This paper has two findings. First, while the international design fairs is central to the outward

branding process of Taiwanese design industry, the strategic choice of international design fairs not only shows an association, disassociation, and re-association process in the branding of design production but also presents a dynamic process of strategic coupling in the state-design firm relationship. Second, the strategic interventions has transformed the developmental state itself from an economic regulator to an intermediary role. Therefore, this paper aims to provide a contribution to understand the state transformation in developing creative economy.

From a creative city to creative mobilities: flâneur, nomad and migrant artists in Berlin

Johanna Hautala - University of Turku

Vast research exists that connects mobility and creativity. In general, international mobility is found to support creativity, but empirical research on short-term mobilities and from a process perspective is lacking. Within this literature, a key debate considers the 'creative city'. In this debate, the mobility of the members of the creative class (e.g. artists) mainly concerns their move into a creative city, where they foster the creative atmosphere of the city. In sum, the relation between creativity, complex mobilities and the changing place (city) remains vague. This article investigates internationally mobile Finnish artists in Berlin and asks: How are Finnish artists in Berlin using mobilities to support their creative process? The research strategy follows the basic principles of the new mobilities turn and process-perspective. Mobility is considered as an entering, staying and returning home. In addition to the mobilities of artists, also the mobilities of their creative objects, imagination and messages related to their creative process of making art is studied. The article includes interviews of 16 Finnish artists living in or visiting Berlin in 2014-2015, and a questionnaire collected one year later. The results demonstrate flâneur, nomad and migrant practices of mobilities and their particular connection to the creative process of making art.

Placing work and networks in the digital and creative industries

Darja Reuschke - University of Southampton | **Nick Bennett** - University of Southampton | **Susan Halford** - University of Southampton

Much work in the creative industries is conducted by professional self-employed workers (freelancers). Despite a sizeable body of literature on the creative industries at firm-level and their clustering in regions and cities, relatively little research has investigated the geography of the creative industries at the individual scale of the creative professional self-employed worker. Some insightful qualitative work suggests that freelancers often do not work in traditional workplaces such as an office, shop or factory and that their networking is both highly localised and global (Cockayne, 2016; Martins, 2015; Mould et al., 2014). The creative industries have generated new workplace geographies that are distinct from the industrial past and difficult to capture with existing population or employment statistics or surveys.

This paper uses social media data to contribute new understanding of the places and practices of creative work. The Brighton-based Twitter network @WiredSussex is used to identify freelancers working in the digital and creative industries sector. A sample of 1,000 tweets of 444 freelancers was created to explore where freelancers tweet from and the content of their tweets. Tweets were classified by whether they are work-related or private whereby the work-related geolocated tweets reveal the varied places freelancers work from. 'Retweets' and 'mentions' of work-related tweets are used to generate networks of creative freelance work. Findings reveal a variety of workplaces including in transit spaces, in commercial areas and in the sea! Spatial clustering and networking of creative work is driven, as expected from the existing literature on creativity and agglomeration, by the 'buzz' of dense urban areas but also residential areas, which the economic geography of creative industries has hitherto paid little attention to.

The Economic Geography of Creative Industries III

The spatial evolution and drivers of knowledge creation for regional economic and social upgrading in value chains: Evidence from the emerging creative industries ecosystem in Seoul, Korea

Jiwon Lee - Seoul National University

Economic spaces around the world have changed dynamically. Creative arts and cultural actors have begun to emerge in old industrial neighborhoods of major metropolitan cities. To delve into this background, this study conducts an empirical study of the creative ecosystem in Seoul, Korea. Arts and cultural actors consist of artists and designers in arts and cultural sectors, artisans in shoemaking industry, and social economy sectors related arts and culture in the area. Multiple stakeholders including artists,

designers, social enterprises, non-profit organizations and government are geographically concentrated in the area and collaborate between different local agents by creating economic value and reducing inequalities through pursuing social value. Particularly, regional intermediaries play a vital role in dynamics of knowledge creation and creativity by integrating exploring and exploiting knowledge among diverse related sectors in building a creative milieu. It has a significant impact on forming the emerging creative industries ecosystem, especially the new social fashion industry cluster in the area. In this regard, this study will investigate the fundamental mechanisms and driving forces of knowledge creation for regional economic and social upgrading in value chains through a case study of the emerging creative ecosystem in Seoul, Korea. Therefore, the main purpose of this study is to identify the spatial evolution and key drivers behind the development the creative arts and cultural ecosystem in Korea from an evolutionary perspective.

How core-periphery relations matter for the global production networks in creative industries? Evidence from Central and Eastern Europe

Krzysztof Stachowiak - Adam Mickiewicz University | **Tadeusz Strykiewicz** - Adam Mickiewicz University

The paper aims to discuss the extent to which core-periphery relations matter for the global production networks in creative industries. The term 'global' does not necessarily imply that such a network actually spans the entire world; rather, it suggests that it is geographically extensive and functionally integrated across national boundaries. As such, globalisation of creative industries involves the expansion of production away from the traditional centres. While some groups refer to this development as a 'runaway production', this paper examines it through a broader look of core-periphery relations and points out their implications and consequences from the perspective of Central and Eastern European countries. In addition, the paper addresses a geographic paradox present in contemporary creative industries, which, "on the one hand, points to the need to retain their place-based identity, and on the other hand, indicates the need for regional cultures to establish links to export markets for their survival" (Aoyama 2007). These theoretical insights are examined by analysing East-Central European cases from various industries, such as film, TV, music, and media. These industries serve as a vivid examples of the complex interplay between the global core and the local periphery in creative industries.

Elements of differentiation in the geography of the creative sectors. Study in 46 small extra-metropolitan cities of Spain

Ana Isabel Escalona-Orcao - University of Zaragoza | **Luis Antonio Sáez-Pérez** - University of Zaragoza | **Belén Sánchez-Valverde García** - University of Zaragoza

The paper investigates the geography of creative industries in a set of 46 cities, between 30.000 and 50.000 inhabitants, located in the extrametropolitan areas of Spain. Creative industries are recognized for their potential to contribute to the intelligent, inclusive and sustainable development of the territories. Theorizing about creative industries has focused on large cities, assuming the arguments of Alan Scott and Richard Florida, mainly. However the thesis on which this contribution is based establishes that there are also creative industries located outside metropolitan areas as we have been able to confirm in previous investigations.

By focusing the paper on small extrametropolitan cities, we thus separate from the mainstream research with two aims: improving the knowledge on the spatiality of creative industries in extrametropolitan and rural areas and to illustrate the possible differences and similarities in the geographies of the creative industries. This requires, first, identifying the small cities with relative concentrations, or clusters, of employments and firms in the main creative sectors. We then review the theories that could explain the localisation of creative clusters and see that together with the traditional factors brought by markets and government policies (infrastructures and other "hard factors"), other "soft" or immaterial factors (amenities, tolerance, local atmosphere) come into play. Finally the performance of each of these factors in determining the distribution of creative industries among the cities studied is assessed using an econometric analysis.

At the conclusions we value the results in relation to a better knowledge of the geographical specificities of the different creative sectors and of the possible interconnections between their location factors. We also emphasize the contribution of the research to a relevant social debate about local development, which is currently discussed for the design of many international territorial strategies.

Determinants of concentration of some creative industries in Krakow

Wioletta Kilar - Pedagogical University of Cracow

From among many activities included in the creative industry, Krakow is the place of concentration of, among others, companies of various sizes related to IT activities and the film industry.

Due to the intensification of the concentration process, the Krakow Film Cluster was established, gathering professional companies, organisations and experienced individual creators working in the film industry in the Małopolska region. Currently, over 300 representatives of the film industry are included there. It forms the platform of cooperation, exchange of information, promotional activities, education and support for innovativeness.

The information activities attracts both small local companies and branches of large corporations, which built their research and developer centres in Krakow, e.g. Motorola, IBM, Sabre or Cisco. It is conducive for establishing numerous start-ups.

The development of the creative industry made international investors call Krakow the “Dragon Valley”, as the city is viewed to be the Polish Silicon Valley.

The objective of the presentation are the determinants of concentration of numerous companies representing the creative industry in Krakow.

The most important of them is transport accessibility (by air, railway and road) as well as large resources of well qualified young people. 800,000 people live in Krakow, of whom as many as 20,000 work in IT. Krakow is a strong academic centre in Poland, whose two facilities are included in the list of the best universities of the Center for World University Rankings.

The creative industries are in various ways supported also by the Krakow Technology Park, located in the special economic zone, and focusing its activities on start-ups, as well as laboratories companies of various sizes.

The Economic Geography of Creative Industries IV

Inbound cultural tourism behaviour during the economic crisis (2008-2016). A comparative study of middle cities in Spain: Ávila (Castilla y León) and Alcalá De Henares (Madrid)

Carmen Hidalgo - Autonoma University of Madrid | **Antonio J. Palacios** - Autonoma University of Madrid

During the financial crisis of 2008, tourism has displayed as a key sector of the Spanish economic recovery. If in the first years of the recession, tourism sector suffered a considerable deceleration, in later periods, when the main emitting countries of tourists to Spain presented an economic recovery, tourism was consolidated as one of the principal engines of development due to its contribution to the Gross Domestic Product (GDP) and its ability to equilibrate the balance of payments and to create employment. Although sun and beach tourism has played a fundamental role in the leadership of this economic activity, cultural tourism has also contributed to this process, but its repercussions have been less-well studied. According with this idea, the principal hypothesis of this research is how creative industries, more specifically inbound cultural tourism, has not only been able to remain stable during the economic recession, but also it has been strengthened and even increased. To corroborate this approach, a comparative statistical methodology has been designed between two medium-sized Spanish cities inscribed in the UNESCO World Heritage List: Ávila (Castilla y León) and Alcalá de Henares (Madrid). Results aim to explore the behavior of cultural tourism (international) and its impact on the labor market at a national and regional level and to draft patterns of behavior during economic crisis especially, in medium cities.

The status and policy research of Kunming cultural and creative clusters

Jing Luo - University of Cologne

Since cultural and creative industries has become the pillar industry in the development of a regional central city, the policy makers of Kunming(Yunnan,China) formulated a series of policy package to promote the development of creative industry clusters. Until 2017, Kunming government has confirmed 21 Cultural and Creative Industries Park inside its region by a document carried out in 2015. The paper use the SWOT method to analyze cultural and creative industry clusters in Kunming, most of them was selected by the government. The strengths, weakness, opportunities and threats of Kunming creative industry clusters show the real situation of this business and the advantage and disadvantage of the cultural and creative industries in Kunming will be discussed. Paper draw conclusions that government play a leading role in the growth of creative industry clusters in Kunming, government-oriented cooperation would still be a main form in Kunming city.

Can urban design foster creative clusters?

Pieterella Aten - Delft University of Technology | **Arie Romein** - Delft University of Technology

It is generally acknowledged that creative industries agglomerate (cluster) in particular urban environments, i.e. places. Many authors consider creative industry clusters to be even deep-rooted in specific places. Florida et. al. (2017) conclude that “place has replaced the industrial corporation as the key economic and socializing organizing unit in the modern-day knowledge economy”; a concept very close to the creative economy.

However, qualities of place has come up yet in research on development and performance of creative clusters only occasionally and in uncomprehensive manner. Our paper first elaborates a coherent concept of place to better understand how place can contribute to creative clusters’ performance by meeting users’ spatial needs and preferences. That concept distinguishes between ‘four meanings of space’: material, symbolic, social and economic. Material and symbolic meanings involve morphology, physical features and symbolic perception of buildings and outdoor spaces as clusters’ place qualities. The economic and social meanings concern networks of workers and businesses that are spatially embedded in clusters.

Acknowledgement of these four meanings of space as such is not new. However, a concept of place that involves all four in their mutual interrelations and interactions is a new way of looking at the spatiality of creative clusters. Exploring these interrelated, both tangible and intangible place qualities as assets for creative clusters can enable urban designers to contribute to their performance. This idea is worked out into a methodology for urban design that is, next, illustrated by application to a former port area in Rotterdam that is, potentially, in an early stage of creative cluster development.

The paper ends with a reflection on this methodology. One key observation is that its application in a design does not automatically lead to an economically successful creative business cluster; success depends on many factors.

Institutions and Networks in Local Scenes: An Analysis of the Growth of San Francisco Bay Area Punk Rock

Maximilian Buchholz - University of Toronto

Economic geographers have exhaustively established the importance of the cultural industries to many regional economies, as well as the spatial organization of the music industry, and the way it is being disrupted by technological changes. We know very little however about how small scale local scenes transition to commercially viable ones. Based on archival research on zines, or small circulation independently produced magazines, I illustrate how the 1980s San Francisco Bay Area punk rock scene, considered ‘dead’ by many, was in fact a vibrant cultural community. Using institutions and networks as analytical lenses, I demonstrate how what was once an underground scene becomes a commercialized one, with bands like Green Day and Rancid becoming hugely popular in the 1990s “wave” or growth of the genre. In doing so, I also attempt to move beyond viewing institutions as a black box and instead, shed light on the processes through which institutions are developed and the subsequent outcomes they generate. Lastly, I illustrate the importance of both institutions and networks to the growth of local scenes.

CITIES, CITY NETWORKS AND THEIR DYNAMICS

Session

Global Changes, Social Exclusion and Metropolitan Transformation in Mexico

Adrian Aguilar - Universidad Nacional Autonoma de Mexico | **Boris Graizbord** - El Colegio de Mexico

Metropolitan centres in Latin America represent dynamic productive poles connected to the global economy, with large labor markets, promotion of regional development, and a high contribution to the GDP; but they also include the social costs of urban development with a growth model unable to provide basic goods to a high proportion of population living in poverty conditions with signs of social exclusion. Mexico is a good example of a highly urbanized country in a region that is the most urbanized of the developing regions. At present Mexico has 72 per cent of its population living in cities, with 55 per cent of the total population concentrated in its 59 metropolitan zones.

In this session, papers will discuss particular and contrastant perspectives of metropolitan transformation in Mexico. The global role of larger metropolitan zones has favored the concentration of some activities with important labor productivity like the knowledge intensive sectors (KIS) in their economies concentrating the best and most qualified jobs and activities that generate innovative and technological change. But despite the apparent better conditions of metropolitan contexts for urban living, the fact is that urban poverty has been increasing in Mexican cities in the last twenty years, and a high proportion of population although is not within poverty levels they confront high degrees of social vulnerability. Metropolitan expansion has caused an intense peri-urbanization that has integrated gradually rural spaces with rapid land use change that have transformed livelihood of local population with negative social impacts. At the same time, Mexico faces an accelerated process of population aging, especially in big cities where much of this older population live in poverty areas with acute problems of health and mobility, with difficulties for this population to access and utilize basic goods and services on a day-to-day basis.

Social and Territorial Vulnerability in Metropolitan Zones of the Central Region of Mexico

Adrian G. Aguilar - Universidad Nacional Autonoma de Mexico | **Flor M. Lopez** - Universidad Nacional Autonoma de Mexico

The Central Region (RC) of Mexico shows a high concentration of the country's population, as in 2015 it registered 39.3 million inhabitants, which represents 33.1 per cent of Mexico's total population. In economic terms, the participation of the RC in the country's gross national product (GNP) is also very high, at 35 per cent of the total. The most important feature of the population of this region is its urban character, as 84 per cent of the total is urban, thus making the RC a highly urbanised territory. Whilst in 1970 there were two metropolitan zones (ZMs) in the RC (Mexico City and Puebla), by 2010 there were thirteen metropolitan zones. This shows that a strong process of metropolitanisation was under way.

Despite the very significant competitive advantages the region offers, in reality there is a high incidence of social polarisation within the region and this reinforces the patterns of labour inequality and social exclusion. In general, there is a process of deindustrialisation in the largest cities, and they have lost high-quality jobs, while the service-sector jobs that are created are usually precarious and wages are low. At present, the largest section of the workforce is found in occupations that have least labour protection and lowest salaries. Additionally, there are 16.3 million people live in poverty throughout the RC. The highest percentages are found in the state of Mexico, with 12.5 per cent of its population living in poverty; Puebla, with 6.8 per cent; and Mexico City with 4.8 per cent.

All these features have increased the conditions of social and territorial vulnerability in different spheres of the urban population lives and confront them with more severe situations of insecurity and exposition to social, economic and environmental risks, in relation to recent years.

Knowledge Intensive Services (KIS) and Metropolitan Employment

Boris Graizbord - El Colegio de Mexico | **Luis Enrique Santiago** - Universidad Autonoma de Aguascalientes

The pattern of concentration in the four larger metropolitan areas in Mexico and its relation to labour productivity is evaluated, based on census data following a classification of services according to the use of intensive knowledge to generate output. O'Sullivan in his *Urban Economics* (2012:3) offers succinctly an argument on why do cities exist: "...human technology has created systems of production and exchange that seem to defy the natural order..." Two conditions are included: city dwellers must produce something to exchange for rural workers products and there must be an efficient transportation -and we add communication- system to facilitate the exchange. However, at present a remarkable transformation has occurred in the process of urbanization. Both rural agricultural production as well as urban activities have experienced dramatic technological changes.

Piketty (2014: 108, note 17) argues that using the traditional division to describe the structure of the economy is in fact problematic. Services dominate in most cases and: “[...] require between 70-80% of the work force in both developed and developing countries... this fact the conventional sectors are not pertinent and provide little information on the trades and services provided...” An alternative typology is perhaps more useful: In this presentation, we propose, on the one hand, an alternative classification of services according to their intensity and type of knowledge developed (scientific, technical and symbolic). On the other hand, we evaluate the relation between labor productivity and the participation of knowledge intensive sectors (KIS) located in the four larger metropolitan areas in Mexico. We also discuss the accepted explanation on why big cities concentrate the best and most qualified jobs and activities that generate innovative and technological change. We use disaggregated economic census data for 2004 and 2014 to find changes in labour productivity in those KIS sectors viz a viz the metropolitan service economy.

“Peri-urban expansion and transmutation of poor agricultural livelihoods in a medium-sized city in Mexico: Implications for poverty and local development”

Yadira Méndez-Lemus - Centro de Investigaciones en Geografía Ambiental | **Antonio Vieyra** - Centro de Investigaciones en Geografía Ambiental

Neoliberal urbanisation has serious implications for poverty and the livelihoods of the poor in Asia, Africa and Latin-America. In these regions most urban population growth is taking place on the surrounding areas of small and medium size cities, and new formal and informal settlements that tend to establish in such territories are largely associated with chronic poverty. The so-called “urbanisation of poverty” is in fact highly associated with rural-urban and/or urban-urban migration processes. Nevertheless, peri-urban areas also expand rapidly over adjacent rural areas, encroaching mostly over agricultural land, triggering the transmutation of the local livelihoods of poor residents. Livelihoods’ transmutation implies gradual degradation of already scarce rural resources and limited access to functional urban assets to fulfil emerging priorities and basic needs. This reduces their capacity not only to rearrange their livelihoods while they try to escape from poverty, but also to negotiate and influence the perspectives of new agents in order to enhance their opportunities as urbanization presses forward. Thus, urbanization of poverty without migration is common but less conspicuous and therefore, hardly ever addressed by public policies. In Mexico, for example, urban areas expand over the most important agricultural land reserve (frequently ejido land), provoking land-use change (from rural to urban), hasten the transmutation of agricultural livelihoods in highly disadvantaged conditions for the local poor. This work analyzes how peri-urban expansion provokes the transmutation of agricultural livelihoods and its implications for urban poverty and local development. We use the example of fifteen ejidos located in Tarímbaro, a municipality notably affected by the growth of Morelia, a middle size city in Michoacán, Mexico.

Making the invisible visible. Hidden geography of energy poverty in the Metropolitan Area of the Valley of Mexico

Rigoberto Garcia - El Colegio de la Frontera Norte | **Thania Castañeda**

The Metropolitan Zone of the Valley of Mexico (ZMVM) has become the urban center with the greatest local and global economic dynamism in Mexico. This situation allows the area to provide its population with the largest offering of jobs, culture, and knowledge in the country. However, these economic, social, and cultural advantages are not expressed uniformly in the intra-urban space, presenting what in this work is called geographies of social exclusion. In this sense, one of the manifestations of social exclusion that has emerged in recent years in Mexico is energy poverty, a situation in which people do not meet their human needs related to the use of clean and affordable energy. Energy poverty is a serious problem of social exclusion because the lack of quality energy services causes physical and mental illnesses that affect the people's quality of life. With this background, the objective of this research is to characterize the energy poverty patterns at the intra-urban level of the ZMVM. Taking as a unit of analysis the territorial demarcations and municipalities that make up the ZMVM, an analysis of clusters is applied to spatially characterize energy poverty and its determining factors. The results show a clear correlation of energy poverty with per capita income, the degree of urbanization, and the level of urban infrastructure. It is concluded that it is necessary to make visible the hidden geography of energy poverty in the ZMVM. To do this, a series of public policies aimed at reducing this serious problem of social exclusion is proposed.

Session

Gateway Cities in Global Production Networks

Moritz Breul - University of Cologne | **Sören Scholvin** - University of Hanover | **Maurício Aguiar Serra** - University of Campinas

Global production networks (GPNs) depend on cities that bundle, channel and co-ordinate material and immaterial flows. These cities constitute ‘gateways’ because they connect their respective spheres of influence – that is, their hinterlands – globally by serving as transport hubs, sites of industrial processing, locations of corporate headquarters and major service providers and/or places of knowledge generation. Only few publications address this critical role of cities in GPNs; also because research on world cities is focussed on inter-city links, paying little attention to city–hinterland connections.

The papers discussed at this panel will contribute to bringing two key approaches in Economic Geography together: GPNs and world cities. The panellists will analyse what factors turn a city into a ‘gateway’ and how gateway cities integrate peripheral places into GPNs, transmitting impulses for economic development. They will also assess how gateway cities concentrate segments of GPNs, rather hampering than boosting economic development in their respective spheres of influence.

Gateway Cities in Global Production Networks I

At the Gateway’s Doorstep: Johor, Singapore, and Connecting to GPNs

Francis Hutchinson - Institute of Southeast Asian Studies

Singapore, a gateway city par excellence, has established deep linkages with its neighbour to the north, Johor. This Malaysian state is Singapore’s hinterland, as it accesses global production networks, transport facilities, and high-end expertise from the gateway city and, in turn, provides natural resources, labour, and low-cost land. In addition, Johor has been affected by the city-state’s decisions to specialize in certain sectors and offshore others. However, rather than being a mere passive recipient, since the 1970s the provincial government has sought to shape its economic trajectory through a variety of policy frameworks. In some cases, this has involved seeking to complement Singapore’s capabilities, and in others it has involved attempts to compete directly with the city-state. These policies have resulted in a variety of outcomes, with some contributing positively to aggregate growth and others dispersing policy attention and resources. This paper thus seeks to complement research on gateway cities by looking how and under what conditions hinterland areas can be partners in linking up to GPNs.

South African Gateways: Cape Town, Durban and Johannesburg in Oil and Gas Value Chains

Sören Scholvin - University of Hanover

In her critique of the world cities approach, Jennifer Robinson shows that corresponding research suffers from a bias towards the Global North. Recently scholars have studied more world cities from the Global South but the bias towards the Global North cannot be overcome by simply applying a concept developed against the background of cases from the Global North to cases from the Global South. Our understanding of world cities, the concept itself, must include experiences from the Global South, recognising that there are ‘multiple globalisations’ and advanced producer services, on which research on world cities concentrates, are just one of them.

In order to better understand the role that world cities in the Global South play for global economic processes, I suggest conceptualising them as ‘gateways’. Gateways are critical to trade flows: they integrate their respective hinterlands into global value chains, being transport hubs, sites of industrial processing, key locations of corporate headquarters and firms that provide producer services and/or places where knowledge generation, in particular the adaptation of external technologies to local specificities, take place. The concept of gateways allows for a broader and, thus, less biased understanding of world cities in the global economy.

I apply this concept to Cape Town, Durban and Johannesburg, which fulfil different gateway functions in oil and gas value chains: Cape Town has become a hub for the upstream sector and provides key services to resource-rich places in sub-Saharan Africa. Knowledge generation also takes place there to a certain extent. Corporate headquarters from the downstream sector, conversely, concentrate in Johannesburg. Durban, meanwhile, constitutes a gateway for industrial processing and transport. I explain these very different roles of the three cities, in particular the division of gateway functions amongst them, with information from expert interviews that are analysed with the help of ‘cognitive maps’.

The Networked Geographies of Tax Havens: Gateways of Relational Cities

Kirsten Martinus - The University of Western Australia | **Ben Derudder** - Ghent University | **Iacopo Iacopini** - Queen Mary University | **Thomas Sigler** - The University of Queensland

Tax havens are most frequently small jurisdictions that exercise their sovereignty to provide special tax concessions and secrecy to both corporation and (mostly wealthy) individuals. Tax havens have come under international scrutiny as bulwarks to the redistribution of wealth in the global economy, diverting public monies from where economic activities are carried out. With increasing mobility of capital, tax havens are under intense pressure to alter their practices, yet corporations funnel large amounts of capital and often claim their activities would be untenable without these jurisdictions. Despite widespread knowledge about the existence of tax havens, surprisingly little is known about how countries are aligned through the financial networks between them. Using data from approximately 700,000 firm subsidiaries across 12 of the world's largest stock exchanges, this paper explores tax havens within global corporate networks by country and stock exchange using social network analysis. It unpacks specific regional and financial clusters in these networks to better understand the tax globalisation patterns of different nations, specifically those acting as relational gateways, through the corporate structures of firms attracted to raise capital in their stock markets.

Gateway vs. relational cities: urban characteristics, not typologies

Markus Hesse - University of Luxembourg | **Catherine Wong** - University of Luxembourg

In this paper, we discuss relationality as a phenomenon that signifies processes of global urbanization. It characterizes highly international, if not globalized cities that are not necessarily metropolitan areas. Our discussion starts with a critical reflection on the concept of 'gateway cities'. While this concept has its merits, as it helped to develop further the discussion of central places and transport places, we argue that it needs to adapt to more recent dynamics of urbanization. Gateway cities imply a sense of territoriality: first in the way they provide a link between sea and land, foreland and hinterland; and second in the way the term assigns an attribute to cities as a whole. Economic relations, however, are increasingly more pluralized, highly differentiated and, particularly, more independent from their territorial foundations.

In this context, we understand relationality as a means of global integration of urban areas, particularly by linking different levels of scale, rather than horizontal linkages. Relationality is not primarily based on economic importance or population size but an outcome of specialization and a politics of niche-sovereignty. In empirical terms, the paper draws upon sketches of three different places: Geneva (Switzerland), Luxembourg-City (Luxembourg) and Singapore. In this paper, we emphasize the distinct ways in which these three places became, or were made to become, part of larger networks and associations, and how niche-making and the successful management of flows has fostered urban-regional transformations. Given that all cities can be viewed as being relational to some extent, we use the label 'relational cities' not as a fixed typology for global urban studies, but rather as a frame of analysis that will enable us to identify key means and moments of urbanisation processes that are increasingly becoming global.

Gateway Cities in Global Production Networks II

Territorial embeddedness and power in the copper GPN

Miguel Atienza - Universidad Católica del Norte | **Martín Arias** - Universidad Católica del Norte | **Nicholas Phelps** - University College London

The organization of the copper mining GPN in Chile is characterized by a hierarchy of cities, with a strong spatial division of labour. The largest and technology intensive mining services suppliers as well as most headquarters of national and foreign mining companies are located in the capital city of Santiago, which plays the role of "gateway city", connecting the Chilean mining activity with the rest of the copper GPN. In contrast, the extractive activity is weakly embedded in the territories of the Chilean mining regions, which are mostly specialized in ancillary and generic tasks, presenting low level of human capital, knowledge intensity and diminishing productive linkages since 1995.

The objective of this article is twofold. First, we describe in depth the pattern and degree of territorial embeddedness of the mining activity in the Chilean regions, based on a sample of almost 4,000 mining services supplier firms, paying special attention to the emerging hierarchy of cities. Second, we analyze how power relationships between network's actors are affecting the hierarchy of cities within the Chilean copper GPN, and the role played in the network by different cities. For this purpose, we use the results of fifty interviews made to academics, politicians and MNE's between 2012 and 2015, comprehending the three main nodes of the copper GPN: London (core of the GPN), Santiago (gateway city) and the Antofagasta Region (where copper is mostly extracted). Preliminary results show that the role played by the state in the bargain with mining multinationals reinforce the power asymmetry between the capital city and the mining regions in their different roles with the GPN and contribute to increase the already weak

embeddedness of mining activity in the Chilean extractive territories that run the risk of becoming enclave cities, an unsustainable form of growth and dependency.

Filtering the gains? - Gateway cities and the development of production linkages in commodity source regions

Moritz Breul - University of Cologne | **Javier Revilla Diez** - University of Cologne

The creation of forward and backward linkages is seen as crucial in order to reap the benefits from being integrated into extractive global production networks (GPN). While some scholars argue that recent changes in the organization of extractive industries have opened new opportunities for a greater participation of resource peripheries, the realization of these opportunities is limited in many countries of the Global South. Instead, existing studies show that the integration of commodity source regions into extractive GPNs has led to the creation of production linkages in central city-nodes outside the resource periphery – so called gateway cities. This study, therefore, aims to assess the relationship between gateway cities and commodity source regions. The analysis focuses on Singapore's gateway role for the resource-holding countries Indonesia and Vietnam in the oil and gas GPN. Based on expert interviews, the study analyzes the implications of this particular spatial configuration in regard to the extent and nature of production linkages in Indonesia and Vietnam.

Maritime and port cities as gateways in GPNs: a mixed blessing for their hinterlands?

Constantinos Antonopoulos - University of Patras

A specific type of gateway city has been a defining element of global cities over recent years. Among them hub cities like Los Angeles, New York, London, Rio de Janeiro, Buenos Aires, Shanghai, Hong Kong and Singapore, Bangkok, Durban and Abidjan share strong embeddedness of maritime logistics activities and financial, producer and service industries in relatively close proximity to each other. In the urban interface of sea to land the spatial privileges and advantages afforded to gateway cities by global financial and business capital are not as diffuse and fluid as the imaginary of global networks suggests. This is manifested on the one hand by the persistence of rigid hierarchies of functions, which remain localised in the urban region of the gateway city, and on the other hand on the form and content of multi-stream and multi-purpose channels of flow that connect cities with their hinterlands. Drawing on the empirical examples of global and European maritime cities this paper discusses three observations with regard to city-hinterland relations: a) the spatial polarisation of GPN activities in gateway cities and main spatial nodes and corridors, b) the often unequal exchange between hinterlands and their respective spatial gateways as suggested in the often observed value leaps and product or process 'upgrading' across the GPN value stream, c) the position of structural dependence that this creates for hinterland and rural cities. This discussion is of interest for current debates in economic geography on world cities/global cities and regional development.

Hong Kong's Gateway Functions for the Chinese Pearl River Delta in Transition – From Front Shop, Back Factory towards a Complex Node in Global Production Networks?

Daniel Schiller - University of Greifswald

This paper assesses how Hong Kong's gateway functions for the Pearl River Delta have been transformed by applying global production networks in the context of gateway cities as an analytical framework. Hong Kong's gateway functions have been transformed and became more differentiated in several aspects. Production-oriented functions lost their meaning, while knowledge-based functions benefitted. Institutional-political changes and economic upgrading processes have resulted in a polycentric gateway structure. The paper contributes to the integration of gateway city functions within the framework of global production networks. Empirically, new interpretations of the integration between Hong Kong and its hinterland are provided.

Gateway Cities in Global Production Networks III

The Rise of Zone-Cities in East Asia: The Symbiosis or an Antinomy for Urban Development?

Jinn-yuh Hsu - National Taiwan University

Some city-regions have come to resemble engines which connect their situating national economic activities with the broader world economy in the current mosaic global economy. The so-called Zone-city (Free Economy Zone (FEZ) and its city-region)

is a primary example of such a city region, as it has become the key node for host states to control global spaces of flow. Among others, New Songdo City, located in the Incheon FEZ in Korea, and the proposed Taoyuan Aerotropolis Project (TAP) in Taiwan are two well-noted examples. In these zone-cities, urban facilities surround the zone whereas the zone itself provides entry points to global networks for the modern city. This zone-city hybridization has provided a fast "solution" through imagining a disconnection from local problems of urbanization, such as broken facilities and environmental chaos, in the East Asian urban contexts since the neoliberalization process accelerated after 2000. But, the zone-city is a term of antinomy. Through a case study of the TAP, this article demonstrates that while the zone performs to separate itself from the contiguous areas with a designated exceptionalism, the city naturally connects with the world afar through spontaneous encounters. Although the zone is planned and even pretends to be a "liberal" territory, the city is intrinsically a public space where social encounters freely materialize. Accordingly, the assemblage of the zone-city is a contradictory coexistence which is doomed to instability. But, instability does not necessarily lead to collapse. Stabilizers, such as the discourses and technologies of the smart city, can always be called upon to re-assemble and re-imagine the zone-cities to a certain configuration of stability under certain (geo)political economic situations.

Science and technology parks shaping aerospace gateway cities: the case of São José dos Campos – Brazil.

Patricia Mello – FGV, SP

The theoretical contribution of this paper consists on associating science and technology parks (STPs) as policy for local and global development and its consequent externalities on a gateway city formation in the Global Production Networks (GPNs). With the theoretical lens of global city studies from which gateway cities of the global south derived, we sought to answer the following research question in a territorial embeddedness perspective: How the São José dos Campos Science and Technology Park contributed to the process of strategic couplings of this city in the aerospace GPNs and, as consequence, in a gateway city conversion? To answer it we performed an ethnographic study observing relations and interviewing multiple players operating in and out this STP. Our aim was to understand the results and related incentives consistent on six different developments society expects from STPs: innovative, economic, academic, entrepreneurial culture, urban, social and international. Furthermore, our purpose was to investigate whether this innovative arrangement may or may not be facilitating these developments in other regions and their access to the global economy so as to the São José dos Campos be characterized as a gateway city in the aerospace sector. We argue by promoting local, global and inclusive development STPs could be operating as a gateway city developer. They would act as an important articulator of GPNs and would function as a gateway to various flows, integrating or obstructing the access of other regions of the Global South to the world aerospace economy, which as many other is organizationally fragmented and spatially dispersed. In fact, the more than 60 years aerospace industry history and the fact it hosts the third more important global enterprise in this sector - Embraer, all evidences gathered corroborated the role of the STP as the main responsible for the aerospace gateway city shaping.

Gateway Cities, Underconnected Cities and Largely Disconnected Cities in Global Value Chains in Sub-Saharan Africa

Herman Geyer - Stellenbosch University

Gateway cities is a term used for lead cities that serve as trade nodes between a regional hinterland and global markets. Rather than serving as mere intermediary terminals in global value chains, gateway cities host essential functions for value chains, which enable local firms to upgrade products, processes and functions, capturing a larger share of value added production in global value chains. Gateway cities thus have a globalising role, in which spillovers enable local firms to better integrate and compete in the global market. Contrasted to that of world cities, the gateway concept analyses the particular role that each city plays in value addition and related upgrading along entire value chains. One of the most important implications of this concept is that the spatial centrality or peripherality of locations and the size of the regional hinterlands becomes less important than the level of participation in global trade. The study identifies two sub-Saharan cities as gateways. They are not centrally located in sub-Saharan Africa and only one of them, Gauteng, has a major economic hinterland nearby. The other, Port Louis, does not. In the global transmission of products and services, centrality becomes a function of the connectivity in value chains, which results from logistics performance, manufacturing capacities, command and control functions, consumer services and knowledge-generating industries, irrespective of the significance of local resources and spatial proximity. The analysis above implies that other regional characteristics become critical for achieving a gateway status, such as the stability of the city's host state, the ability to capture increasing returns through the agglomeration of the aforementioned functions and a socially heterogeneous workforce able to generate greater levels of networking within the region and between the Global North and Global South.

Gateway cities as knowledge production sites in the Global South: the case of offshore oil

Mariane Santos França - University of Campinas | **Celio Hiratuka** - University of Campinas

The global economy has undergone processes of spatial dispersion and fragmentation since the 1970's, which lead to the formation of global production networks (GPN) (Coe and Yeung, 2015). However, some authors state that these processes are actually a "concentrated dispersion", as only some places concentrate the most sophisticated and high value-added activities (Iammarino and McCann, 2010). In the case of the global South, these activities are concentrated in gateway cities, places of stability and good infrastructure in countries or regions marked by internal spatial inequalities, lack of skilled labour and difficulties for doing business. According to Scholvin et al (2017), gateway cities connect their respective hinterland in GPNs through activities related to logistics, industrial processing, corporate control, services and knowledge generation, being the latter the most sophisticated one. Considering these configuration of the global South plug in GPNs and that many regions and countries in the global South, such as Western Africa, Southeast Asia, Brazil and Venezuela, are important producers of offshore oil, a segment which is technology-intensive due to the challenges posed by the different environment and depth, this paper aims to answer to the following questions: Are global South cities inserted in the knowledge production network in offshore oil? What are the characteristics of this insertion? Local institutions, such as NOCs, universities and research institutes are key-actors? To answer these questions, we will analyse data on patents, from 2007 to 2017, collected in the USPTO database. Although patents are considered as a non-ideal indicator for measures of knowledge, it is the most appropriate indicator for this analysis, because the oil industry is prone to patent and because patents constitute relational data. Results show that this activity is extremely concentrated and only Rio de Janeiro and Singapore are adequately inserted in this network.

Gateway Cities in Global Production Networks IV

When economic plans fail it may be better for regions: discussions on the role of gateway- cities to the maintenance of bio- and socio-diversity in the Amazon

Ana Paula Bastos - University of Brasilia/Universität zu Köln

The Amazon tropical region is well known for its biodiversity and lack of infrastructure, but less known for its urban population and metropolitan areas, that concentrate the major part of its 20 million inhabitants (e.g. in Para, Brazil, eastern Amazon, 80% live in urban and peri-urban areas). This region is being continuously occupied for more than 10.000 years, conflicts among its peoples always occurred but it is the event of European colonization that started to change the almost virgin forest and it is the Brazilian side that is target of more development plans since the 1950s. Geopolitical interests lead the government to plan a massive occupation of Amazon and overcome its historical isolation. It's dimension (5, 5 million square kilometres, 60% of Brazilian territory) and low population density lead these development plans to be concentrated in certain areas that would play the growth pole role (Perroux, 1955). The occupation strategy was based on attraction of immigrants and exploitation of mining and other natural resources, agribusiness and one especial industrial zone. To finance the needed infrastructure and big entrepreneurs was created a regional development bank, a special fund and two development agencies. We argue in this paper the region was plugged into the Global Production Networks in a Myrdal (1957) cumulative causation model, thus based on low value creation and low enhancement (Coe and Yeung, 2015), promoted the emergence of gateway cities within the forest but homogenised the landscape, with non-calculated biodiversity and traditional knowledge losses (diminishing the possibilities of capturing any value) and not necessarily improved local tenants' well-being. Manaus, planned as a gateway, became an enclave, but we argue that it is this failure that can promote a novel type of development (Becker, 2013) creating value through Region's heterogeneity and benefit from being plug into GPNs.

Urban inequality, informality and social conflicts: The case of Bangkok

Tamaki Endo - Saitama University

With rapid and 'compressed' economic development, many Asian megacities in the middle-income countries have become global hubs of finance, production and consumption, attracting the rich and the emerging middle class, but at the same time, exhibiting the continuous expansion of the informal economy and slum areas. As the result, these cities and mega regions are showing multi-layered stratification, and economic inequality within the city has been even widening.

By taking the case of Bangkok as an example, this paper will clarify economic drivers and actual configurations of widening internal disparities, as well as how these economic dynamics and changes reveal in term of geographical rearrangement and urban governance of Bangkok. In favor of global actors and capitals, urban redevelopment projects in recent Bangkok are reactivated. It

turns out in the end that spaces for informality are eroded through pushing slum communities to outskirts and/or prohibiting vendors to excise their business on the streets.

The disaster management is another example. When the flood hit Bangkok in 2011, Metropolitan government tried to protect financial hub of the region, inner city of Bangkok, from the flood. Their actual water control practices eventually worsen damage of urban suburbs and surrounding rural areas. The objections brought from residents in latter areas clearly show the tension and conflicts among different social classes.

The development strategies for megacities to boost country's economic competitiveness also may exacerbate regional and income disparities. As this policy dilemma causes various political conflicts in Southeast Asia, to understand it would serve as a key to overcome such conflicts. The paper also touches upon policy dilemma for managing these urban disparities and conflicts among different social classes.

Justifying Value: Professional Service Firms as Intermediaries between Investors and Governments

Anne Vogelpohl - University of Hamburg | **Chris Hurl** - Concordia University

This paper is a first insight into a collaborative research project that comparatively investigates the influence of transnational professional service firms in assessing the value of infrastructure development in Canada and Germany. Over the past three decades, governments in both countries have rolled out new vehicles for the design, financing, construction and operation of urban infrastructures. Public-private partnerships (PPPs) – as long-term financial obligations between state agencies and private firms – have been increasingly taken up in making the private sector responsible in various ways for public services. We explore how the 'Big Four' professional service firms – KPMG, Deloitte, Ernst & Young (EY), and PricewaterhouseCoopers (PwC) – have facilitated this trend through operating as intermediaries between investors and governments, in setting benchmarks, calculating potential risks and rewards, and drafting contracts. Focusing on their role in assessing 'value for money' (VfM), this paper explores the variable ways in which these firms connect public and private actors and shape their cooperation in different national contexts. Undertaking case studies of VfM assessments in two countries – the Autobahn A1 in Germany and the Highway 407 in Canada – we comparatively examine the discourses that these firms deploy in VfM assessments, the multiscale institutional complexes in which they are embedded, the kinds of opposition that they encounter and how they respond to it. Through their capacity to mobilize evaluative frameworks and expertise across jurisdictions, we argue that these firms have been able to sustain public-private co-operation for the financing of public infrastructure, even in face of critique.

Spatial structure, urban hierarchy and productivity in European regions

Frank Van Oort - Erasmus University Rotterdam | **Nicola Cortinovis** - Erasmus University Rotterdam | **Wessel Ouwehand** - Erasmus University Rotterdam

A burgeoning urban literature states that economic externalities are not automatically confined to a single urban core, but can be shared among a collection of nearby and linked cities. Economic empirical analyses of agglomeration and agglomeration externalities in relation to spatial structure is burgeoning, yet varying definitions and diverging research methods hamper conclusive evidence for a pan-European context (Rauhut 2017). This is the more remarkable, as many EU-policy documents stress the polycentric advantages of urban development in Europe. This paper links the multicentric spatial organization of agglomeration to the possibility of the 'sharing' of size between cities resulting in productivity gains (using the Meijers & Burger (2010) US-based framework). Using OLS and 2SLS models explaining total factor productivity (TFP) in the period 2010-2014, we show that spatial structure matters differently in direct and indirect ways. Urban size always contributes to higher TFP, while polycentricity is not directly associated with higher TFP in European regions. This deviates from earlier findings for the US. Indirect effects are analyzed using interaction effects between size and polycentricity and size and dispersion. These showed that a balanced morphological distribution of growth of the regional urban population could be less favorable for productivity compared to the case where the distribution is more hierarchical and centered in nature. A network of geographically proximate smaller cities cannot substitute for the urbanization externalities of a single large city – and this is in line with previous research. We end our paper with the implications for European place-based policy initiatives and for economic resilience in EU regions.

Session

Uneven City Economic Evolutions

Emil Evenhuis - University of Cambridge and University of Southampton | **Andrew Pike** - Newcastle University

Understanding city economies has become a topic of growing importance. In an ever more urbanised world, cities are seen to be driving the economies and wealth of their nations. This has led to an increasing recognition from national governments as well as international bodies on the economic role that cities play. For policymakers, ensuring successful city economies is the key to ensuring economic prosperity also at the national level. It is well known however that not all cities have enjoyed an equal amount of economic success in the past decades: some have surged ahead, others have grown less buoyantly, and some have experienced decline (sometimes quite dramatically even).

We invite paper submissions which take on the theme of the uneven evolution of city economies. Research questions could include (but are certainly not limited to):

What is the relative importance of, and interplay between, different factors that determine the long-run development paths of cities? What determines whether cities are resilient, and can successfully cope with changes taking place in the economy, technology and society?

How is the development of - and between - cities conditioned by structures and processes at various levels of scale?

What constitutes success or lack of success in city economic evolution (i.e. should we move beyond mere 'growth' and 'competitiveness' as a normative ideals)?

Are there clear differences in the dynamics that shape city economic evolutions in different parts of the world (e.g. Global North and Global South, US and Europe, China and India, etc.)

How to delineate cities and their economies, territorially but also relationally?

What may be fruitful new avenues to study uneven city economic evolutions (e.g. innovative modelling approaches, frameworks for comparative case study work, typologies of different kinds of cities, etc.)?

Uneven Technological Development: An Analysis of the Geographical Evolution of the US Optics Industry

Melissa Haller - UCLA

While significant research has examined processes of knowledge production across space, less work has focused on understanding the dynamics of technological change within particular industries. Why do technologies emerge unevenly across space, and how does the evolution of particular knowledge trajectories enable growth in some cities, while constraining growth in others? To better understand these questions, this project uses the optics industry as a case study. Optics is the study of the behavior and transmission of light, and optics technologies have fueled breakthrough innovations in the fields of photography, medical imaging, defense and security, fiber optics and telecommunications, and many other areas. Often described as an enabling technology, optics is unique because of the clear synergies that it possesses with other technological industries. Using patent data from the USPTO, I build on the work of previous studies of the optics industry using optics patents produced between 1976 and 2014. Then, using networks built from USPTO sub-classifications, I map the evolution of optics technologies across cities in the United States to better understand how that evolution contributes to regional economic development.

Institutional void, path creation or dependency: understanding the emergence of 'Silicon Berlin' from a governance perspective

Sören Becker - Bonn University

After more than a decade of stagnation and unfulfilled hopes for becoming a global city, Berlin is growing again both regarding inhabitant numbers and economic terms. The sudden reappearance of growth dynamics came as a surprise to many, in a time when surplus housing was demolished and infrastructures were gradually adapted to shrinkage, especially in the more peripheral areas. Today, Berlin attracts a major share of foreign investments into Germany and shows the fastest growing labour market within Germany. This development is driven by a dynamic technologically-oriented start-up sector, but also by investments of major German firms that allocate their digital innovation units within the city. Seen as the expression of a recent boom, these developments, notwithstanding, accelerate dynamics of social exclusion and uneven development within the city.

While this sudden take-off changes Berlin's face both economically and socially, it also renders a puzzle for evolutionary theories of urban development. Aiming to engage in the ongoing discussion on institutional change and urban development dynamics (Cumbers et al. 2003, Pike et al. 2015), this paper discusses different concepts of evolutionary theories on urban governance in face of the genealogy of Berlin's development as a hub for start-ups and the digital economy – sometimes even termed 'Silicon

Berlin'. Empirically, it will map out the economic, but also the strategic and organisational governance-dynamics behind this development. On a conceptual level, the paper will systematically assess the explanatory value of the concepts of path dependency (Evenhuis 2017), path creation (Garud et al. 2010) and the institutional void (Hajer 2003) for grasping the developments in Berlin. It will conclude by commenting on the relationship between market and governance dynamics in this specific case.

The Resilience of Cities to Economic Shocks

Ben Gardiner - University of Cambridge | **Ron Martin** - University of Cambridge

The notion of resilience is explicitly intended to analyse and understand the capacity of a system or entity to withstand and recover for shocks and disruptions. Economic systems are inherently shock-prone and development is an inherently shock-prone process, and in recent years, the notion of resilience has become an increasingly prominent idea in studies of regional and local economic performance (see, for example, Martin and Sunley, 2015). Over the past four decades the British economy has been subjected to four main recessionary shocks - in the mid-1970s, the early-1980s, the early-1990s and in 2008-2010 - and the nation's imminent withdrawal from the European Union ('Brexit') will pose yet another major disruption. In this paper, we use a novel and unique annual economic data set constructed for 85 British cities, for the period 1971-2015, to examine their resilience to these shocks. It emerges that while the pattern of city resilience has changed over time, southern cities have in general been more resilient than northern cities. We then explore some of the various factors that may have influenced these differences, including economic structure and specialization, skills, agglomeration effects, and export intensity. Finally, we estimate how Britain's cities are likely to be effected by Brexit, while highlighting the considerable difficulties in deriving such estimates.

(This paper draws on research that is part of a larger project on city economic evolutions funded by the ESRC - grant ES/N006135/1. See also www.cityevolutions.org)

Panel Session

Uneven City Economic Evolutions

Emil Evenhuis - University of Cambridge and University of Southampton | **Andrew Pike** - Newcastle University

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What determines whether cities are resilient, and can successfully cope with changes taking place in the economy, technology and society?

How is the development of - and between - cities conditioned by structures and processes at various levels of scale?

What constitutes success or lack of success in city economic evolution (i.e. should we move beyond mere 'growth' and 'competitiveness' as a normative ideals)?

Are there clear differences in the dynamics that shape city economic evolutions in different parts of the world (e.g. Global North and Global South, US and Europe, China and India, etc.)?

How to delineate cities and their economies, territorially but also relationally?

What may be fruitful new avenues to study uneven city economic evolutions (e.g. innovative modelling approaches, frameworks for comparative case study work, typologies of different kinds of cities, etc.)?

Uneven development redux

Jamie Peck - UBC

Whatever happened to uneven development? A condition of existence for economic spatiality itself, and an axiomatic principle for most economic geographers, (combined and) uneven development has not really been a focus for active theorization or debate since the 1980s. Back then, the theoretical problematization of uneven development was prompted by two things, by the growing influence of radical political economy on the one hand, and by the pervasive sense that the very gestalt of capitalism was undergoing transformative, indeed structural, change. Both the world and our preferred theories of it have changed considerably

in the intervening decades, yet with a few rare exceptions there has been no reevaluation of the theoretical and methodological implications of uneven spatial development. Conceptually speaking, uneven development seems to have become almost inert, a background condition, or some fleetingly acknowledged article of faith, when a case could be made that we need it more than ever. Advocating a theoretical and methodological reconsideration of combined and uneven development, not as a retro maneuver but as a necessary component in adequate treatments of urban and regional transformation, the paper develops two themes: theorizing with difference and the problematic of mixed economy.

Uneven City Economic Evolutions

Yuko Aoyama - Clark University

Panel speaker

Uneven City Economic Evolutions

David Rigby - UCLA

Panel speaker

Uneven City Economic Evolutions

Andrés Rodríguez-Pose - London School of Economics

Panel speaker

Uneven City Economic Evolutions

Heike Mayer - University of Bern

Panel speaker

Session

Urban Housing Challenges and Responses from a Global Perspective

Sebastian Schipper - FU Berlin | **Steffen Wetzstein** - University of Erfurt

Housing is back on the agenda of policy makers, advocates and researchers around the world. While urban housing markets and systems have been undergoing longer term-transformations in the neoliberal age, intersecting macro-processes around financialisation, urbanisation and austerity-framed re-regulation in the Post-GFC years have triggered the rise of serious challenges around the affordable, adequate and accessible supply of housing for urban populations in many places. In some contexts, commentators even speak of full-blown urban housing crises. But why are particular cities more affected than others? How can we get a more accurate multi-contextual and multi-faceted picture on the origins, processes, effects and responses in regards to housing-related transformations? And what empirical, conceptual, theoretical and methodological insights can help us to meaningfully engage with this topic?

We believe economic geography, in particular if practiced with the globalizing economic and institutional context in mind, should be well-placed and well-endowed to shed new light on these questions, set agendas and inform political and policy responses. Its rich disciplinary heritage, mid-level analytical gaze and productive openness to other disciplines should be key advantages that ought to be utilised to intellectually tackle pressing urban housing challenges and responses from a global perspective.

Examples of topics:

- Rationale behind the emergence of housing challenges and crisis conditions
- Describing, mapping and explaining the socio-spatial implications of urban housing challenges
- Policy makers key responses, including the re-regulation of foreign investment, taxation and land-use as well as creating/encouraging new supply of affordable and social housing etc.
- Political mobilisation, grass-roots movements and ongoing contestation of housing-related urban political questions

- (New) political economy of urban housing, including financialised housing, speculative urban land markets, neoliberalised state-regulatory apparatuses etc.
 - Processes of de-coupling urban housing markets and labour markets
 - Comparative urban housing studies (north/north; north/south; south/south)
-

Urban Housing Challenges and Responses from a Global Perspective I

In-Fill strategies as a solution to maintaining social mass housing stock in mega cities? A global North-South comparison

Brigitte Zamzow - Bauhaus-Universität

Mass Housing in modernist concrete blocks has its roots in the thought of creating an egalitarian society after the First World War. The Bauhaus utopian ideas molded into concrete slabs from the 1920's have found followers all over the world, and while their architecture has been deemed as failed in the United States' social housing discourse, it is being used today as a form of (still!) modern luxury living for the upper-middle and higher class in other parts of the world. Architecture itself can not be the reason of success or failure of urban design, and more so, of an egalitarian society it was trying to provoke in its beginnings (e.g. Florian Urban: Tower and Slab, 2012).

Also, so far in the German-speaking context, there has been hardly any scientific evidence of the interrelation of industrial building in its societal context (Christine Hannemann: Die Platte, 2005). This research aims to fill part of this void by asking the question: How are high-rise slabs becoming part of a revitalization process by using in-fill strategies without giving in to gentrification and displacement? I will be using a multi-contextual theoretical approach concerning failing social and affordable housing policies and current gentrification processes in New York City, Amsterdam, Johannesburg and Medellín's slabs. The in-fill strategy in different contexts will then be introduced.

The aim of this research is to eventually apply an innovative empirical approach. Using ethnographic data collection (which has rarely been done in policy research) and design-analyzing techniques to answer the question: How is the designed structure of apartment units being used by its inhabitants and who lives in the these buildings creating a community that succeeds at deconcentrating poverty (thereby actively avoiding the social mix discourse that has proven unsuccessful in the field of deconcentrating poverty)?

The savage consequences of a massive, neoliberal social housing policy and the institutional reproduction of marginality in Santiago de Chile: Disinvestment, inefficacy and stigmatization.

Javier Ruiz-Tagle - Catholic University of Chile | **Martin Alvarez** - Catholic University of Chile | **Juan Carraha** - Catholic University of Chile | **Gricel Labbe** - Catholic University of Chile | **Pedro Palma** - Catholic University of Chile

In the 1980s, Chile launched a massive system of social housing that reduced historical deficits and fueled a large, privatized industry working with extremely low standards, and developing vast areas of formalized precariousness. Later, several institutional processes reproduced the status of these areas. The 'neighborhood effects' thesis has been a popular analytical tool to study this, assuming a direct relationship between concentrated poverty and 'social pathologies'. Despite the wide usage of this thesis, criticism has pointed to its theoretical grounding and its relation with housing policies of poverty dispersion, public housing demolition and social mix. Drawing on literatures on 'total institutions', 'institutional geographies', urban marginality and urban-political-economy, we work with an alternative perspective focused on external institutions and their influence on marginal neighborhoods.

We study this influence through a large mixed-method, case-study in Santiago de Chile, focusing on three interrelated mechanisms. First, through disinvestment, there is an absence of several important institutions configuring what residents call 'Red Zones': that is, public, private and civil institutions which, for different reasons, refuse to enter marginal neighborhoods and to deliver their services, generating a variety of social, economic and symbolic effects. Second, through the inefficacy of different interventions from local governments, social organizations have waned, and their behavior and modes of participation have been modified, thus bringing a generalized feeling of distrust between citizens and the State (in its different forms and scales), and complicating any public intervention. And third, through stigmatization, these neighborhoods have been critically degraded from the media and other powerful actors, thus triggering subjective and objective consequences, like the reproduction of the mentioned 'Red Zones'. All of this has several implications for the debate on neighborhood effects and for the creation of housing policies of poverty dispersion and social mix.

Uncovering the role of social housing in Chile: The neo-colonisation of the Mapuches

Francisca Cancino - University College London | **Francesca Cariqueo** - Council of Quilicura, Chile

The qualitative deficit of housing in Chile has reached 1,200,000 units in 2017. This amount is considerably high especially considering that the Chilean population is of approximately 17 million. On the one hand, the housing solutions currently built by the private sector are focused on the middle and upper classes, meanwhile, the developments for the low-income people are practically nonexistent. On the other hand, the neoliberal Chilean State, by means of a subsidy system, has delivered social housing for the poorest sectors. These subsidies are given through a public competition for all of those whose profiles match with a strict application based on positive discrimination (low-income people, disabilities, indigenous roots, and so on). These subsidies are transferred to private companies for the management and construction of social housing for the winners of the contest (Beneficiarios). Due to a series of irregularities in the private companies' behaviour, the central governance enacted multiple norms and regulations over the social housing specifications in order to avoid new scams and to provide appropriate solutions for the people. However, our hypothesis is that these regulations are not only oriented to curb the companies which are developing social housing but also to establish a social control over the poor, particularly, indigenous people. Thus, in lieu of meeting a way towards a multinational state and acknowledging our cultural heritage, the State is looking to colonise the indigenous using social housing as a catalyst. Comparing both Mapuche's dwelling and a typical State' social housing, our preliminary results show that when Mapuches beneficiaries change their dwelling for a social housing, they suffer from a strong standardisation of their daily activities and the transformation of their social relations, and a de-territorialisation of their identity.

China's Moving Slums: A Hidden Geography of Recycling and Housing Injustice on the Edge of Beijing

Guo Chen - Michigan State University

Close to 30% of China's urban population live in slum conditions according to UN-Habitat (2010). China's rapidly expanding large cities continue to face an "urbanization of poverty" marked by the coupling of staggering urban growth with increasing rural-urban migration, shifting environments at the rural-urban interface, and exclusion of rural-urban migrants from urban privileges. China's post-reform urban scholarship often treats slums as historical or geographical exceptions. The recent state urban slum eradication/upgrade plan has excluded rural migrant settlements from the scope of the plan. By introducing the concept of moving slums in China, we interrogate both the "slum-free" vision in the Global South and the scholarship on China's slum-absent urbanism. We argue that China's hukou divide, land politics, and property-driven urban (re)development regime under neoliberal-authoritarian state governance has necessitated the spatial mobility of Chinese de facto slums, which has, in turn, enabled the state to selectively eliminate informality in order to paint an image of order and prosperity, both discursively and practically, to attract investments and boost land value. We draw evidence from visually enriched, sociospatial and ethnographic data based on years of in-depth fieldwork and participatory research in Henan migrant-run recycling enclaves that have existed at the edge of Beijing for decades. We contend that engaging with the geographical concept of moving slums fills a gap in knowledge and practice to redresses inadequate attention to the "hidden" migrant communities and the increasing inequality and distributive justice in China.

Urban Housing Challenges and Responses from a Global Perspective II

The cyclic crises of capitalism and the frontier of space production

Richard Wilson Borrozine de Siqueira - Instituto Federal de Brasília, IFB

This article aims to discuss a relatively frequent process of intensification of space production before some of the major crises of capitalism, as well as its strategic use by governments to cool economic crises. The production of space seems to be a kind of cyclical frontier of economic activities. In this article, through the establishment of connections between historical, economic, geographic and urban facts, we highlight the relations and similarities between crises in Europe in the late nineteenth century; the crises that affected the United States and much of the world as in 1929 and 2008, as well as specific periods of urbanization in the United States from 1945 to 1960 and 1968 to 1975. Some countries in Latin America, Asia and Africa also experienced industrialization, development and rapid urbanization between 1973 and 1990 and crisis processes. In addition to the singularities of each of these crises, there are some common elements to be analyzed. An intense spatial production is usually linked to speculative processes of commercialization and high valuation of housing and expansion of the mass of financing, indebtedness (individual, family, commercial and public) and processes of devaluation and destruction of capital. In each major period of intensification of spatial production, there is usually a major prior effort to accumulate, coordinate, organize and direct expressive volumes of resources largely financed by savings, private resources, and government expenditures and investments affecting large

production chains. The production of space is often linked to urbanization, construction of buildings and houses in cities, etc. However, it is much more than that because every society needs to appropriate space in different dimensions. It is a historical, complex and contradictory movement, considering that space is a condition, medium and product of human action, involving broad economic and social segments.

How can the concept of resilience be applied to housing market problems?

Friederike Frieler - Hochschule für Technik, Wirtschaft und Kultur (HTWK)

The emergence of urban housing crises and responses by local authorities represent a complex, dynamic process involving various drivers. Among these drivers, demographic change (e.g. population growth or shrinkage) is a slow-burning but prominent catalyst to urban housing markets. As population shifts are hardly predictable, especially at the local level, this driver can be considered as a shock to a city's inert housing supply. While the resilience of social-ecological systems seems to be a well-developed approach in research related to urban resilience, community resilience and regional economic resilience, few attempts have been made to apply this approach explicitly to housing market problems. Yet, policy makers already employ the notion of "resilient housing policy", though its theoretical and empirical essentials remain unclear.

In order to conduct empirical research on the conditions of transforming housing markets and policy from a resilience perspective, we seek to analyze existent resilience frameworks and indicator sets which already include housing aspects or can be linked to this issue. Some useful indicators can be drawn from these frameworks, while others are considered inappropriate for understanding resilience in housing policy from an evolutionary, socio-economic view. The structural potential, institutional capabilities as well as the interlacing of civic sector, public sector and private market actors have to be studied thoroughly. Proceeding from these basics, we present a preliminary set of factors that could promote housing market resilience in regard to demographic shocks. The overall aim is to provide a framework for a qualitative case study on housing policy in the city of Leipzig. Leipzig has seen extreme demographic changes over the past 30 years: urban shrinkage and severe housing vacancy, as well as unexpected rapid growth leading to a constricted housing market situation today.

Besides the theoretic proposal, we can provide first-hand insights from the ongoing empirical study.

Investments in Student Housing and its Implications for the Local Housing Market in German University Cities. The Case of Goettingen

Michael Miessner - Georg-August-University of Goettingen

Studentification studies have shown the specific role that higher education students play for housing markets in university towns. However, these studies are mostly restricted to the United Kingdom and these investigations additionally, lack a detailed analysis into exact reasons why houses of multiple occupation, flat sharing of students or student apartments are lucrative investments for landlords. This raises questions with regards to the strategies used by landlords to enforce higher rents in apartments occupied by students. The paper starts by showing, on the base of semi-structured interviews with landlords, property managers and real estate agents, the strategies of flat owners to increase rents in the university town of Goettingen (Germany). The high fluctuation of students enables rent increase, while the high student demand for flats makes standardised management possible for landlords. Student flat sharing allows the payment of higher rents than low-income families can pay, as students spend a high proportion of their income on rent. Secondly, using statistical data, the paper details the consequences of this investment strategy for housing markets in Goettingen. Districts characterised by students and the segment of one-room flats have an especially high rent increase. Additionally, because a lot of flats are occupied by students and due to the increasing rents, the demand for ownership of condominium and single- and double-family houses grows. Therefore, prices in this segment raises as well and due to the necessity of property loans, the new owners will be incorporated to (global) financialization processes.

Can urban people dominate rural areas? Side effects of economic oriented land use policy

Alina Żróbek-Róžańska - University of Warmia and Mazury in Olsztyn

Currently, new settlements are often being localized in suburban rural areas instead the cities' borders. Intense migration has been observed, especially in rural areas neighboring large cities. Local land use policy realized through economic oriented local development plans causes urban population settling in the particular residential localizations, and thus creating new concentrated housing developments with a high population density. National land use anti-speculative policy regulating transactions on the agricultural land market also stimulates various socio-spatial implications, such as spatial concentration of transactions and pathological behavior of market participants. Such solutions often lead to side effects, including changes among the local authorities and thus, local policy. The main purpose is to answer the question of whether particular land use policy solutions introduced in rural areas can lead to urban people dominating rural areas? The aim was accomplished through the careful

examination of a selected areas of Poland. The particular value of this study is that its structure and suggested scenarios of possible effects can help local policy makers governing areas neighboring cities create suitable development strategies.

DIGITAL ECONOMY

Session

Digital Economies, Digital Connectivity, Digital Margins: Digital Labor and Production Networks

Mohammad Amir Anwar - University of Oxford | **Mark Graham** - University of Oxford

People, places, and processes are becoming digital, digitised, and digitally-mediated at an astonishing pace. In 2017, over half of the humanity can be considered to be internet users. At the same time, hugely transformative changes are occurring in the global economy. First, an ever-increasing amount of economic value creation is affected by the digitisation of goods, processes and services. Second, places in every corner of the planet now aspire to become centres of digital production and entrepreneurship.

This session seeks to bring together scholarship that directly addresses issues of changing connectivities and the effects that those changes have on, and in, economic margins, particularly on digital labour. We are defining digital labour to include a wide variety of work practices, which, both at individual and organisation-level, can be outsourced through the internet such as web development, graphic designs, transcription, article writing, data entry, virtual assistant, etc. This session hopes to bring together papers from a variety of theoretical and empirical perspectives that explore the nuanced ways in which digital labour in economic margins is incorporated into the global production networks. In doing so, it aims to explore what the changing connectivities mean for economic geography of work and its implications on labour in economic margins, particularly for economic inclusion, exclusion, upgrading, downgrading, etc.

In this session, we welcome papers addressing key issues including but not limited to:

Divides and positionalities in digital production networks (incl. digital production and online labor);

Nature, origin, roles and formation of human capital and skills in digital labour;

Demographics and biographies of digital workers and entrepreneurs;

Articulation of previously disconnected labour forces into the global markets;

Labour market segmentation, regulation, institutions, rural-urban [re]structuring of new labour markets;

Labour standards, social upgrading, labour control, alienation, workers' agency, collective organisations, etc. in new digital production networks.

Beyond Global Digital Labour Platforms: Divulging demographics and biographies of digital workers from Serbia

Branka Andjelkovic - Public Policy Research Center | **Jelena Sapic** - Public Policy Research Center

This paper presents an initial analysis of demographics and biographies of digital workers from Serbia to provide contributions to the ongoing academic and policy debate of gig economy impacts on labour livelihoods. According to Kuek et al (2015), Serbia is ranked as the world's second online outsourcing country when it comes to the number of digital workers relative to the country's population. Together with Romania, this is the largest pool of digital labour among European countries. More precisely, Serbia contributes with 1.1 percent of workers per country population and with 2.6 percent of workers per country's total labour force to outsourcing workforce compared globally (approximately 80.000 workers from Serbia who work on global online platforms and live locally). Nonetheless, an emerging scope of literature focuses on digital labour based either in center (the USA, the UK, the EU – Smith, 2016; Huws et al, 2016; Schmid-Druner, 2016; de Groen and Maselli, 2016) or in periphery (South East Asia, Africa – Graham et al, 2017; Beerepoot and Keijser, 2015; Khanna et al, 2010), omitting the semi-periphery one. In order to fill this gap, the paper examines backgrounds, subsistence, human capital, and earnings of digital labour from Serbia. Drawing upon collected data from double-auction digital labour platforms such as Freelancer, People per Hour and Guru as well as from an online survey and interviews, this analysis extends to what are demographic characteristics and socio-economic positions of the digital workers. By doing so, it intends to address the notion of fair gig economy, decent work agenda, and the option of their application to this labour population from Serbia.

Key words: digital labour, digital labour platforms, Serbia, gig economy, decent work

Connectivity, digital labour and exclusion in Brazil: public policies and corporate interests in the information technology industry

Melissa Steda - University of São Paulo

Both empirical and academic studies bring out the large use of information technologies (IT) among the Brazilian civil society, mainly in urban areas with high rates of access to computers, smartphones, and Internet connection. Also, softwares are used in a wide range of production processes, in order to automate both simpler and more complex tasks.

This huge potential consumer market is one of the factors that might explain a recent increased number of public policies designed by the Brazilian government in order to promote innovation in the IT industry, especially on computer software, and to expand connectivity networks. Among them, we can highlight the Brazilian National Broadband Plan (nowadays rebuilt as the “Internet for All Plan”) and the recent Brazilian Strategy for Digital Transformation (“E-Digital”), which are being carried out since 2009. In what concerns to digital labour, the Strategic Program for Software and Information Technology Services (TI Maior Program) has a special action plan called “Brasil Mais TI”, whose objective is to offer young people online education on software programming languages. Also, we are experiencing in many cities an increasing use of applications for private transportation, such as Uber and Cabify.

These policies prepare the territory to receive larger and faster information flows, and labour force to work with new technologies. However, the main actors which seem to be benefiting from them are foreign IT corporations – for instance, those who produce the most broadly used mobility applications. Meanwhile, digital workers receive low income and are very segmented. In this context, we want to address the particular spatial and regulatory issues of Global South countries, like Brazil, that might accentuate digital divide and social exclusion. They might also deepen the subordination of periphery countries in the global capital dynamics, resulting in notable implications for territories and societies.

Platform labour in Africa: agency, autonomy and bargaining power of workers in the global gig economy

Mohammad Amir Anwar - University of Oxford | Mark Graham - University of Oxford

Economic geographers have made remarkable contributions to the field of labour geography to show that labour too can create its own spatial fixes and not just capital (Herod, 1997, 2001). A number of studies have explored labour geographies in an attempt to highlight the agency of labour in capitalism (Carswell and De Neve, 2013; Coe, 2013; Coe and Jordhus-Lier, 2011; Cumbers et al., 2010; James and Vira, 2012; Rogaly, 2009). Labour agency is known to help workers achieve positive socio-economic outcomes such as improvement in livelihoods, enable social reproduction and transform social relations. However, much of literature has been informed from the perspective of labour in classical firm/factory-based settings. With the emergence of digital platform-based remote work that is highly commoditised and geographically less sticky than old forms of economic activities (Graham and Anwar, 2018), there is a need to rethink labour agency and its impact on labour.

We conducted semi-structured interviews with sixty-five platform workers in five countries in Africa on one of the world's biggest digital job platforms-Upwork. In this paper, we document new sets of strategies and acts of resilience, reworking and resistance (Katz, 2004) employed by platform workers as forms of agency both on and off the platform. We show how agency is shaped by their positions in the economic networks/value chains of platform work and also by their social and cultural landscape. We argue that labour agency is key for greater autonomy at work and bargaining power for platform workers.

Searching for digital urban voids: a survey of the restaurant sector in Lisbon, Portugal

Daniela Ferreira - University of Lisbon

We are entering in the big data age, in which new forms of producing information emerge. One of these is volunteered information. To our study we will focus on volunteered geographic information (VGI), which is characterized by users being able to create spatial content about any place. The concept of sharing economy has been associated to this new mode of production with a significant capacity of influence, which is based in the freedom and creativity of the consumer.

Although the usefulness of VGI has been recognized in terms of enrichment of spatial information, the coverage of VGI is not equal for all territories and this is generating spatial inequalities. The production of VGI depends on the resources and availability of user-generated-content, and this has led to digital urban voids. Our work will focus on firms to which online visibility, through the rankings, reviews and filters of platforms that can create virtual representations about them and influence everyday life, is as significant as offline visibility.

Thus, the objective of this paper is to identify digital urban voids through a spatial correlation between the restaurant sector in Lisbon and its representation on TripAdvisor. After this, it is also important to discuss the new challenges that entrepreneurs in

digital urban voids face. How much of a disadvantage is it if they are not integrated in digital platforms? Although current literature has recognized the importance of VGI for firms, these challenges have not been studied so far.

Session

Digital Economies, Digital Connectivity, Digital Margins: Development, Entrepreneurship, and Inequality

Nicolas Friederici - University of Oxford | Mark Graham - University of Oxford

People, places, and processes are becoming digital, digitised, and digitally-mediated at an astonishing pace. A majority of the world's wealthy have long been connected, but it is the world's poor and economically marginal that have only relatively recently been enrolled into digital networks. In 2017, for the first time in human history, over half of the humanity can be considered to be internet users. At the same time, hugely transformative changes are occurring in the global economy. First, an ever-increasing amount of economic value creation is affected by the digitisation of goods, processes and services. Second, places in every corner of the planet aspire to become centres of digital production and entrepreneurship.

This session seeks to bring together scholarship that directly addresses issues of changing connectivities and the effects that those changes have on, and in, economic margins (i.e., across the Global South or economic peripheries within the North). It seeks to move beyond over-simplified narratives about whether digital tools and technologies are a panacea for development.

Instead, it hopes to bring together papers that explore the nuanced ways in which digital technology shapes opportunity and value creation in economic peripheries. In other words, the session wants to unpack the complex economic changes that digital connectivity has inflicted upon people, organizations, and institutions at economic margins.

In this session, we welcome papers discussing development implications of digital economies (incl. local development impacts, inequality, measurement issues, rural/urban divides, etc.) and digital entrepreneurship (incl. digital production, geographies of markets and opportunities, value creation, business models, clusters/entrepreneurial ecosystems, skilled labor pooling, etc.). Contributors can refer to our second session on "Digital Labor and Production Networks" if they gravitate more towards those aspects of digital economies.

Digital Economies, Digital Connectivity, Digital Margins: Development, Entrepreneurship, and Inequality I

Online social media: a knowledge resource for SMEs?

Emmanouil Tranos - University of Birmingham | Hannah Budnitz - University of Birmingham

This paper explores how small and medium enterprises (SMEs) in the UK utilise online social media (OSM). The theoretical underpinning of this research lies in the capacity of OSM and to enhance individual interactions, which can support knowledge creation and transfer processes (Crevoisier & Jeannerat, 2009; Grabher & König, 2017; Tranos, 2016). Therefore, the usage of such digital technologies can improve the ability of businesses to access diverse sources of information and knowledge, which are not necessarily proximately located. Using the Longitudinal Small Business Survey, this paper exposes whether: - specific sectors or business sizes are more prone towards exploiting the opportunities provided by OSM; - OSM are used by businesses as a supplement or complement of their rural or urban location or whether their usage is related to other geographical characteristics (e.g. deprivation, accessibility, distance from London, quality of internet connection); - the usage of such digital tools is related to the outputs of SMEs and their capacity to innovate. To do so, we employ multilevel statistical modelling, which considers both the firm-level and the contextual effects on OSM usage. Simply put, we identify the firm characteristics (e.g. sector, size or MEG-led business) which influence the use of such digital technologies as well as the geographical attributes, such as urban location, peripherality, accessibility or the level of deprivation, which influence the use of OSM. Multilevel models control for the clustering of individual observations within the same contextual (i.e. geographic) unit. Conceptually, multilevel models mirror economic reality as hardly ever entrepreneurs are isolated from their direct environment. On the contrary, they are nested within complex economic and institutional contexts (Dahl & Sorenson, 2009; Hundt & Sternberg, 2016). The results indicate, among other things, a clear core-periphery pattern with firms locating in London having a much higher likelihood in utilising OSM.

Platforms Urbanism as commodification device: a critical review of platforms effects on the Italian cities geography

Heba Hussein - Sapienza University of Rome | **Alessandra Esposito** - Sapienza University of Rome

E-commerce is one of these cyberspatial connective media, enabling virtual interaction between banking, digital commodities and digital activity practices (Laguerre, 2005). Those practices engaged the individual citizens, city infrastructure, and urban space, locking them into the global interactive nodes. On the forefront of this development process is the city itself: its services, goods, infrastructure, houses and its image are anticipated and communicated via the virtual world.

The platform commerce allows enterprises, sellers, retailers, and customers to be brought together in a 'one-stop market', through which the values creation happens on the website to accelerate the circulation of a commodity, people, and capital. This paper empirically questions the effects of platforms virtual connectivity by defining the specifics of digital places and the imprints of its virtual geography on the urban geographic nodes of Italian regions. Therefore, the research design is a qualitative approach, aiming to observe the induction of the virtual connectivity services of Airbnb platform in comparison to Amazon and its implications on Italian cities.

The findings support the theory that the corporative economic geography is a planetary urbanization (Taylor, 2017). The platforms interwove small sized Italian cities to the virtual commodity process, introducing them to the market as business models and products. Cities are becoming a digitally consumed commodity, with its infrastructure, homes, services and its visual identity offered on the virtual world for consumption. These virtual platforms servers generate both new services such as 'delivery in one hour' and new products - such as the "authentic local house" - whilst introducing the Local into global connectivity, on the cloud, and as physically inter-connected urban networks. This has resulted into a transition to a complete and accelerated commodification urban process, ruled by the digital economy, within people, territories, and experiences that are being packaged for trading.

Rural digital hubs- catalysts for community resilience?

Christina Rundel - University of Groningen | **Koen Salemink** - University of Groningen | **Dirk Strijker** - University of Groningen

The rural digital divide remains a challenge in the countries surrounding the North Sea. When it comes to NGA technology, many rural places are, if so, connected the last. Earlier studies have shown that also the digital skills of rural inhabitants and businesses are frequently lagging behind (e.g. Townsend et al. 2014). One way of fostering the uptake of digital technology is the installation of rural digital hubs. These are physical places where people or businesses based in the rural have the opportunity to engage with (the latest) digital technologies. At the same time these can be important meeting places in the rural, as e.g. Willis (2017) has shown.

How and to what extent these centers can contribute to a more resilient community in general, is however not studied in-depth so far. Therefore, a literature review is conducted to see which elements of a hub contribute to promoting community resilience or perhaps impeding it. The different types of rural hubs are thereby taken into account and, subsequently, conceptualized.

A survey is implemented aiming at rural communities in the North Sea Region. Local municipalities that have a rural digital hub in place are identified and, in case they have set it up themselves, are asked concerning the aims they are pursuing with these places. A key question in this is whether they solely target the digital uptake, or whether they also aim at fostering the community cohesion and resilience in general.

One preliminary finding is that rural digital hubs can contribute to multi-functionality, which is an important condition for community resilience (Wilson, 2010). Rural digital hubs can also be relevant meeting places for various community stakeholders. Furthermore, the hubs show to be very diverse among different rural communities and countries.

Assembling an SMS-based weather forecast for smallholders in western Kenya: iterative adjustments and the translation of meteorological science into short messages

Julian Rochlitz - University of Bonn

Mobile phone-based weather forecasts have spurred hopes that small-scale farmers in developing countries can increase their production by gaining access to information and thus better aligning their activities with weather patterns. While the evidence of the effects of digital services for farmers in general remains inconclusive, very little attention has been paid to the way in which such seemingly simple tools are created and maintained. Drawing on the concept of a socio-technical assemblage, this paper addresses this issue on two levels. First, it examines the fluid making of one SMS-based weather forecast for small-scale farmers in western Kenya by tracing the iterative sociotechnical adjustments it has gone through from its early stages to its present form. Second, by "following the information" from meteorologists to farmers' mobile phones, it reconstructs the heterogeneous network of actors that are involved in translating complex scientific knowledge into information that is disseminated through text messages

(i.e. meteorologists, NGO experts, technologies, etc.). Thus unpacking the socio-technical and organizational complexity and fluidity of attempts at making and running a phone-based weather forecast, the paper provides a critical reading of the notion of “access to information”.

Digital Economies, Digital Connectivity, Digital Margins: Development, Entrepreneurship, and Inequality II

Digital Entrepreneurship in Africa

Nicolas Friederici - University of Oxford | **Mark Graham** - University of Oxford | **Michel Wahome** - University of Oxford

Africa is experiencing a boom in digital entrepreneurship. Underlying are two beliefs that are widespread among policymakers, development organizations, and commentators, namely (1) that the diffusion of the Internet enables Africa to leapfrog stages of economic and technological development, and (2) that African digital entrepreneurs are becoming part of a globally level opportunity landscape. Against these beliefs stands the observation that a digital entrepreneur located in Africa remains embedded in fundamentally more challenging economic structures compared to one operating from the Global North. This paper investigates this tension, exploring opportunities that have opened up for African digital entrepreneurs but also limits that remain. It highlights patterns derived from a large-scale multi-year (2014-2018) comparative empirical study, including more than 200 interviews conducted in Nairobi, Lagos, Kigali, Accra, Kampala, Addis Ababa, Yaoundé, Dakar, Johannesburg, Abidjan, Dakar, and Harare. Five patterns are discussed: (1) challenges to the scaling of African digital enterprises, (2) the role of entrepreneurial identities in shaping understandings of digital entrepreneurship, (3) vicious cycles hampering the development of entrepreneurial ecosystems, (4) systemic exclusion of rural and poor digital entrepreneurs and consumers, and (5) the persistence of postcolonial global power relations. Summarizing across themes, the paper concludes that digital entrepreneurship in Africa is certainly contributing to local economic development, but it cannot be expected to generate continent-wide economic transformation. Digital entrepreneurship is itself affected and hampered by ingrained structural and institutional shortcomings and imbalances, meaning that it cannot compensate for them. Finally, the paper discusses implications for policy and practice, like the need to focus on experiential learning instead of classroom-based education, or specialization economies and regional integration to overcome domestic market barriers. Ultimately, our paper grounds ambitious visions of the potentials of digital entrepreneurship for Africa, and bears insights that can set development efforts on more realistic and effective pathways.

Gendered institutions and digital entrepreneurship

Efe Imiren - University of Strathclyde | **Samuel Mwaura** - University of Strathclyde | **Stoyan Stoyanov** - University of Strathclyde

Women entrepreneurship has received growing attention from researchers, policy makers and practitioners. For many women, advancement and development of digital technologies has enabled participation in entrepreneurship, enabling the choice of entrepreneurship as a career path, a lifestyle and opportunity to balance work and family. In spite of growing attention to female-entrepreneurship, existing research are focused on the barriers and constraints discuss; and concentrated on western developed country studies. As such, although scholars have noted that studies from developing countries are in a position to contribute to our understanding of female-entrepreneurship, studies of women-entrepreneurs in developing economies are scarce, and significantly missing from the literature are accounts of women who navigate gendered institutions to exploit opportunities. In addition, studies at the intersection of digital and female entrepreneurship are scarce. These gaps pose theoretical and practitioner problems in the discourse and limits our understanding of female entrepreneurship. This paper proposes to address these gaps by developing a tripartite theoretical framework that informs our conceptual framework for explaining how women navigate gendered institutions for opportunity-exploitation in digital contexts.

Going digital: A dynamic perspective on smartphone adoption amongst smallholders in agricultural value chains in Africa

Gideon Hartmann - University of Cologne | **Peter Dannenberg** - University of Cologne

Although there is extensive literature on the impacts of mobile ICT use by smallholder farmers in the Global South and particularly Africa, recent empirical findings are predominantly based on the dynamics and consequences of simple phone usage. However today, Internet connectivity is catching up rapidly and manifesting through widespread smartphone adoption amongst smallholders integrated in commercial value chains. We will present the results of two surveys with smallholders in the Mount Kenya region

from the years 2013 and 2017. This comparative approach serves to document and interpret the shift towards more elaborated ICT uses in a region with pioneer character in terms of value chain integration and Internet adoption. Contextualizing our results with concepts on domestic and export-oriented agricultural value chains three major dynamics – or novelties – are identified and discussed: First, smallholders use Internet-based services to supplement and partly emancipate from vertical, intra-chain knowledge linkages. Second, smallholders involve in inter-firm, horizontal knowledge networks of unprecedented reach and size via social networks and messenger groups. Lastly, initial indicators for an emergence of digital domestic markets of formal and informal character are evident. Albeit the immature stage of those three dynamics, first implications and nuances for value chain upgrading can be derived: While our farmer-centric approach shows little changes to the structures and governance of export-oriented chains, Internet connectivity deserves particular attention in the rejuvenated debate on domestic marketization in emerging economies, as it comes with new factors for opportunistic and strategic upgrading in domestic value chains.

Modalities of digital economy ecosystems in African cities: Replication versus ‘artful integration’

Michel Wahome - University of Oxford | **Nicolas Friederici** - University of Oxford | **Mark Graham** - University of Oxford

ICTs can be designed, re-engineered, repaired, accessed and used by a diversity of actors, who hold a variety of knowledges and skill-sets acquired from formal and informal sources. This adaptability provides a broad opportunity for locales to generate situated modalities of use and innovation that reflect techno-economic affordance and socio-cultural milieu. This potential is often set aside in favour of reproducing the economic success of other locales, by replicating their places and practices. A reason for this is that digital economy is popularly regarded as a facet of economic and technological advancement, and some geographies are persistently framed as non-modern. The avowed aspiration to modernity means that in African contexts, and elsewhere, the digital economy is often represented by cosmopolitan/international, but mostly ‘Western’ modalities. This is in contrast to alternative lenses such as adoption and domestication which would highlight the localisation and ‘artful integration’ of knowledges, practices and social orders. The questions are: Can digital economy assemblages concern themselves with being cosmopolitan and global, and also effectively reckon with local specificities? Are there sites where this tension has been reconciled and if so, why has this been achieved? This paper deals with the marginalising effect of the imbrication of ‘digital’, ‘hi-tech’, and ‘global’, and how attempts to replicate an ideal ecosystem amplifies global asymmetries rather than reduces them. It develops its arguments from a multi-sited, multi-year study conducted in ten African cities, and contrasts the trajectories of their digital ecosystems, with special attention given to the Johannesburg case.

Session

Digital Labour Geographies, ‘Sharing’ Economy Work Futures

Al James - Newcastle University | **Hannelore Roos** - Hasselt University

This session engages with the series of dramatic, digital transformations of work, employment and labour relations that have accompanied the extraordinary growth of on-demand labour in the so-called ‘sharing’ economy. Underpinning these transformations, the internet is used to unbundle production and value creation from formal employment, with online labour markets and algorithms used to manage and motivate work carried out beyond the spatial and temporal boundaries of ‘typical’ workplaces (Huws 2015). Other monikers include the collaborative / gig / on-demand / and peer-to-peer economy. Whatever the label used, many commentators are excited about the digitally-mediated possibilities for enabling workers from a wide range of backgrounds to access new forms of ‘flexible’ work and income opportunities in multiple sectors (notably in professional services, household services, and personal transport). This excitement is particularly apparent in the EU, where the ‘sharing economy’ is worth an estimated €28 billion in 2015 (PwC 2016). Crucially however, the quality of those on-demand work opportunities in the ‘sharing economy’ is also prompting growing criticism around attendant working conditions, wage levels, and distributions of income and wealth (see Schor 2017). With reference to a range of online work platforms (Uber, TaskRabbit, Upwork, Amazon M-Turk, Helpling), critical work to date has explored: the ‘dark side’ of ‘sharing’ economy labour relations for workers who have limited legal protection as ‘independent contractors’ (the cybertariat) on for-profit platform apps; how digital platforms and clickwork are potentially crowding out old jobs rather than creating new ones; and how digital on-demand work is reinforcing stubborn labour market inequalities rooted in gender and race, re-inscribed through customer reputational reviews and the digital platform algorithms which route jobs out and set the terms under which digital workers labour. These critiques find expression in a range of provocative terms including ‘sharewashing’, ‘crowdfleeing’, and the ‘share the scraps economy’.

This session takes issue with a striking asymmetry within this growing research agenda. In short, while internet geographers have begun to engage with issues of work and ‘digital labour’ in the sharing economy, labour geographers have for their part been rather slow to engage with digital work platforms from ‘the other direction’. The result is a very partial set of analyses of digitally-mediated work-lives, and scope for developing a digital labour geographies research agenda (cf. Herod 1997: 30; see also Castree 2007, Lier 2007, Rutherford 2010). So motivated, this session is concerned to bring the nascent research agenda around digital

work in the 'sharing economy' into new productive conversation with the labour geographies research agenda. It aims to prompt new conversations around how workers are capable of actively making and remaking the geographies of the 'sharing economy' and 'platform capitalism' and effecting positive changes in their work and employment conditions - rather than simply watching passively from the sidelines and being affected by the dynamics of economic change writ large by platform developer companies and their shareholders. Likewise, to explore how place matters in shaping patterns of 'constrained worker agency' (Coe and Lier 2010), focused on digitally-mediated labour markets as the 'spatial settings and contexts... that specific employment practices, work cultures, and labour relations become established' (Martin 2000: 456; see also Peck 1996 2003).

The session will bring together established and new scholars with diverse research interests around digital transformations of work, to learn from each other and to explore new possibilities for animating more progressive worker outcomes in the sharing economy in the global South and global North. In so doing, the session responds to growing international calls for economic geographers to develop more critical analyses of how and where economies function, for whom, and to what ends (Christophers et al. 2016). As such, the substantive focus of this session is crucial to GCEG2018's core concern with the geographical outcomes of uneven economic growth, economic futures, and scope for effecting positive change that narrows the gap between winners and losers. Specific topics might include, but are by no means limited to:

- Analytical contradictions between celebratory media and policy commentaries of digital labour market 'flexibility' with the negative realities of digital work (focus on e.g. corporate globalisation, increasing precariousness of incomes, wage inequality, the institutionalisation of labour market risk, and shifting welfare policy priorities).
 - Comparisons between everyday work-lives in the sharing economy with previous/simultaneous work-lives in 'mainstream' paid employment
 - On-demand career building and gig economy advancement – geographical possibilities for online labour market progression?
 - Variations in worker experiences between different online work platforms, and between workers who use the sharing economy to generate all versus some of their annual income?
 - Feminist geographies of digital work; and how gendered and racialized identities and varied responsibilities of care differently shape workers' abilities to participate and succeed as digital microentrepreneurs in the sharing economy.
 - Geographical possibilities for organising on-demand platform workers in the face of digital 'subcontracted capitalism' (Wills 2009).
 - Alternative platform work models (cooperative platforms) that seek to 'take back the sharing economy' a la Scholz and Gibson-Graham.
 - Mutual gains / interventionist possibilities to improve the work-lives of on-demand workers in a manner that simultaneously improve service delivery for customers and increase revenues for digital platforms (in short, are these necessarily competing alternatives?)
 - The methodological challenges and useful strategies for doing research on digital labour geographies in practice and using online work platforms as a robust source of survey data.
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The promise of precarity? A strife for recognition and social reproduction of precarious workers in contemporary capitalism

Marjan De Coster - Hasselt University | **Patrizia Zannoni** - Hasselt University

In contemporary capitalism, one can notice an incontrovertible increase of individuals doing project- or freelance work (Gandini, 2016). This tendency is strengthened by the development of the platform- and sharing economy (Eichhorst, et al., 2016) through which individuals can surrender to an entrepreneurial discourse (Peticca-Harris, et al., 2018).

The research on this transformation is largely constituted by two main strands. On the one hand, studies have generated rich insights into the harmful conditions inherent to these new forms of work, constituting workers as precarious. These studies reveal how the experience of insecurity is internalized by the 'precarious' and individualized through the neoliberal ideals of autonomy and flexibility (de Peuter, 2011). On the other hand, a stream of labour politics literature draws on Autonomist Marxism (Hardt & Negri, 2000) to theorize the potential of precarity for the 'socialized worker' to collectively contest and transform capitalism (Dyer-Whiteford, 1994). While the latter strand thus focuses on a dream of collective activism incited by precarity, the former body of literature still strongly focuses on the internalized and individualized experiences of precarious workers.

This paper draws on social reproduction theory and Judith Butler's work on dispossession and recognition of subjectivities to reconnect the empirical focus on individualization of insecurity with the theory on the subject as a political agent. We combine these bodies of literature to unravel how precarity is a political space of contestation, a venue for precarious subjects to become political agents to be recognized and reclaim the social reproduction rights they are deprived of.

Empirically, the paper presents a qualitative study with a platform-based Belgian cooperative which seeks to challenge the "terms that define the political in our times" and to open up ways for these new subjectivities to be recognized and to access social protection from which they have been excluded.

Women in the Gig Economy – Online Work Platforms as a ‘Godsend’?

Al James - Newcastle University

This paper engages with important academic and policy debates around social reproduction, gender inequality and the future of work in the so-called ‘gig economy’. For the first time, it documents the lived experiences of female returners with young families juggling gig work with the messy and fleshy everyday activities of social reproduction, in ways that potentially disrupt (versus reinforce) stubborn gendered labour market inequalities. The paper presents key findings from recent interviews with 30 women in the UK using popular online jobs platforms (PeoplePerHour, UpWork, TaskRabbit). The paper challenges celebratory commentary surrounding the ‘emancipatory’ labour market experiences of female digital workers seeking to reconcile work, home and family through new found digital ‘flexibilities’. Likewise, the contradictions and hardships experienced by these women in relation to income precarity, well-being, work-life conflict, and health and safety, as they seek to negotiate better work-lives via digital work platforms relative to their previous jobs with ‘mainstream’ employers. The paper opens up new ground, not least because the expansive work-life balance research literature remains strangely limited in its engagement with platform workers in the ‘Gig Economy’. Rather, most WLB studies continue to focus on white collar employees in ‘typical’ office environments governed by HR managers in person; rather than ‘dependent contractors’ whose daily work is governed virtually through digital algorithms developed by platform developers. A number of practical suggestions are made for improvements to online work platform models, based on suggestions from women gig workers.

Online voices of diasporic digital artists tackling precariousness

Hannelore Roos - Hasselt University

In the literature there is quite a consensus that workers in the animation and VFX industry are confronted with job precarity due to the industry’s structure. However, less is known about how digital artists experience these working conditions that are described as being precarious, and how they tend to deal with, navigate through or attempt to overcome the drawbacks and challenges of the industry they work in. In an attempt to get access to digital artists at various geographic locations, research was carried out online at one of the largest digital occupational forums of digital artists.

Given the lack of systematic research on digital artists and their mobile career trajectories, a qualitative, interpretative approach seeking exploration is chosen. In an attempt to adequately understand the voices of (diasporic) digital artists tackling precariousness, this research deploys a hermeneutic content analysis, a well-established method in communication and media studies.

Although insecurity, economic risks and precariousness corrode the basis for collective action and lead to fragmentation and individualization, at the same time new forms of community-making and solidarity can be observed. Therefore, it is of primordial importance to investigate these new forms of community-making, such as mediated by online forums and social media. As digital artists have developed a strong online presence where they search for work, showcase their artwork and exchange other work-related information such as links to tutorials introducing new technologies and features, this research seeks to identify and analyze the discursive practices enacted on an occupational community forum regarding experiences of work precariousness, solidarity, collective action, and the construction and maintenance of an occupational identity. By doing so, this research also aims to begin to answer the question how digital artists respond collectively to precarious work circumstances such as outsourcing, relocation, overtime and underpay or what they experience as precarious.

Understanding the evolving roles of physical and virtual spaces in the interaction and cooperation processes

Liang-Chih Chen - National Taiwan University | **Tzu-Yu Chen** - National Taiwan University

Since the development in information and communication technology that greatly improve people’s capacity to undertake distanced interaction, economic geographers have been re-examining the role of physical colocation in the networking processes among economic actors (e.g. individuals or organizations). Recent studies suggested that, because people have been depending greatly on face-to-face contacts with one another so as to exchange critical un-codified messages as well as to build mutual trust, they still require to co-present at certain physical spaces at certain period of time during their cooperation processes. However, as the computer-mediated technology has been increasingly used as the major means for people’s communication and given the fact that many of people’s current effective knowledge exchanges and relation building activities are actually taking place in the virtual space (or cyberspace), one might question if above arguments that emphasize physical colocation as a critical condition for effective cooperation still hold true?

This paper intends to engage in this line of discussion. Specifically, using the unique cases of the colocation of Taiwanese software developers in some local hackathons, it examines the specific networking behaviors of these developers, also referred as “hackers”;

as a result of their co-presence in the physical space (i.e. the hackathon venues) and the virtual space (i.e. the online world) provided by the event organizers. As a qualitative-based study, this paper collected its data mainly through in-depth interviews with Taiwanese developers who participated the hackathons, and from the field observations on these developers' on-line and off-line activities, particularly those occurred in the hackathons. In presenting the research results, this paper then adopts the proximity perspective proposed by Boschma (2005) to explain how and why physical and virtual spaces play respective and inter-changeable roles in influencing people's interaction and cooperation processes.

Session

Industrial Internet, Industry 4.0 and digital manufacturing as transformers of spaces of production and consumption

Martina Fromhold-Eisebith - RWTH Aachen University | **Päivi Oinas** - University of Turku

A new era of advanced information technology (IT) based goods production is on the rise in various industrial economies: notions such as 'Industrial Internet' in the Anglo-American sphere or 'Industry 4.0' in European countries put into terms that innovative IT solutions and Internet of Things (IoT) applications are expected to trigger leapfrogging changes in the ways how manufacturing is organized, value chains are coordinated, and production interacts with consumption. So called Cyber Physical System (CPS) technologies allow products to expediently communicate with their processing machines as well as among each other while running through the value chain. Additive Manufacturing techniques, or 3D printing, enable consumers to individually manufacture various items from digital blueprints locally at short notice. These new qualities of interaction promise to increase industrial efficiency, to reduce malfunctions, waste and losses, and to better adapt end products to customers' needs.

While the engineering and management requirements of these trends have already been debated for a couple of years, major implications for industrial spaces, their labour markets and institutional contexts of production remain to be explored. Linking to the main theme of GCEG 2018, dynamic technology changes will probably significantly transform unequal geographies of production. For instance, will 'Industrial Internet' or 'Industry 4.0' help traditional, depressed industrial localities to revitalize through substantial rationalization and increased customer orientation? Which industry sectors and associated service providers will mostly benefit from upcoming technology shifts? How should national or regional innovation systems respond to the new challenges? And how will local labour market and skill requirements change, potentially deepening international and interregional digital divides, hence industrial development disparities? The suggested session aims at compiling seminal contributions that shed light on these and related issues.

Industrial Internet, Industry 4.0 and digital manufacturing as transformers of spaces of production and consumption I

Digitization of Production and the Transformation of Regional Relatedness. The Example of the Compound Material Cluster in Stade/Germany

Max-Peter Menzel - AAU Klagenfurt | **Sonja Buxbaum-Conradi** - HSU Hamburg

We examine how the digitization of production alters the "relatedness" of industries and in doing so also their spatial knowledge externalities. In doing so, we investigate how the digital connection of product, component, place and production alters the technical division of the production chain. Using the example of the CFK cluster in Stade, we show how the digital connection of product, component and place increasingly disintegrates existing production chains. This disintegration coincides with a functional disintegration and the possibilities to combine the work piece with other components multiply. New combinations of components and manufacturing processes also enable new products and services. As a result, the cluster diversified from its origin in the aerospace industry to the wind turbine industry as well as shipbuilding and automotive engineering. The example shows how digitalization of production alters both the product, the product space and regional relatedness.

Spatial Implications of Industry 4.0 – the Case of Three Traditional German Textile Regions

Philip Marschall - RWTH Aachen University | **Jan Jordan** - RWTH Aachen | **Robert Peters** - RWTH Aachen University

Industry 4.0 - the new paradigm of industrial production in which digital processes, real-time data and cyber-physical production systems are being deployed to increase overall production efficiency and quality while adjusting to consumer demands in ever greater flexibility - is changing the way we think about the manufacturing of goods and industry as a whole. Profound changes are

predicted across all industry branches and along the entire value chain. Not least in the textile industry, where these changes are already becoming increasingly apparent in the production of technologically advanced technical textiles. The German technical textile industry presents an ideal case for exploring economic interaction in light of new digital production technology, because it is highly innovative and specialized with complex production processes, it is truly global with a well above average export ratio and it is characterized by a complex commodity chain with multiple SME's involved in the production of the end product. This conference paper introduces an interdisciplinary project collaboration between economic geographers, textile engineers and technology historians that essentially explores requirements for and impacts of cross-chain adaption of Industry 4.0 processes in three German textile regions. What changes can be expected within the value chain? How can innovations be implemented collaboratively? What role do regional organizations and national institutions play? And how can these traditional clusters retain their competitive edge? The paper will present empirical findings from a set of 50 semi-standardized company interviews conducted in the three regions in the first half of 2018 and will use the method of multi criteria impact analysis to structure the findings in a holistic and comprehensive model.

Urban Manufacturing: Planning Issues and Case Studies

Kerstin Meyer - Institut Arbeit und Technik | **Stefan Gärtner** - Institute for Work and Technology

Recent trends like digitalization (e.g., e-commerce, 3D-printing), demographic change (e.g., aging population, internationalization), individualization, climate change, social inequality, and lately right-wing populism (e.g., President Trump's protectionist trade position) are the reason to start a new discussion about Urban Manufacturing (Sassen 2006, Läßle 2013, Lentz 2015, Brandt et al. 2017, Stiehm 2017). Läßle (2013) supports a new urban economy that stabilizes social structures in cities and strengthens local circular and resilient economies against the turbulences on the global market. We define Urban Manufacturing as producing and processing tangible goods in densely populated areas, commonly close to the residence of the entrepreneurs, employees and/or customers. Entrepreneurs operate to achieve commercial viability, but not obligatorily for profit. Prevalently, local resources and embedded value chains are used. The closeness to housing demands low-emission and resource-efficient methods of manufacturing and transportation to prevent conflicting uses (Brandt et al. 2017). Due to the period of low interest rates, investment funds have been speculating in residential and office buildings, especially in growing cities. Space-needing, noisy urban manufacturers and urban industries were relocated to the cheaper urban fringe or periphery (Brandt et al. 2017). Already in 2002, the San Francisco Planning Department described the importance of the manufacturing sector (production, distribution, and repair) in cities in its report. In addition, cities like Vienna, Brussels, or London have already been implementing different tools to achieve a mixed use, including urban manufacturers as well as some factory owners who try new concepts to stay in the city. Based on case studies we give an overview of how to support urban manufacturers, who are important for the local economy, through planning law, urban planning and economic promotion in cities. Moreover, we analyze how to achieve a better mix of land use and compatibility of residing, working and recreating.

Potential of urban manufacturing for industrial revitalisation – Evidence from selected city-regions in the German state of North Rhine-Westphalia

Caroline Mühl - RWTH Aachen University | **Hans-Christian Busch** - University of Cologne

(Re)integration of 'intelligent production systems' into urban spaces is a central issue in current debates in the fields of political economy and economic geography regarding 'industry 4.0' and its implications for working environments, corporate organisations and society. Propagating the production of goods in urban spaces, urban manufacturing potentially helps to constructively grasp global challenges in fields of energy and resource consumption, mobility or demographic change. Industrial applications of digital technologies and industry 4.0 potentially enable a resource-saving, low-emission and space-saving production, which is also located in direct proximity to the customer. However, the question as to how compatible digital urban manufacturing really is regarding its urban vicinities remains unanswered. Which characteristics should modern production encompass in order to better integrate into urban spaces? Under which conditions do cities profit from the current trend of urban manufacturing? And how are processes of manufacturing, working environments, corporate organisations and networks influenced by this trend? Answering these questions, this paper aims to investigate the context of urban manufacturing in selected city-regions in the German state of North Rhine-Westphalia. We use regional-statistical methods as well as qualitative empirical methods in order to examine how technological and sector-specific characteristics of urban manufacturing differ between regions. Thereby we also aim to show the location-specific conditions of digitally supported urban manufacturing, as well as possibilities of embedding production sites into urban spaces. Some of the investigated city-regions show an increased potential of industrial revitalisation and start-up activities in the context of digitisation due to historically developed locational advantages. Outstanding cases of digital urban production could already be identified as pioneering companies within the investigated city-regions. As a result of local competitive advantages in the fields of knowledge economy and technological orientation as well as through inter-company cooperative approaches, these companies can be considered as 'digital champions'.

Industrial Internet, Industry 4.0 and digital manufacturing as transformers of spaces of production and consumption II

Technological Change, Spatial Development and Gaps of Governance: A Literature Review

Martina Fuchs – University of Cologne

Since early, technological change realized in factories was discussed as driver of competitiveness of companies and regions. This paper presents a literature review, embedding the recent discourse into broader contexts of interdisciplinary research. The paper argues that since long the focus of academics and practitioners has been on interfaces between tasks within the production chain, enabling the globalisation of manufacturing. Since the early 20th century, the expansion of factories has started, integrating many places around the globe. Particularly since the 1980s, digitalisation, accompanied by modularisation, allowed a new push of industrial diffusion. While particularly early internationalisation of factories often was criticised as neo-colonialism, recently some plants upgraded, dependent on their role within international production networks, quality requirements and regulation of the local state. Global governance mechanisms had some influence on upgrading, still limited. Data protection has been an issue in the digitalisation discourse in some countries already since the 1980s. Today, data protection related to digitalisation is a key concern in the media in many industrialised countries, particularly related to problems of privacy. Still, for manufacturing industries, data protection is relevant, too. E.g. in Germany, problems of data protection already hinder the managers' willingness to introduce smart technologies resp. industry 4.0, as technological interfaces are not safe. At the same time, FDI in Germany, which are shaped by less data sensitive business environments in their home countries, bring in technologies creating the transparent organisation. Thus, digital control, realised by newly emerging powers, can turn into an international competitive advantage. Then, new modes of digital control, as roughly anticipated by George Orwell (1949) in his book "1984", could become an economic necessity. Until now, there are lacks of governance related to this topic. The presentation illustrates paths of digitalisation and discusses upcoming digital control regimes affecting spatial development.

Changing GPNs: Manufacturing reshoring due to Industry 4.0?

Henrik Brynthe Lund - Norwegian University of Science and Technology | **Markus Stehen** - Department of Industrial Management, SINTEF Technology and Society

The offshoring of manufacturing activities from developed to emerging economies has been a dominant trend since the 1970s. This offshoring took place due to various reasons related to gaining comparative advantages, such as lower labour costs or access to consumer markets. However, in recent years a trend has emerged whereby manufacturers are reshoring previously offshored production, or parts of production, to their home country. Similar to offshoring, reshoring occurs for several reasons. This paper however, emanates from the observation that many firms are reshoring production activities due to, or in connection with, the implementation of novel and advanced manufacturing technologies. These technologies, often bundled under the rubric of 'Industry 4.0', enable smarter and more autonomous production lines. Consequently, the number of workers in manufacturing is reduced and the knowledge demands for those who remain increases. The burgeoning literature on reshoring is dominated by management and logistics researchers emphasising changing cost structures and agglomeration effects as key reshoring rationales. However, reshoring of manufacturing activities is a location decision and has explicit geographical outcomes – and, we suggest – geographical explanations. We therefore find it timely for economic geographers to partake in research on manufacturing reshoring. This paper focuses on how the introduction of new digital tools, automation and robotization currently occurring in manufacturing sectors may influence reshoring decisions, and how decisions must also be seen in light of the production networks or value chains they are embedded within, as well as firms' key knowledge networks. To address this topic, we study ten recently reshored Norwegian manufacturing companies operating within different GPNs/GVCs. Drawing on concepts from the GPN framework the paper aims to provide a novel approach to understanding the reshoring phenomenon, and explore how manufacturers in a high-cost country have been able to (re)construct comparative advantage in global manufacturing industries.

Transformation of Global Production Networks: the Impact of 3D Printing

Jennifer Johns - University of Bristol | **Adriana Nilsson** - University of Liverpool Management School

There is currently much popular hype around the 'new industrial revolution' and the revival of manufacturing in the context of Industrie 4.0. The suggested shift towards digitised economies is starting to receive greater attention from across the social sciences. 3D printing is one type of technological innovation that is often cited as part of Industrie 4.0. Its increasing adoption by firms as a manufacturing technique has the potential to transform global value chains. However, the present and future impact of 3D printing on manufacturing and global production networks is currently not understood (Laplume et al. 2016). This paper offers a critical perspective on 3D printing to counter some of the hype around its impacts and contribution to 'Industrie 4.0'. It seeks to 'bust' some of the myths around this technology and how it may impact on the manufacturing sector in general.

Using Gereffi's (2017) categorization of use of technology into 'complementary', 'displacement' and 'adaptation', this paper will examine how 3D printing technologies are impacting on existing manufacturing. The paper is based on in-depth qualitative interviews with 3D printing firms in the UK and Germany, conducted as part of an interdisciplinary research project. Interview data and project case studies will be used to outline the development of the 3D printing industry itself, before turning to two significant issues around 3D printing. First, the degree to which 3D printing will replace traditional manufacturing. Second, if and how we may witness a shift in the geographical location of manufacturing as a result of increased adoption of 3D printing. Our paper concludes with discussion of the challenges and barriers facing further growth in the 3D printing industry and how the technology is adopted by the wider manufacturing sector.

Session

The Rise of the Platform Economy

Koen Frenken - Utrecht University | **Gernot Grabher** - HCU Hamburg

Digital platforms have entered in many sectors in the economy including retail, mobility, housing, energy, food, healthcare, journalism, and education. Platforms range from asset sharing (e.g., Airbnb, Drivy), gig economy (e.g. Uber, Upwork, Helpling), second hand markets (e.g. eBay, Fairmondo), business-to-consumer rental models (Car2Go, Mobike), to various crowdfunding, crowdsourcing and open source initiatives. Across all sectors, platforms reorganize labor, disrupt established industries, and often bypass regulations.

The rise of the platform economy poses many new questions:

- which business models can be distinguished in the platform economy?
- why do platforms emerge in certain sectors rather than others?
- what explain the geography of platforms, in terms of their headquarter locations and operational locations?
- which institutional varieties of platforms can be distinguished and to what extent do these varieties map onto "Varieties of Capitalism"?
- which have been the regulatory responses of local and national governments, and why do these response differ?
- what notion of value and valuations operate on platforms?
- which non-for-profit and cooperative models have emerged, and what explains their success or failure?
- what are the impacts of platforms of work, income, jobs, productivity, sustainability and social relations?
- how does labor and local communities respond (e.g., through forms of unionization)?
- are communitarian or environmental values increasingly crowded out by mere economic considerations?
- which theories and methodologies are helpful in studying the platform economy?

We also welcome other topics related to the rise of the platform economy.

The Rise of the Platform Economy I

The Rise of the Platform Economy

Koen Frenken - Utrecht University

In this talk, I will describe online platforms (e.g., Helpling, Airbnb, Uber) as a new organizational form from the theoretical perspective of "institutional logics". I review the arguments that would describe online platforms as a hybrid organization combining institutional logics. I then will argue that most platforms follow a single logic (that of the corporation), but are nevertheless illegitimate for not adhering to the dominant template of corporations. Given the current state of contestation and the lack of platform institutionalization, I expect online platforms, as a new organizational form, to evolve their business models as to fit with either a market logic, a community logic or a more traditional corporation logic. I will also discuss the more speculative idea that platforms may become a new logic on their own.

Sharing the liberal utopia. The case of Uber in France and the US

Katarzyna Gruszka - WU Vienna University of Economics and Business | **Andreas Novy** - WU Vienna University of Economics and Business

September 2015 brought a set of coordinated protests in multiple locations around the globe – these are the starting point of this paper: protests of taxi drivers against the operations of Uber, a San Francisco based online transportation network company (TNC). Amid its diversified offer (including e.g. business-to-peer on-demand deliveries, food deliveries, corporate transportation services),

the company provides urban ride-sharing services operating on an easy app solution – UberPOP. The company has been successfully entering a market after a market, oftentimes meeting with different forms of resistance: be it from the side of taxi unions, local, regional to national governance, consumers, or UberPOP drivers themselves.

Numerous times, Uber has been and keeps being referred to as a flagship example of the sharing or collaborative economy, which can be broadly defined as a range of digital platforms and offline activities centered on the highly contested concept of sharing (Schor, 2014). Contrary to the utopian readings of sharing practices, cases such as Uber can also be seen as political, cultural, and economic actors fuelling platform capitalism (Smicek, 2017), reflected in the discourses and practices accompanying the rise of Big Sharing (Cohen, 2016). We narrate the history of Uber in the US and France, describing the strategies of public and private actors and exploring the strategic selectivity resulting from the respective institutional frameworks and power fields. Based on the detailed description of practices, institutions and structures, we employ two interpretative frames, a Hayekian and a Polanyian. Whereas the former shares many points with the supporters of Uber & the like, the later makes sense of the problematic aspects of this techno-social innovation. Our argumentation, however, will go beyond common-sense understanding, esp. with respect to Hayek's view on laissez-faire and Polanyi's prediction of the destructiveness of the liberal utopia of self-regulation markets.

Framing the Platform Economy: A Media Analysis of Ridesharing Platforms in Indonesia and the Philippines

Suci Lestari Yuana - Utrecht University | **Wouter Boon** - Utrecht University | **Rob Raven** - Utrecht University | **Frans Sengers** - Utrecht University

Frames are important in shaping the institutionalization of the platform economy. This paper enquires about the emergence of ridesharing platforms in developing world economies by analyzing the social construction and potential implications of different frames in online media in Indonesia and the Philippines. The research questions are: (1) what frames that can be identified based on news articles on ridesharing in Indonesia and the Philippines? And (2) How do these frames reflect the governance of ridesharing in Indonesia and Philippine?

To address these questions, the paper presents an analysis of a sample of online ridesharing platform news articles, identifies framings that both support and reject ridesharing, and uncover reflections of regulatory decisions into these frames. We identify five different frames, which are embedded in their spatial and economic contexts and uniquely characterized by gridlock problems in densely populated cities, the utilization of informal transport as a gap filler, and an emphasis on collectiveness. These frames are: commuter solution, illegal public transport service, cooperative business, non-conformity, and informal livelihoods.

Through these frames, the governance of ridesharing in developing world economies can be discussed. There are several logic that shape the institutionalization of ridesharing. In the process of formulating regulations, the logic of consequences of formulating regulations is somewhat engineered decision-making process. The regulation output may be shaped by variety of discussions on the consequences of the ridesharing phenomenon, whereas after the regulation has come into force it can be seen that the authorities utilize the logic of disciplining, which somewhat narrows the possibilities of accommodating more stakeholders. We also identified that the fluctuating and gradual regulatory process in translating these logic of consequences into legislation, may facilitate a more inclusive and comprehensive view of ridesharing that somehow encourages the reaffirmation of a more cooperative mechanism in governing the sharing economy.

Reining in the global freelance labor force: how global digital labor platforms change from facilitators into arbitrators

Niels Beerepoot - University of Amsterdam

A key feature of digital platforms is the presence of winner-takes-all effects. This implies that small differences in performance translate into much larger differences in the corresponding distributions of economic rewards. The winner-takes-all effect works at two levels: the platform itself which emerges as the dominant design (e.g. the dominance of Facebook, Uber, Amazon, Upwork) and for those operating or working via the platform. Based on longitudinal monitoring of the platform this paper examines what made Upwork the dominant operator in the field of digital labour platforms and how (inadvertently) it ended up in a situation with the majority of the labour coming from the Global South. Second, this paper shows how the platform started as a labour auction where outcomes, including remunerations, were almost exclusively defined by the rule of supply and demand. However, driven by the desire to further reduce transaction frictions, the platform in recent years started to interfere more manifestly in the market they originally only enabled, both by providing new services and by introducing a certain degree of regulation. Their role, in result, is changing: no longer are they mere facilitators in the global market for freelance labor; rather, they are becoming increasingly versatile arbitrators adopting an ever more palpable intermediary role in managing the 'human cloud' of freelance labor, and, in the process, capturing a larger share of the value they help to create. The changing strategy of platforms has major implications for how the benefits of digital work are spread and for the opportunities it provides for freelancers around the world. Yet, the case of

Upwork also reveals how platforms could be regarded as a transitional phenomenon that over time increasingly will get bypassed in the search for low-cost labour.

The Rise of the Platform Economy II

Technologies, Theories, and the State. A Polanyian Framing of the Platform Economy

Jonas König - HafenCity University | **Gernot Grabher** - HCU Hamburg

The rapid diffusion and the apparent omnipresence of online technologies have triggered two sweeping debates on 'disruptions': the discourse on the 'sharing economy', on the one hand, insinuates less market and more embeddedness; the 'platform economy', on the other hand, heralds the next 'Great Transformation' towards marketization and ultimate dis-embeddedness. Taking this objection as a starting point, the paper employs a Polanyian perspective to re-assess the emergence of (sharing) platforms and to push beyond the ostensibly antagonistic dynamics of more or less market. It argues that the emergence of the platform economy triggers modes of socio-economic coordination that neither are simple variations of market-based coordination nor rejuvenate reciprocity and redistribution as alternative modes. Moreover, the emergence of the platform economy, albeit some similarities, clearly differs from the dynamics that have, according to Polanyi, brought market-based coordination to the forth. While marketization revolved the technological affordances of 'the machine' and the commodification of labor, land and capital, platform technologies transform networks into a 'fictitious commodity'; and while markets were scientifically legitimized and constituted by economics, platforms deploy social network theory to 'preform' reality. Just like markets, however, platforms are nothing natural, but politically contested. They are consciously 'embedded' into the regulative framework of society.

Using sharing platforms to deliver local public services and social value under austerity

Phil Northall - University of Nottingham

Emanating from an earlier systematic review of the sharing economy, this paper explores the potential to use sharing platforms – those platforms that enable access to under-utilised resources – to deliver public services and social value in cities. It is split into two sections, 1) identifying existing activity and their enablers, and 2) exploring opportunities and their barriers, and is based on semi-structured interviews with 24 local authority experts, primarily Senior Directors, across 18 English urban local authorities. Existing activities centred around the creation of shared data repositories and the rationalisation of local authority buildings. Other common activity was focussed on 'low risk' services such as libraries, leisure facilities, and parks, and where community capacity was not such an issue. Of greater note was the development of platforms such as Comoodle, Share Peterborough, and Sussex Nightstop. These platforms targeted community resources, local business supply chains, and rough sleeper priorities respectively. Opportunities to extend the use of sharing platforms, focussed on reducing 'failure demand' in order to free up resources for front line service delivery, but also covered areas as diverse as energy generation, community transport, and festival delivery. Opportunities to enhance local business networks and make better use of local supply chains were also prominent. More radical suggestions linked these platforms to a more active citizenship, a renegotiation of the social contract, and an incorporation with the Internet of Things. Financial pressures from austerity were almost unanimously cited, either as drivers for action, or as barriers to pursuing these new ways of working. Sharing platforms were viewed as a way to maintain service provision and quality, but the findings of this paper suggest that this will only be possible if there is a considerable shift in the risk appetite of local authorities, and an increase in preventative approaches and investment.

Airbnb and Sustainable Tourism in European Cities: a Comparative Analysis with the Hotel Industry

Kristóf Gyódi - University of Warsaw

The main aim of the article is to examine the value-creating potential of Airbnb and examine its relationship with the hotel industry across major EU cities. The analysis focuses on the structure of Airbnb offers, the spatial characteristics of Airbnb networks, and the price distribution of offers in relation to traditional hotel industry. The analysis is based on a unique dataset, constructed by web-scraping of Airbnb listing data and hotel offers available at Booking.com in Paris, Barcelona, Berlin and Warsaw. The empirical analysis reveals that the value creating potential of Airbnb networks is restricted and that a significant share of listings belongs to professional businesses. While Airbnb facilitates the spread of tourism to areas not covered by the traditional hotel industry, it is also highly concentrated in touristic neighbourhoods, contributing to the increase of pressure from tourists in those

areas. The analysis of price distribution revealed that while Airbnb is a close substitute of traditional accommodation providers in all price segments, Airbnb offers complement the traditional hotel industry in local areas. The empirical analysis addresses significant research gaps, implements a unified methodology to compare the characteristics of Airbnb networks in major EU cities, and constitutes the first effort to compare all available offers on a popular hotel aggregator platform to Airbnb listings.

Regulating We-media Communities without Law? A Study on the Self-Regulation Mechanisms among Wechat Official Account Holders

Xingfang Li - The University of Hong Kong

Nowadays, We-media gradually replaces traditional media and becomes popular in China. However, it is inevitable that new disputes arise within newly-formed online social communities. The problem is that legal reforms always fall behind the rapid growth of new types of social practices, which makes the dispute resolutions fall into legal loops. This paper takes Wechat online platform as an example to examine the self-regulation mechanisms generated by the platform itself and its Official Account Holders. There are several questions to be examined. How are these internal regulations within Wechat online communities generated? Why do most of the account holders prefer to use self-regulations to solve disputes rather than referring to judiciary? Whether such internal regulations, either generated by the account holders themselves or by Wechat platform, are effective enough to solve the disputes of infringement? By analyzing Wechat platform's and its users' behaviors, this paper tries to argue that the self-regulation mechanisms generated by we-media communities should be incorporated into the official resolution mechanisms, provided that such self-regulations are within overall legal regimes and meet with the social and moral standards. The effectiveness of self-regulation mechanisms within Wechat community will be examined through analyzing different stakeholders' active practice. It is also stressed in the paper that to recognize the true community builders' (in this case, the Wechat Official Account holders' and the platform's) own ability to solve the disputes is of equal importance as to improve the the overall legal resolution systems. A more flexible, swift and down-to-earth dispute resolution mechanism is needed due to the unique features of of China's internet communities. It is hoped that this research could shed some lights on the development of we-media in China, the shaping process of online communities originated from "user-generated contents", and the standardization of informal social regulations in China's internet.

ENTREPRENEURSHIP AND ENTREPRENEURIAL ECOSYSTEMS

Session

Entrepreneurial Ecosystems, Governance and Institutions

Erik Stam - Utrecht University | **Rolf Sternberg** - Leibniz Universität Hannover | **Heike Mayer** - University of Bern

The emergence of the Entrepreneurial Ecosystem approach has co-evolved with a revival of the interest in the context for entrepreneurship and the role of entrepreneurship in local and regional economic development (Mack & Mayer 2016; Stam & Spigel 2018). However, many issues are still unresolved, regarding the nature, measurement and explanation of the emergence, evolution and effects of entrepreneurial ecosystems (Stam 2015; Acs et al 2017). In this session we focus on the governance of entrepreneurial ecosystems and the role of institutions, both formal and informal, in the functioning of entrepreneurial ecosystems. This focus on governance and institutions also provides opportunities to increase the policy relevance of economic geography. There is a long-standing tradition in the study of the geography of entrepreneurship (Sternberg 2009). This has gained prominence with the emergence of the Entrepreneurial Ecosystem approach. We marry this with the increased relevance and study of governance and institutions at the regional and local level of analysis, to better understand the economic development of places (Farole et al 2010; Rodriguez-Pose 2013; Charron et al 2014). The session will both reinforce the study of the geography of entrepreneurship, and explicitly combine economic geography with debates in neighbouring disciplines (public administration, economics, business studies, law) on the role of governance and institutions in economic development.

Entrepreneurial Ecosystems, Governance and Institutions I

Regional Governance of entrepreneurial ecosystems

Christiaan Broekman - Tilburg University | **Martijn Groenleer** - Tilburg University | **Erik Stam** - Universiteit Utrecht

Does regional governance matter for economic growth? More specifically, would more tailor-made regional governance arrangements and policies positively affect economic development? Regional governance is here not understood as governance by sub-national bureaucratic layers, but as collaborative governance arrangements at a sub-national level, which include metropolitan regions, but also triple helix arrangements involving private and public actors and knowledge institutions. These arrangements raise questions around democratic legitimacy and effectiveness of governance through networks.

This paper aims to shed light on the effectiveness of differentiated regional governance of ecosystems for economic development. This question will be studied from two perspectives. Firstly, we will analyze quantitatively whether an increase in regional autonomy leads to economic performance through differentiated governance. This will be done through a quasi-experimental study using the sale of utility companies as an exogenous shock leading to increased regional autonomy. We will analyze first whether the shock leads to differentiation in regional governance, and second, whether differentiation leads to economic growth, through the emergence of scale-ups.

The second perspective will feature a more in-depth study of how regional governance is customized to fit regional challenges and conditions. Four regions, which are dealing with different kinds of problems, will be studied. Zeeland, as a peripheral region, has a lower density of organizations and no big cities. Twente, as an industrial region, may have had some problems of 'lock-in' by having had a heavy emphasis on the textile industry, whereas Rotterdam-The Hague has problems of fragmentation, typical for big metropolitan areas, and several industries have faced decline (such as the port). The fourth region in this case study is Utrecht, the most competitive region of continental Europe, without substantial problems. On this basis, we will generate hypotheses for why different forms of governance may be more appropriate in some cases than others.

Cutting institutions down to size: the case for conceptual care in Entrepreneurial Ecosystems research

Örjan Sjöberg - Stockholm School of Economics

Empty signifiers have their uses; beyond creating voids to be filled they may help the conversation along. The word institutions has such a quality, and this is seen perhaps most clearly in the emerging field of Entrepreneurial Ecosystems research and its various predecessors. Yet, useful as a rallying cry as the notion of institutions might be, it comes at a cost. Not only do we as a result of a lack of precision run the risk of talking past each other, but by liberally sprinkling our texts with terms that attract attention

and help us reach out to peers we face the risk of making it inconsistent, analytically intractable or meaningless. This paper argues that as we shy away from properly defining the term institution and, equally significant, as long as we fail to see how it is conceptualised we might well make it much too expansive for its own good. Given the prominence of institutions and their role in setting the stage and shaping governance, this lack of conceptual clarity is of particular concern in discussions on entrepreneurship and entrepreneurial context. Inspired by recent work on institutional thickness, the paper illustrates this with reference to the ideas of institutional entrepreneurs and institutional voids. While not a plea in favour of the use across all research initiatives of a particular form of institutional theory, or for turning our backs on such theories entirely, it is a call for precision as part of our quest for rigour.

Where are the entrepreneurs? A micro-geography of the entrepreneurial ecosystem in a lagging region.

John Lombard - Old Dominion University

Like many economic development policy mantras of the recent past, the entrepreneurial ecosystem affords local and regional economic development agencies another vehicle to pursue economic growth and development. The literature on entrepreneurial ecosystems is vast and includes a number of recent critical reviews that while sympathetic in many regards; present a number of shortcomings that need attention. This paper investigates the micro-geography of the entrepreneurial ecosystem in the Virginia Beach-Norfolk-Newport News metropolitan area that is considered a region lagging in entrepreneurial activity. We explore the evolution of the emergent structure and performance at the micro-geographic scale by identifying the spatial linkages that constitute the entrepreneurial ecosystem within the political, financial, and institutional sub-systems in a region that lacks substantial entrepreneurial activity. The paper concludes with suggestions for continued research and calls for a comparison of the entrepreneurial ecosystem in competitive regions for policymakers to better understand the nature and scope of this economic development mantra.

Entrepreneurial Ecosystems: Some Evidence from Turkish Regions

Nuri Yavan - Ankara University

In recent years, the concept of “entrepreneurial ecosystems” has emerged as one of the most popular framework in the academic literature especially among policy makers. It seems that the concept has also attracted much attention and thus becoming increasing significance in the field of economic geography. However, despite wide interest and very rapid adoption of the concept, understanding of how the entrepreneurial ecosystem works and what is new about it and how it is different from other existing territorial approaches that seek to explain the geography of entrepreneurial activity such as industrial districts, RIS, learning regions and clusters remains very limited because the concept is undertheorized and still little empirical research and evidence available. Therefore, this paper review critically the popularity of the concept, and discuss briefly the attributes constituting entrepreneurial ecosystems. The paper then provides empirical evidence of entrepreneurial ecosystems from Turkey based on two years fieldwork. Using analytical framework developed by Mack-Mayer (2016), Brown-Mason (2017) and Spigel (2017), we tried to go beyond the lists of factors/components/elements approach of entrepreneurial ecosystem. In order to understand the transformation and evolution of an entrepreneurial ecosystem, we compared and contrast four regions/cities in Turkey in terms of three specific topics within entrepreneurial ecosystem approach including the ecosystem’s core actors and their interrelationship, stages of ecosystem evolution and ecosystem typology. Finally, although entrepreneurial ecosystem approach has its own distinctive features and some obvious differences from territorial approaches, this concept fails to consider certain key features of the territorial approaches in which we use in economic geography since long time and fails to address properly the spatial specificities of entrepreneurship. Accordingly, our results suggest that these two approaches are complement each other and therefore should use together in analyzing geography of entrepreneurship and especially in the study of local and regional development.

Entrepreneurial Ecosystems, Governance and Institutions II

Help-To-Buy, Home Equity and Entrepreneurship

Enrico Vanino - London School of Economics | **Nikodem Szumilo** - London School of Economics

This paper studies the impact of an increase in the limit of a direct equity loan provided by the UK government to finance mortgage deposits on the aggregate mortgage lending and on the rate of entrepreneurship activity at the local level. Previous studies have investigated the link between home equity borrowing, collateral constraints and entrepreneurship, providing though mixed results. Our analysis uses the spatial discontinuity methodology and takes advantage of a natural experiment which occurred

at the beginning of 2016 when the UK government has increased the limit of equity loans in London with the reform of the Help-to-Buy (HTB) scheme. By using data on mortgage lending by banks and on the population of businesses in the UK, we are able to compare postcode sectors on the opposite sides of the Greater London Authority boundary, measuring the impact of the new policy on very similar local markets. The results show that higher equity loans increase aggregate mortgage lending by banks. In addition, we show that an increase in the housing collateral value alleviates credit constraints, fostering the creation of new entrepreneurial activities in the affected postcode sectors. Policies promoting homeownership by encouraging increasing financial leverage have a positive indirect effect on entrepreneurial activity, not driven by necessity self-employment but instead creating new jobs in the local area. Additional robustness tests look at the post-entry performance of firms in the short-run, analysing the potential crowding out effect on pre-existing businesses and differentiating between credit-constrained and housing-market related industries.

Self-directed, intelligent, reflexive Entrepreneurial Ecosystems: how can we recognise them?

Arnoud Lagendijk - Radboud University

Successful Entrepreneurial Ecosystems

- (a) are self-directed, intelligent governance systems;
- (b) use distributed practical intelligence and innovation competencies to boost and serve growth markets, and
- (c) manifest reflexive capacities, distributed over human champions and non-human devices (eg monitoring), to advance practices of collective learning and to steer effectively between the paths of collaboration and competition.

In view of these theses, this paper develops a threefold argument:

- (1) Using fieldwork material from across the Netherlands, it first explores the general validity of these characteristics of Entrepreneurial Ecosystems. The evidence shows strong differences in how intelligence and capacities are distributed; also governance proves difficult to capture in 'system' terms. Yet, all three theses meet strong support.
- (2) The paper then continues with a remarkable observation, namely how little recognition these characteristics receive in mainstream policy making and academic research, despite mounting 'grassroots' evidence. Policy makers remain fixated on 'best practices', despite continual, evidence-based, refrain that emulation hardly works. Even the recent turn to 'smart' policies seem to make little change. While academic work varies widely, the gold standard continues to be retrieving generic patterns and determinants of entrepreneurship and innovation. Both policy-makers and academics appear to guide their work by a view of Entrepreneurial Ecosystems as other-directed (supported by general rankings and quantitative profiling), fuelled by external intelligence (privileging policy and academic analysis) and with a rather instrumental take on collective learning (seen as a practice rather than working philosophy).
- (3) The paper finishes with debating the need for policy-makers and academics to leave their comfort zone of disengaged, transcendental analysis. Yet it also signals the formidable hurdles such an endeavor is likely to meet. While there are growing, effective networks of intermediaries supporting learning across Entrepreneurial Ecosystems, this is likely to occur primarily outside the realms of mainstream policy-making and academic research.

From Finland to Japan: Exporting an Institutional Field Vital to a Startup Entrepreneurship Ecosystem

Jarmo Nikander - Turku School of Economics

This case study observes the Finnish style student startup scene formation in a challenging institutional and spatial context of Japan. This is done via ethnographic participatory observation and key informant interviews in Japan at the non-profit case organization of Slush Asia, a sister organization of Slush in Helsinki, which is the crown jewel of the Finnish scene promoting entrepreneurship. Slush is a student volunteer based non-profit organisation responsible for the flashy international startup conference held annually in Helsinki. Tokyo and now also Shanghai and Singapore host conferences under the brand and organisation model of the original. In Japan the organization aims to make entrepreneurship a legitimate and desirable career choice thus steering Japan's strict traditional institutions toward a more entrepreneurship-friendly society. The findings include the transferability of the basic ethos of the Finnish scene, its operative logic of volunteer based cooperation and its ability to surpass, circumvent and even change strong institutions.

Keywords: startup, entrepreneurship, institutions

Fostering the Growth of Student Start-ups from University Accelerators: An Entrepreneurial Ecosystem Perspective

Qiantao Zhang - University of Toronto | **Shiri Breznitz** - University of Toronto

Despite their significance, firms created by students have been the subjects of little research. Adopting the entrepreneurial ecosystem framework, this paper examines the growth of student start-ups, especially those that participate in university accelerators. Focused on the University of Toronto, this paper contributes to an understanding of how university accelerators can better support the entrepreneurial efforts of students. It is clear that firms that participate in accelerators with a screening process have a stronger performance in both employment and product growth. Moreover, a habitual entrepreneur director or a more intensive accelerator program is found to have more positive effects on product growth at firms than on employment growth.

Session

Entrepreneurs, places and processes in entrepreneurial ecosystems

Suntje Schmidt - Humboldt-Universität zu Berlin / IRS | **Elizabeth A. Mack** - Michigan State University

The topic of entrepreneurship has a long tradition in economic geography and regional studies. More recently the frame of entrepreneurial ecosystems connects several strands of prior work and depicts entrepreneurship as a blend of inter-connected entities and people interacting within regional environments. Although a comparatively new framework, critiques of ecosystems highlight a lack of emphasis on entrepreneurs and a lack of attention dedicated to space-time aspects of community building, partnerships and collaborative arrangements (e.g. de Bruin et al., 2017). So too have studies neglected different types of entrepreneurial activity above and beyond growth-oriented ventures such as entrepreneurship in creative and cultural industries, and gendered aspects of ecosystems.

In an effort to expand the scope of research on entrepreneurial ecosystems in these directions, this session invites both conceptual and empirical papers that put the “entrepreneur” in ecosystems center stage. Papers that offer e.g. a gendered perspective, examine coworking, maker spaces, and/or accelerators as nodes in ecosystems, or take on a space-time perspective on the development of entrepreneurial ecosystems are particularly welcome.

Entrepreneurs, places and processes in entrepreneurial ecosystems I

Co-Creation, Maker Spaces and Micro Industrial Districts

Rachel Granger - Leicester Castle Business School

This session draws on the empirical example of Underbroen, Copenhagen’s maker space and “space for exploration of urban production and a meeting place for innovators and disruptors” (<http://underbroen.com>). Not only is Underbroen presented as a propitious creative lab, in which value is tied to co-creation and creative community (Schmidt and Brinks, 2017), its ideology and means of operation, strongly social, signals a new era in creative entrepreneurship and creative cities, tied to sustainable and plural practices; a so-called “Fab City” (<http://fab.city>).

Starting from modest ‘maker space’ ambitions, Underbroen collaborates with Space 10, the IKEA-funded future living lab, to challenge prevailing ideology about the way cities organise and function; creating a new spatiality for entrepreneurship and economic organisation. The session focuses in particular on Underbroen’s more recent membership and activities, which has reinforced its role as a site of skill development and ideas (challenging the role of local universities) and its recent organisation as a mini collective (with legal entity) to bid for and supply innovative work in its own right.

Strategically, Underbroen’s development from maker space to micro industrial district and milieu, which is a place of support, place of learning, and place of local production represents an exciting development in the economic geography discourse. It signals a change in cities’ economic organisation away from traditional public sector providers and investors to the primacy of new ‘underground’ stakeholders (both Underbroen and Space 10 could be labelled as genuinely “underground” drawing on Cohendet’s (2010) work). The subtleties of such stakeholder changes, permitted in part by the vacuum created by the global financial crisis, also amounts to a new and alternative economic space (Gibson-Graham, 1996), drawing on the principles of an industrial district (see Piore and Sabel, 1984), but organised as a type of socialised third space (Soja, 1996).

Collaboration, cooperation and competition within and outside coworking spaces in The Netherlands

Mariangela Lavanga - Erasmus University Rotterdam | **Maulde Cuereel** - Erasmus University Rotterdam | **Carolina Dalla Chiesa** - Erasmus University Rotterdam

Coworking spaces (CWS) are increasingly considered as an emerging feature of the recent urban landscape where entrepreneurs are grouped in higher or lower levels of cohesion. Several researches have explored the role and the importance of a community within coworking spaces. Indeed, community in a sense of cooperation between coworkers seem to be a well appreciated component of coworking (Spinuzzi 2012; Blein, 2016). However, exchange and collaboration does not always come as easily as it might be perceived. Some researchers have shed lights on the phenomenon in articles such as They're working on their own, just side by side (Fost, 2008) or Working alone, together (Spinuzzi, 2012). These considerations raise questions regarding the role of CWS within the entrepreneurial ecosystem at the local and regional levels. To what extent are entrepreneurs in the CWS embedded within the local entrepreneurial ecosystem? How do CWS connect and contribute to strengthening the local entrepreneurial ecosystem? What are the practices that increase cooperation, collaboration and competition within and outside the CWS? Little research has investigated these dynamics. Moreover, as Bown (2017, p.117) states referring to the various managerial practices "it is yet unclear the extent to which the different approaches influence or nor the outcomes". This study looks at CWS as nodes in the local/regional entrepreneurial ecosystem; it focuses on the dynamics within and outside CWS in the Netherlands, as well as the potential impact of their managerial practices. Using qualitative methodology with semi-structured interviews and participant observation, our study intends to understand the different aspects and practices of collaboration, cooperation and competition within and outside CWS, how managers influence these dynamics and what is the role of the CWS within the entrepreneurial ecosystem at local and regional levels.

Anchoring ecosystems – open creative labs as focal places for entrepreneurial processes

Andreas Kuebart - Leibniz Institute for Research on Society and Space (IRS)

Although facilities such as co-working spaces and accelerators are considered as key ingredients for entrepreneurial ecosystems, insights on how the micro-geographies of entrepreneurial processes are shaped by these kinds of places are understudied so far. Through identifying relevant places and relating them to spatial patterns of entrepreneurial activity, this study aims to explore this gap for the case of Berlin. While new places of collaborative work seem to grow explosively in general, several types of open creative labs have been identified. Three of the most prevalent types of OCL include working labs, experimentation labs and investor-driven labs. These places cater to varying degrees to entrepreneurs and startups, with the latter focusing entirely on this segment. The aim of this study is first to map the places of entrepreneurial activity in Berlin by geocoding startup offices and OCL locations. Secondly, these two datasets are related through measures of spatial point analysis. Through this, it is possible to differentiate which types of OCL spatially related to entrepreneurial activities. Since entrepreneurial activities and especially high-growth entrepreneurship in Berlin and elsewhere are characterized through high degrees of spatial clustering, further insights on micro-geographies can help to explain how the relatively new phenomenon of OCL does fit into the picture.

Incubators, accelerators and regional economic development: a systematic review

Max Nathan - University of Birmingham | **Margarida Madaleno** - LSE | **Henry Overman** - LSE | **Sevrin Waights** - LSE

Innovation and entrepreneurship carry a high risk of failure. Policymakers have developed a host of ways to de-risk these activities. Co-location is an important part of this toolkit, as embodied in familiar interventions such as science parks. Today, increasingly popular variants are emerging for startups and early stage businesses combining co-location with mentoring and networking. Such spaces are now present in many UK cities and regions: Britain has the most programmes in the world outside the US, with at least 205 incubators and 163 accelerators currently active (Bone et al 2017). Incubators and accelerators are claimed to have substantial positive impacts, helping young firms develop ideas, strengthen business models, attract investment and raise sales. If true, such tools could also help deepen clusters, regional innovation systems and regions' place in larger value chains. However, we have little evidence on whether such interventions work, how and for whom. This paper makes a number of contributions to this field. It covers incubator and accelerator business models; builds an analytical framework for impacts and impact channels; and conducts an OECD-wide systematic review of impact evaluation evidence, plus interviews with policymakers and programme operators. It also explore the broader co-location evidence base, including impact evaluations of science parks, building-level microgeographies, and temporary conferences and events.

Entrepreneurs, places and processes in entrepreneurial ecosystems II

The spatial formation of entrepreneurial ecosystems

Susann Schäfer - University of Jena

Although the concepts of entrepreneurial ecosystems make explicit or implicit reference to space, little conceptual consideration has been given to the localities, boundaries and scales of these systems. Empirical studies on entrepreneurial ecosystems have not yet acknowledged their spatial formation and the dynamics of spatial features over time. This paper aims to enhance our understanding of these spatial features theoretically and empirically: It combines geographical insights on localities, boundaries and scales with the ecosystem concept and shows with the help of an empirical case study (Tel Aviv, Israel) how entrepreneurial ecosystem development is tied to changes in localities, boundaries and scales of such systems.

On the creative ecosystem: cultural and creative microenterprise business journeys

Nick Henry - Coventry University | Victoria Barker - Coventry University

This paper responds to the call to expand the scope of research on entrepreneurial ecosystems. It does so through an empirical study of entrepreneurship within the (non-growth orientated part of the) creative economy of the UK.

Through a multi-method approach, three ‘mappings’ of the creative entrepreneurship ecosystem are presented and compared. First, the study applies selected theoretical models of ecosystems as the framework for a data-driven mapping of the (national) creative ecosystem. Second, a series of stakeholder interviews are presented as an alternative embedded understanding of creative ecosystems. Third, narrative case studies of microenterprises within one UK region were undertaken and their ecosystems mapped. Data mapping of ecosystem approaches in the creative economy reveals a number of emphases, biases and gaps when applied in a particular sectoral setting. In contrast, the device of ‘ecosystem’ was largely recognised by key sector stakeholders, with their understandings strongly driven by their institutional position and relationships within ‘their’ ecosystem. Finally, the study found that whilst case study microenterprises accepted the term ‘ecosystem’ for describing their environments, they did not incorporate this approach into their strategic planning and this reflected formal and informal aspects of ecosystems that bled well beyond often constrained notions of business activity.

At conceptual and empirical levels, clear differences between the ecosystem mappings were apparent, highlighting the nascent nature, measurement and explanation of the emergence, evolution and effects of entrepreneurial ecosystems (Stam 2015; Acs et al 2017). Within the broader context of economic geography literatures, ‘ecosystem’ may offer an analytical enhancement around a growing set of processes in the economy (Spigel & Harrison 2017). Work remains across the current multiplicity of approaches if a more closely shared definition is to be reached as the basis for effective policy and practical application.

How do Gender and Institutions relate to Entrepreneurial Activity? It depends where you go

R. Sandra Schillo - University of Ottawa | Ajax Persaud - University of Ottawa

Recent research on entrepreneurial ecosystems and national systems of entrepreneurship has provided ample evidence that the way entrepreneurial individuals react to and shape institutional arrangements is not globally universal (Acs et al., 2014, 2017; Stam & Spigel, 2018).

Research has also shown that the interaction between potential entrepreneurs and their environment is different for different groups of entrepreneurs (Santarelli & Vivarelli 2007; Parker, 2009), and systemic factors influence these different groups in different ways (Bird & Brush, 2002; DeBruin et al. 2007).

This is particularly true with regards to differences between men and women, and the gendered nature of institutions. Pathak et al. (2013) show that gendered institutions are associated with women’s entry into entrepreneurship, and interact with individual’s characteristics relating to entrepreneurship.

While previous research has documented differences between men and women, much remains to be learnt about the nature of gendered perspectives. This paper extends current knowledge and explores gendered country-level variation not only in terms of level of entrepreneurial activity, but also in terms of the strength of associations between individual and ecosystem characteristics and entrepreneurial activity.

Using multi-level analyses with varying slopes, we find that, indeed, there are differences across country-level entrepreneurial ecosystems with regards to how strongly individual characteristics are associated with entrepreneurial intents, as well as country-level characteristics. We also explore interactions between individual and country-level characteristics. In general, we find that the variation across countries is larger for men, than for women, and that in a range of countries differences between men and women are minimal, but in other countries, there are notable differences between men and women.

Our analyses demonstrate the importance of taking into account geographical and gender differences in academic research, and they hold implications for policy development, and specifically the transference of policies from one jurisdiction to another.

Serial Entrepreneurs and Entrepreneurial Ecosystems

Elizabeth Mack - Michigan State University | **Tatum Cho** - Michigan State University | **Samyuktha Iyer** - Michigan State University

Although there is little agreement about the components that make up entrepreneurial ecosystems, entrepreneurial success stories are a critical aspect of the cultural component. Serial entrepreneurs, which are people that enjoy the start-up process and found several businesses, but do not necessarily manage these businesses after the initial start-up period is over, are an important aspect of these success stories. Serial entrepreneurs are also important vectors of start-up knowledge and opportunity identification within ecosystems. Too often however, the role of the individual entrepreneur is lost in ecosystem studies. To fill this gap in our knowledge, this presentation will focus on the cultural legacies endowed on ecosystems by serial entrepreneurs. To do this, the paper presented will provide detailed documentation about the business and personal histories of serial entrepreneurs in small ecosystems within the United States. Here, we argue that serial entrepreneurs have perhaps an even more important role to play in small ecosystems, which are more likely to have thinner cultural milieu than historically larger entrepreneurial ecosystems.

Session

Entrepreneurship and Regional Development in Emerging Economies

Wenying Fu - South China Normal University | **Javier Revilla Diez** – University of Cologne

Entrepreneurship is the cornerstone of modern economy that drives the creation of new economic opportunities, and it has gained the attention of economic geographers in the past decade by viewing it as a spatially-bounded phenomenon and regional event. While there has been considerable work done to explore the spatial processes of entrepreneurship in advanced economies, there needs to be more engagement from the emerging economies on this topic. This is especially so as the regional environment in the emerging economies has shown considerable dynamism within the context of institutional reform and technological catching-up. The inflow of knowledge through FDI, thriving entrepreneurial culture, improving marketized institutions and transport infrastructure have all contributed to a facilitating regional environment for the emergence and growth of entrepreneurial activities. On the one hand, many city regions in the emerging economies have become the hothouses for opportunity-driven entrepreneurship which is characterized by high growth and innovativeness. Situated within in the fast-changing socio-economic and institutional environment, the entrepreneurs have also exhibited great agency in employing spatiality strategies to leverage resources and networks. On the other hand, the vast rural areas lag far behind the urbanized areas in regard to limited economic opportunities and inferior accessibility to markets, hindering the development of high-quality entrepreneurship and thereafter the potential of sustained growth. This inevitably led to the enlargement of urban-rural divide and rising spatial inequality. With the foregoing in mind, the session seeks papers, both theoretical and empirical, that address the uniqueness of regional entrepreneurial systems in emerging economies, compared to that in advanced economies, and explores the place-specific factors that determines and moderates the regional entrepreneurial processes. In addition, it welcomes participants to interrogate the way that entrepreneur's initiative behaviors shape and reshape local milieu and spatial structures in emerging economies.

No Startup in a Vacuum: The Entrepreneurial Ecosystem Elements and Performance in Estonia

Hannes Velt - Lappeenranta University of Technology | **Sami Saarenketo** - Lappeenranta University of Technology | **Lasse Torkkeli** - Lappeenranta University of Technology

The concept of the entrepreneurial ecosystem has recently started gaining renewed attention among entrepreneurship scholars, yet the research on economic geography and international entrepreneurship has until now stayed notably silent on the role that entrepreneurial ecosystems can have in driving the entrepreneurial activities towards economic value creation. These are crucial omissions in knowledge, as startup development does not occur in a vacuum, but can instead be argued to be largely dependent on the specific entrepreneurial ecosystem in which it occurs.

In order to respond to these omissions in research, in this study we investigate the concept of entrepreneurial ecosystem through its systemic elements and each of their role in cultivating the entrepreneurial activities. We assess the entrepreneurial ecosystems from the point of view of start-up entrepreneurs by examining them in their unique setting of an emerging economy. We chose Estonia as the focus case due to its open-border policy and gaining attractiveness among global start-up entrepreneurs. We use the survey method and statistical data analysis with STATA (t-test and ANOVA). Our findings contribute to the literature on entrepreneurial ecosystems by 1) outlining the entrepreneurial ecosystem elements most essential for the development of high-

growth startups; 2) describing the elements most critical in the initial stages (discovery and validation) of startup development in particular, and; 3) assessing the performance of the system through the lens of the local high-growth startup entrepreneurs. The study thus helps to understand how emerging economies progress and set up their local environment to develop systems to nurture entrepreneurial value creation.

Keywords: Entrepreneurship, Entrepreneurial Ecosystems, High-Growth Startups, Estonia, Emerging Economy.

JEL subject code: F60, L25, L26, M13, O52

Spatial variation of new firm formation and changing growth regimes in China's manufacturing sector

Jin Shi - Zhejiang University of Technology

New firm formation creates jobs, raises productivity and income, and constitutes a region's endogenous growth potential. Based on a firm-level database in China from 2003 to 2013, this paper first explores the sectoral and spatial patterns of new firm formation in the manufacturing sector in 338 cities, and then examines the relationship between new firm formation and net employment growth by the concept of "growth regimes". The descriptive analysis reveals the ever-changing sectoral and spatial patterns of new firm formation in China's manufacturing sector. Indicators of gross employment flows confirm the role of new firm formation as the driving force of job creation at national level. Nevertheless, new firm formation does not necessarily guarantee net employment growth when it comes to specific regional contexts. Therefore, statistics of new firm formation and net employment growth are combined to classify cities into 4 different types of "growth regimes", i.e. entrepreneurial, revolving door, routinized, and downsizing. The result suggests considerable spatial restructuring in growth regimes, indicating the changing geography of new as well as incumbent firms in job creation. We argue that the 'mass entrepreneurship and innovation' campaign in China should not overemphasize the importance of start-ups at the expense of innovative large enterprises, and relevant policies have to be tailored to local circumstances.

Does regional environment affect the growth of technology-based start-ups and incumbents equally? Evidence from China

Wenying Fu - South China Normal University

Technology-based start-up firms are newly established firms that use state-of-the-art or emerging technology as a key part of their manufacturing and product development. Their growth in a quantitative term, often measured in the number of employees, has been the center of focus in the literature as they serve as the engine of regional growth in modern economies. Yet little attention has been paid to the qualitative growth where they establish unique knowledge competitiveness and build innovative capacity on a sustained basis. Related literature suggests that firm growth performance is grounded in internal routines and competences, on the one hand, and region-specific factors and local environment on the other. But it is still not clear how firms rely on their internal competence and interact with regional environment in start-up period as compared to the post-start-up period. By using a representative sample of Chinese technology-based firms, this study investigates both the intra-firm factors and regional factors that help them to achieve qualitative growth in innovativeness. It further distinguishes the "star firms" that have grown into established innovative firms within its start-up period, and firms that build up innovative capacity when they become mature incumbents. Interestingly, the results show the mechanisms at work, both intra-firm and extra-firm, are very different between the start-up and the post-start-up period. While the technology-based start-ups benefit substantially from the presence of foreign investment and regional knowledge stock, the qualitative growth of the mature incumbent firms is more facilitated by both initial technological competence and potential pool of young skilled labor in the region. However, growth of incumbent firms is handicapped by foreign investment presence and size of the local labor market. It implies that technology-based start-ups are less likely to be influenced by firm routine lock-in and overembeddedness in the regional environment.

Session

Transnational Entrepreneurship meets Entrepreneurial Eco-Systems

Rolf Sternberg - Leibniz Universität Hannover | José Ernesto Amorós - EGADE Business School Tecnológico de Monterrey

This session seeks to address scholars working in the fields of migration studies, transnational (diaspora) entrepreneurship and/or entrepreneurship in general. Transnational entrepreneurship, while established as a sub-discipline since about two decades, recently has received increased attention both in the academic arena and in government policy due to its close relationship to globalization processes, the emergence of global migration flows and the government policy responses to these new developments. The Entrepreneurial Eco-system (EES) concept is a rather young idea to conceptualize how entrepreneurship works within a system

of interdependent actors and conditions. The EES-idea has recently gained enormous popularity among scholars and, even more, among policymakers who intend to support local economic growth by entrepreneurship activities. As such EES are strongly determined by local factors and actors, they are mainly situated at the sub-national level of regions, i.e. it is a dedicated research topic of economic geography. We are looking for theoretical, empirical and/or policy papers that analyze the role of transnational entrepreneurship by migrants with an EES. Among several other target groups potential contributions are expected in particular from two large international research consortia, the Global Entrepreneurship Monitor (GEM) (www.gemconsortium.org) and the DiasporaLink project (www.diasporalink.com).

Scholars who are interested to present at this session are asked to provide a three pages summary of a potential paper (to be submitted later) by March 15, 2018, to Rolf Sternberg: sternberg@wigeo.uni-hannover.de

Chairs have signed a contract with the British publisher Edward Elgar for an edited volume "Transnational Diaspora Entrepreneurship" (working title). Papers of the session may be considered for this volume.

Transnational entrepreneurs: opportunity driven enablers of entrepreneurial ecosystems?

Johanens von Bloh - Leibniz Universität Hannover | **José Ernesto Amorós** - EGADE Business School Tecnológico de Monterrey | **Mauricio Apablaza** - Universidad del Desarrollo | **Vesna Mandakovic** - Universidad del Desarrollo | **Rolf Sternberg** - Leibniz Universität Hannover

This paper explores the relationship between country embedded transnational entrepreneurship (TE) and entrepreneurial ecosystems (EES). We hypothesize that transnational entrepreneurs with personal ties to different countries can be of high relevance to EES vice versa. Acting as potential bridging agents, such entrepreneurs could connect ecosystems across the globe which would allow them to play a crucial role in keeping EES vital and progressing by suppling role models and contacts for local entrepreneurs to internationalize, by providing an inflow of new knowledge and routines from other EES, by having a unique opportunity recognition which helps the EES to maximise its potency by pushing opportunity driven entrepreneurship, by enhancing the social capital of both EES by connecting actors of both EES with each other and by inducing positive development in both EES or if at one side an EES is not yet in existence, they can help build or even lead it with their experience. The group of transnational entrepreneurs with personal ties to different countries is still vastly under researched compared to their potential influence. With this work we plan to shed light on the TE phenomenon with local embeddedness by contrasting two different but still comparable nations: Chile and Germany. We use a unique data set on transnational entrepreneurs from the Global Entrepreneurship Monitor (GEM) Adult Population Survey (APS) to analyse the impact of being a transnational entrepreneur on opportunity driven entrepreneurship and compare nation specific context variables influencing TE characteristics for specific context in both countries. We hypothesize that, among other idiosyncrasies, TE have a higher probability of engaging in opportunity based entrepreneurial activities with higher growth expectations, and that this probability differs between both countries based on contextual peculiarities, i.e. ecosystem conditions.

The impact of migrants on the emergence and evolution of entrepreneurial ecosystems

Sebastian Henn - Friedrich Schiller University Jena | **Susann Schäfer** - University of Jena

Unlike existing studies on entrepreneurial ecosystems, this paper does not focus on the internal dynamics of such systems but rather argues that entrepreneurial ecosystems are linked through economically specialized migrants that trigger their emergence and positively affect their future development. To illustrate the relation between migration and the dynamics of entrepreneurial ecosystems, a model is presented that distinguishes three different phases: (1) the remigration of highly skilled migrants, (2) sunshine return migration, and (3) the out-migration of local entrepreneurs to foreign startup ecosystems. Even though the model is based on both existing literature and own empirical findings in the Tel Aviv IT entrepreneurial ecosystem, it is argued that its implications also hold true for other regional contexts.

In-between networks: migrant entrepreneurs leveraging resources from different entrepreneurial ecosystems

Jonathan Levie - University of Strathclyde | **Paul Lassalle** - University of Strathclyde | **Samuel Mwaura** - University of Strathclyde | **Stoyan Stoyanov** - University of Strathclyde

Attempts to comprehend the complex nature of entrepreneurial activities within their specific locations and social context is further complicated by efforts to differentiate the various cross-border types of entrepreneurship, such as transnational (Drori et al., 2009) and international entrepreneurship (McDougall and Oviatt, 2000) or types of entrepreneurship related to the migration background of entrepreneurs (Waldinger, 2005; Jones et al., 2014).

A large strand of work in the field of migrant entrepreneurship draws attention to the embeddedness of entrepreneurs in their community, in transnational social networks (Stoyanov et al., 2017; Kitching et al., 2009) and in the host country's opportunity structure (Kloosterman, 2010; Lassalle and McElwee, 2016). Recent developments of the concept of entrepreneurial ecosystem in the wider entrepreneurship literature (Acs et al., 2017; Autio and Levie, 2015; Stam, 2015) provide a novel conceptual framework to explore how migrant entrepreneurs and entrepreneurs operating within diasporic communities access resources.

Based on a comparative fieldwork conducted among 24 migrant entrepreneurs from Central and Eastern European countries in the entrepreneurial ecosystems of London and Glasgow, we analyse the different patterns of resource orchestration in these two different locations.

We show that migrant entrepreneurs located in these two entrepreneurial ecosystems make a different use of the resources drawn from their community and diaspora networks, either to engage in transnational activities (London) or as a compensation to the lack of access to local networks (Glasgow). A potential implication of this observation for further research is to focus on the interplay between migrant entrepreneurs and the specific conditions of the entrepreneurial ecosystem in which they operate, including in relation to their degree of integration into the local entrepreneurial ecosystem. Second, our findings call for further consideration of the rationales behind the use of the different networks, for entrepreneurial purposes, either for market access or for transnational development.

Entrepreneurial ecosystems in unlikely places: the Balkans and the role of the diaspora in the creation of collectiveness

Veneta Andonova - Universidad de los Andes School of Management | **Jana Schmutzler** - Uninorte

The notion of ecosystem in business literature is a metaphor. It is used to communicate the idea that business organizations can be seen not only as pertaining to a single industry but that they can be perceived as interconnected elements of a “larger system that spans many industries” (Neumeyer and Corbett, 2017). Arguably, the value of using this metaphor is to communicate to policy makers and business people in general, among which entrepreneurs, that it is the coordination and collective efforts of various stakeholders that make possible the success of individual endeavors and the increase of societal wellbeing that comes along. During the second half of the 20th century the Balkan countries used to be ruled with a particular style of collectivistic ideology that gave rise to the so-called communist regimes, a type of dictatorships that relied on planned economies. The fall of the communist regimes in the 90's came with the creation of institutions for private property protection. The ideology of collectivity was rapidly substituted with the idea of the primacy of individual rights, which in many cases appeared as an irrational backlash to the previous social order. Nevertheless, desirable economic and social progress require a certain level of collectivity and an agreed-upon social purpose. The current rise of the entrepreneurial ecosystem in the Balkans are seen here as a restoration and legitimation of the need for collective and coordinated economic and social interactions but on a different basis, that of individual freedom and entrepreneurial ambition. Based on more than 50 interviews with participants in the Balkan entrepreneurial ecosystems and company-level data this paper gives both a qualitative and quantitative perspectives on the creation of entrepreneurial ecosystems. The role of the diaspora is recognized as instrumental for the growth potential and scalability of Balkan ventures.

EPHEMERALITY, TEMPORALITY AND INFORMALITY

Session

Agglomeration in an age of informality, ephemerality, virtuality and the aestheticization of the urban

Nicholas Phelps - University College London | Stefania Fiorentino - University College London | Cassandra Wang - Zhejiang University

Despite a vast literature on the subject of agglomeration, there remain blind spots. Literature on joint action and agglomeration in developing countries is poorly attuned to the majority of informal businesses to be found there (Moreno-Monroy, 2012). Theory and empirics might also usefully focus on the different aspects of the 'personal networks' that now represent the contemporary institution supporting agglomeration (Duranton, 2001) and the creeping informality found in the global north as a result of the increasing precariousness of employment and the 'gig economy'. Research has explored the contributions of ephemeral events such as trade fairs and exhibitions to processes of 'temporary clustering' (Maskell et al., 2006). Can these ideas be extended to informally-constituted temporary or 'pop-up' events making use of vacant or under-used sites within cities? Despite the call to refigure economic geography around issues of virtuality and digital technologies (Thrift and Olds, 1996), the implications of e-commerce and digital technologies for existing agglomerations or the emergence of new agglomerations remain underexplored. E-commerce has promoted many new 'Taobao' villages in China. Scholars have also been quick to study new agglomerations of tech and 'maker' industries (Anderson, 2013) as part of 'start-up urbanism' (Rossi and Di Bella, 2018). Finally, the role of urban morphology and amenity as the micro-foundations of agglomeration have been little explored (Duranton and Puga, 2004). Economic geographers have concentrated on the institutional, labour market and knowledge bases of the untraded interdependencies of agglomeration (Amin and Thrift, 1992; Storper, 1995) but they have rarely considered the impacts of amenity and the aestheticization of urban space (Scott, 2010) on the agglomeration of business. We invite papers that speak to: informality and agglomeration; temporary clusters such as trade fairs, pop-up events; e-commerce and its relationship to agglomeration; the contribution of the built environment to agglomeration.

Agglomeration in an age of informality, ephemerality, virtuality and the aestheticization of the urban I

Location, location, location! An exploratory study of the attraction and contribution of quality of the built environment to foreign direct investments

Jacob Simpson - University College London | Nicholas Phelps - University College London

The academic economic geography and international business and practice and policy-facing literature on investment promotion and site selection have long investigated the role of location in the attraction and development of FDI but have typically focused on the 'tangible' factors that determine location. The theory of agglomeration which has increasingly been applied to international business specifically places greater emphasis on the 'intangibles' that may drive location. However, this literature has typically focused on knowledge and labour market externalities to the exclusion of considerations of qualities of the built environment. The idea that urban amenity drives economic growth is more familiar but largely assumed within the urban geography, sociology and design fields. Drawing on exploratory interview research with real estate and site selection intermediaries involved with FDI in the Ile de France region we explore the significance and impact of the quality of the built environment for FDI. Urban amenity is a complex bundle of attributes that is meaningful for a small but diverse segment of FDIs in any location and is perceived to make a similarly diverse contribution to FDI performance.

Rome and its innovation hubs: "gig" or "new urban" economies?

Stefania Fiorentino - University College London

A consistent group of innovative businesses have emerged within the last decade in Rome, mainly regulated by informal inter-firms relations. The rise of those new activities has corresponded to the set up of a number of national institutional measures to support entrepreneurs and "innovative start-ups" as a way to stimulate economic growth. At the regional level, authorities have promoted a number of complementary interventions mainly supporting international events such as the Makers Faire and other

mainly educational initiatives. Though, economic policies still struggle to address this new volatile sector and its actors, while the conservative local planning system completely fails to address SSAs and a variety of different regulations and therefore room is left for informality and the rise of a set of new soft-institutions. In this context, shared service accommodations (SSAs) are emerging as the enabling facilities of this ecosystem of innovation, populated by the Makers movement, creative free-lances and other start-ups operating in the soft-tech or digital innovation field. Here, those spaces gather professionals and allow the birth of knowledge spillovers. This paper investigates and describes the role of SSAs as intermediaries of this new informal economy of the city of Rome. Patterns of concentration of innovative businesses and activities have been identified, which mainly corresponds to the location of such spaces. The whole innovation scene of Rome appears to be regulated by a system of untraded relationships between the different actors, the understanding of which is key to the delivery of the next round of planning and economic policies.

Agglomeration of mobile food vending as temporary economies

Petra Luetke - University of Muenster

Temporary urban economies such as mobile food vending have become well beloved parts of the urban landscape in many contemporary cities. In general mobile vending in public space is not new and it is existing for hundreds of years. Today a new generation of mobile food vending commonly occurs in urban areas and the recent rise in popularity of street food has brought renewed attention to mobile vending in urban and regional landscapes. On the one hand these mobile Food Trucks are seen as a catalysts of urban revitalization representing food as the internal diversification of a postmodern society with variegated cultural expressions. On the other hand the temporary presence of Food Trucks seem to be the booster of urban development: Urban upgrading strategies, real estate investment decisions, altered demand-patterns and social displacement shape the transformation process. The dynamic local arrangements of the temporary socioeconomic practices of mobile food vending is embedded in spatial dynamics by creating ephemere spaces. The practices of everyday life in urban space and time force the interplay between local cultural models of order and socioeconomic practices. This paper reinterprets these transformations by conceptualizing urban socioeconomic practices that are not fixed but ephemere and regrounded from flows of people, practices and capital.

Real, imagined and administered spaces of urban economic agglomeration: the case of industry, kampongs and government in Indonesia

Nicholas Phelps - University College London

The reality of urban economic agglomeration is one of the greater or lesser concentration (or dispersal) of businesses and their linkages. Although the extant literature on agglomeration continues to be invested with a strong sense that the economic development benefits that flow from agglomeration and external economies are place bound, rarely has the scale of such places been the subject of explicit consideration. Moreover, rarely do concentrations of business and their linkages coincide with the boundaries of imagined communities or the borders of administrative spaces of governments. In this paper we explore the development implications of the varied relationships between these three senses of space, including the evolution of these relationships over time. We develop stylized typologies of the geographical and temporal relationships between these three senses of place. We illustrate these typologies with respect to industries and their relationship to kampongs as imagined and more or less cohesive social communities and administrative spaces of local governments in the Indonesian cities of Bandung, Semarang and Solo. The causal connections between these geographical and temporal relationships are ambiguous and highlight the limits of 'one size fits all' policy advocacy with respect to urban economic agglomeration.

Agglomeration in an age of informality, ephemerality, virtuality and the aestheticization of the urban II

Multifaceted nature of agglomeration in a twenty-first-century city: Measuring urban vitality in the physical and virtual spaces of Seoul using big data

Young-long Kim - Clark University

Economic geographers have developed theories and methods to study the factors of agglomeration. In the recent decades, however, the rapid transition to the post-industrial and digital economies calls for attention to the multifaceted micro-foundations of agglomeration. Urban vitality, which is defined as buzz or busyness, has been argued as one of the components of Jacobian externalities. However, since urban vitality has been elusive both in conceptualization and measurements, previous academic and

policy attempts to grasp the concept failed to address the problems. In an effort to operationalize the concept, this paper seeks to measure urban vitality by dissecting the concept into the social, economic, and virtual dimensions. An empirical measurement was conducted at the fine-grained spatial scale thanks to the availability of big data. Not only conventional datasets such as census data but also big data including pedestrian traffic based on mobile phone activity and bank card transaction are used for the indicators of urban vitality in this paper. In particular, this paper proposes the location of Wi-Fi hotspots and cellular towers as the proxy of the virtuality of urban vitality. Economic geographers have shown that virtuality is not independent from but embedded in agglomeration in physical space. To date, however, empirical studies in the Internet geography have mainly focused on wired internet infrastructure at the inter-urban scale. The need for the studies on the wireless internet is urgent as the penetration of portal gadgets with wireless connection has rapidly revolutionized the everyday life in cities. By investigating how the social, economic, and virtual vitality interrelates to each other in the three city centers of Seoul, this paper fills the gaps in the economic geography literature on understanding the micro-foundation of agglomeration.

E-commerce Adoption and the Dynamics of the SMEs Cluster: Evidence from Zhili Children's Garment Town, China

Cassandra C. Wang - Zhejiang University

Despite the increasing importance of e-commerce adoption in a digital economy, its impacts on the functioning and dynamics of traditional industrial clusters are not yet touched. This exploratory study of the actual practices of e-commerce adoption and its impacts on a traditional town-based cluster in China unfolds an intriguing trajectory that does not conform to popular perceptions of e-commerce studies. It is found that e-commerce adoption does not depreciate local production networks but instead reinforces the traded and untraded relationship between clustering SMEs. Trust relations created by geographical and relational proximity cannot be achieved by electronic communications or online transactions. However, e-commerce adoption does start to alter the inter-dependent relationship between clustering firms and local specialized market by diversifying marketing channels of clustering SMEs and more easily targeting and accessing to individual customers. Findings of this research contribute to the debate over the importance of geography in a digital era and criticize the cluster studies that over-emphasized localized production networks but under-estimated the role of marketing channels of SMEs.

Implications of the electronic market for the spatial clustering of traditional industries: A case study on the furniture cluster in Foshan, China

Xiangyu Wang - University College London

The discrepancy in the results of existing studies in both information system and management disciplines involved in the debate over the spatial influence of information and communication technology (ICT) reminds this influence may vary due to different geographic aggregation dynamics in an actual industry cluster. The ultimate aim of using ICT in the industry and commerce is to realise the market governance on the inter-organisation relationships in the value chain as well as directly connect producers and consumers by eliminating the intermediaries between them. Extant studies focusing on these two dimensions, that are, the movement trend of inter-organisation relationship governance and the disintermediation along the supply chain, offer useful hints for our geographical work. Through a case study on the furniture cluster in Foshan, China, this study examines whether the geographical clustering dynamics has been challenged by the e-market by analysing different segments of relations along the supply chain; and if true, what is the nature of this change. The result shows that inter-firm relations have not been damaged as much previous literature predicted and the spatial clustering dynamics persists. Furthermore, unexpected new outsourcing relations in a hub-and-spoke structure have formed. The underlying rationales behind this result (also the contribution of this research) include that: 1) what the e-market is actually able to affect are those relations often characterised by low transaction value, frequency and asset specificity in the downstream which have already been governed under the market logic offline, and the transaction agents thereof; 2) the extent of disintermediation are determined by the aggregation degree of previous offline customer demand in the e-market, and moreover during this process both the backward and the forward integration happening in firms are incomplete. In addition, as a concomitant of the results, the salience of MAR externalities in the cluster has also increased.

Research on Relationship between Large Enterprise Growth and Urban Development

Mengran Xu - Peking University | Canfei He - Peking University

Based on the annual survey of industrial firms during 1998-2009, this paper studied the relationship between large enterprise growth and urban development in China. Empirical results suggest that the urban institutional environment has a significant impact on the growth of large enterprises. Large state-owned enterprises have benefited from government intervention and marketization

process, while large non-state-owned enterprises have achieved rapid development by grasping the opportunities of globalization. However, marketization has hampered the growth of large non-state-owned enterprises. As expected, large enterprises rely more on internal economies of scale and are not sensitive to urban industrial environment. The increasing wages of both types of large enterprises and the investment by large non-state-owned enterprises have promoted urban economic development. Surprisingly, the exports of large non-state-owned enterprises and innovation of both types of large enterprises have hindered urban economic development.

Session

Linking Regional Economies to the Outside World: Agents, Networks and Temporary Settings

Sebastian Henn - Friedrich Schiller University Jena | **Harald Bathelt** - University of Toronto

Regional economies have long been at the center of research in economic geography. Researchers have been particularly interested in understanding the local factors that explain why clusters of interconnected firms in related industries are competitive and exhibit dynamics start-up processes. In recent years, however, it appears that cluster research has lost some of its momentum – even though the same industrial agglomerations are still drivers of the economy and play an important role in regional policies. Much work over the past decade has shown that the success of localized industry settings cannot be attributed to local factors and processes alone. It depends substantially on linkages with a variety of agents and organizations from other regions or countries that provide knowledge about external markets and technologies thus enabling these agglomerations to constantly adapt to changing economic, technological and political environments. Permanent linkages between industrial agglomerations or clusters, for example through corporate networks developed through foreign-direct investments, but also face-to-face encounters during temporary community events, such as leading global trade-fairs or B2B conferences, have been found to play a significant role when it comes to understanding how firms access and make use of knowledge created elsewhere. While a growing number of studies have dealt with such external connections that link regional economies to the outside world, the nature, role and impact of such relations has been vastly understudied.

This session seeks to explore the structure of external networks and linkages by focusing on the following questions: Which actors generate trans-local connections? How do temporary get-togethers of industrial communities affect permanent industry settings? How can regional policy support the development of interregional and international linkages? How is knowledge developed elsewhere transferred and applied locally? How does external knowledge travel between co-located firms? How can regional impacts of external linkages be measured?

Linking Regional Economies to the Outside World: Agents, Networks and Temporary Settings I

Adapting to Industry 4.0 in manufacturing cluster: a question about cluster absorptive capacity

Asbjorn Karlsen - Norwegian University of Science and Technology | **Henrik Lund** - Norwegian University of Science and Technology | **Markus Stehen** - SINTEF

For some decades the cluster concept has attracted attention from scholars in economic geography and related disciplines, and even more so policy makers. The academic literature has addressed some conceptual shortages, not least on how to understand exchange between clusters and their surroundings. Cohen and Levinthal (1990) introduced the concept ‘absorptive capacity’ as firm’s ability to recognize the value of new information, assimilate it, and apply it to commercial ends. They argue that the existence of previous knowledge is decisive for firms’ ability to absorb new knowledge. More recently, the concept is applied on meso-level studies of innovation systems (Tripl et al. 2017: 6), regions (Vang and Asheim 2004), and clusters (Giulliani 2005).

In order to advance the debate on cluster dynamics, we draw on a refined conceptualization of cluster absorptive capacity. We find the concept of intermediaries productive in studies of how clusters’ cope with new technologies, not least in the face of Industry 4.0. In line with Smedlund (2006) we define intermediaries as organizations that operate as mediators between the users and producers of knowledge and technologies. These intermediaries work as an adhesive in a cluster, binds the cluster to external knowledge sources and disseminate industry relevant knowledge among cluster firms.

This paper analyses knowledge exchange and technology upgrading in two small city high-tech manufacturing clusters in Norway in their maturing stage. Currently, key cluster firms are adapting to Industry 4.0 with the introduction of advanced automation technologies and computerization in manufacturing, and novel combinations of materials. To further the understanding of intermediaries’ influence on cluster absorptive capacity, we study recent strategies for upgrading of technological capabilities associated with Industry 4.0 and their implication for knowledge bases, cluster dynamics and knowledge linkages.

The interaction of a local industrial cluster with the inflowing knowledge from international trade fairs: the case of Istanbul's jewellery industry

Yiğit Evren - Yıldız Technical University | **Ayşe Nur Ökten** - Yıldız Technical University

The purpose of this paper is to reveal and understand the role of international trade fairs in shaping the evolution of local industrial clusters. Trade fairs have recently received significant interest from various scholars in economic geography resulting from the observations that these short-term occurrences provide a unique business climate in which participants acquire new knowledge, learn from each other and initiate relationships on a wide palette of practises of interaction. In this context, international trade fairs are viewed as temporary clusters generating global buzz which enables firms in local industrial clusters access new technologies, new markets and, thus, enhance their economic growth, competitiveness and sustainability. However, the processes that take place in the aftermath of trade fairs have not yet been systematically investigated. One of the questions which need examination and comprehending is how the knowledge disseminated in the global buzz is transferred and integrated into the local evolution of production. Our paper aims to address this issue with a multi-level research method by employing quantitative and qualitative techniques sequentially. The empirical focus of our study is the body of Turkish exhibitors of the Istanbul Jewellery Show, 2018. 48 large scale producers that have previously participated in various international hub fairs for the last three years constitute the universe of this research. Since we are especially interested in analysing the creation and diffusion of new routines that stem from these firms, a twofold data collection process will be employed. At the first stage (during trade fair) a questionnaire will be carried out with firm representatives. At the second stage (after the trade fair) these firms will be revisited for partially structured and in-depth interviews, the goal being to understand the ways how their relational neighbourhood deals with the resonances of the global buzz.

Interorganizational collaboration, knowledge transfer and micro-geography of trade-shows

Stanislav Vlasov - Tilburg University | **Ajan Markus** - Tilburg University | **Leon Oerlemans** - Tilburg University

Recent literature has demonstrated that participation at events, such as conferences and trade-fairs, plays an important role for organizational knowledge creation and organizational collaboration. However, less is known about how internal structures of events (e.g., technical programs, venue layouts, etc.) influence these outcomes.

To address this gap this study uses archival data on 1672 companies that participated in 10 PittCon exhibitions between years 2007-2016. PittCon (The Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy) is the world's leading conference and trade-show in the field of analytical instruments. The maps of exhibition floors were manually coded to obtain the coordinates of exhibition booths of each company. Using these coordinates and exhibition layout itself we calculated walking distances between each pair of companies. We then combined this data with data from BvD's Orbis, PatentsView (USPTO) and SDC Platinum to estimate the effect of trade-fair micro-geography on knowledge transfer and collaboration.

The preliminary results for small sub-sample show that indeed the factor of proximity between two companies on the exhibition floor is significantly and negatively associated with the amount of knowledge transferred in the subsequent period. In other words, the further the exhibitors are from each other, the less likely they are to cite each others' patents in the future. We are currently working on testing more detailed hypotheses on the whole sample and with the inclusion of additional moderator and control variables.

The contribution of this study is to show how micro-geography of events facilitates initiation of knowledge transfer and emergence of new collaboration ties. Moreover, while previous studies have focused on the proximity effects in single quasi-permanent intra-organizational settings (e.g., office layouts), this study shows that such effects also hold in the contexts of temporary inter-organizational interaction.

From executors to global subcontractors: How a new category of suppliers is changing the Italian clothing and footwear industries

Giulio Buciuani - Trinity College Dublin | **Jacopo Canello** - University of North Carolina at Charlotte

The diffusion of Global Value Chains (GVCs) has drastically reshaped the nature and structure of subcontracting agreements, impacting on both the competitiveness of territories and firms. This transformation has paved the way for the emergence of heterogeneous groups of subcontractors with distinct identities and idiosyncratic approaches to the market. Although the most diffused type of suppliers still retains most of the characteristics discussed by the supply chain and industrial districts literature, we observe that GVCs are increasingly featuring advanced forms of subcontractors, which we refer to as 'global subcontractors'. Building on this emerging phenomenon, this study aims to shed light on the geographical dispersion of this peculiar type of firm and understand the firm-level dynamics and regional factors underlying their upgrading process.

We propose and discuss an empirical investigation that features a novel longitudinal database of Italian small and medium-sized enterprises which is particularly suitable for the purpose of the investigation. First, the database covers a significant share of the entire population of Italian manufacturing firms; this is a very important feature of the database considering the highly fragmented structure of the Italian industrial system. Second, it provides firm-level information regarding suppliers' financial and economic performances and supply chain relationships. The study focuses on the footwear and clothing sectors, two industries whose geographical and organizational configurations have been significantly impacted by globalization over the past two decades. Preliminary results show that 'global subcontractors' tend to conglomerate in specific regions and that their economic performances are on average above those of traditional suppliers. These findings suggest that the ability of suppliers to partake in GVCs improve their competitiveness over time.

Linking Regional Economies to the Outside World: Agents, Networks and Temporary Settings II

Travelling planning ideas boosting local development: the emergence of Turku Science Park as Innovation District

Helka Kalliomäki - University of Turku | **Päivi Oinas** - University of Turku | **Teemu Salo** - University of Turku

In economic geographers' wide-ranging writings on locally significant industrial clusters, the issue of their physical bases in urban structures is often not raised. While clusters are often increasingly internationally connected, local relations within clusters remain important as they ascertain their efficient functioning and drive their renewal capacity through processes of knowledge creation and circulation amongst a diversity of agents. Proximate relations amongst cluster agents are typically assumed but it is not necessarily considered how they can be accomplished within urban structures. This is especially the case in large cities. A new trend seems to be arising that aims to facilitate the new geography of innovation within cities, called "innovation districts" (IDs) (Katz & Wagner 2014). Instead of building isolated campuses and concentrations of activities to suburban locations, a new urban model is emerging within the urban structures to promote more physically compact ways of interaction between companies, start-ups, business accelerators, research and all levels of education, housing, and services. The concept is spreading globally albeit in different forms in different contexts, thus fitting e.g. Healey's (2011) characterization of travelling planning ideas. In this paper our aim is to analyse the gradual development of the Turku Science Park area in Kupittaa (Turku, Finland), and show how the city's current policy aims for the area bear a close resemblance to the internationally spreading ID model. Diverse data sources provide evidence that the history of the area's development efforts similarly reflect internationally traveling policy ideas pushing innovation-based urban economic development trends in diverse guises. This reminds of the fact that local clusters are not merely emergent, autonomous phenomena but results of conscious urban planning efforts in their cities. Agents in such clusters form relations with agents in similar IDs in other cities thus contributing to successful cluster development through transnational policy learning.

On the Mechanism of Strategic Coupling

Yi Liu - Sun Yat-sen University

This paper critically reviews the theoretical development, contribution and problems of the studies of strategic coupling in terms of conceptualization, explanatory variables and the analytical framework. It finds that there is ambiguity in the theoretical reasoning of the analytical framework and the typology. By learning from the studies of global production network and global value chain, this paper argues that the strategic coupling studies shall be advanced by refining spatial variables from a latecomer perspective, rather than purely focusing on global lead firms. This paper then proposes two spatial variables, spatial stickiness and locational advantages, for better understanding the formation, variety, impacts of strategic coupling during the globalization of latecomer region. Key word: relational economic geography; Global production network; Strategic coupling; Spatial stickiness; Locational advantages

Relational implications on Management Concepts

Alexander Wong - University of Gothenburg

The understanding of management practices is important as they constitute one of the microfoundations of value-creation. Following the globalisation of the economy, the diffusion of management concepts, conceptualised sets of management practices, have intensified through MNEs and Global Production Networks. When management concepts diffuse and are adopted in new

contexts with high institutional distance compared to the spatial origin of the concept, extant literature has shown that unexpected consequences are often the case. While disciplines such as Organisation studies and Operations management have studied these problems from a firm-level perspective, the effects on globalization of management concepts from a spatial perspective has been limited in extant studies. This article argues that meso-level theories in economic geography, in particular the relational approach, has the potential to explain the difficulties of adopting management concepts. In extant studies, the relational approach has been proven valuable in explaining economic activities of various kinds. This article explores the implications of the relational principles of economic actions (contextuality, path-dependence, contingency) on management concepts. The case-study of a popular management concept in the ICT-industry, is interpreted through relational principles. The article illustrates how the relational approach can be used to explain the difficulties of fulfilling the expectations of management concepts. This paper contributes to our understanding of management concepts, and theoretically to relational economic geography.

How geographical context influences knowledge acquisition at trade fairs: A structural equation model approach

Yi-wen Zhu - East China Normal University | **Harald Bathelt** - University of Toronto | **Gang Zeng** - East China Normal University

The literature on temporary clusters has identified important knowledge acquisition process at such events, particularly at leading international trade fairs – both in developed and developing countries. However, little attention has been paid to the conditions under which knowledge acquisition takes place successfully. In particular, it is unclear which contextual variables, aside from industrial sector and firm strategy, may influence this knowledge acquisition process. This paper focuses on the geographical context conditions at the firms' permanent locations and aims to investigate whether firms' knowledge acquisition behavior during trade fairs varies systematically with locational conditions, such as city size, growth rate, peripherality and connectivity. This is done based on an analysis of 136 questionnaires and interviews conducted in 2014 and 2015 at the China International Industry Fair (CIIF) in Shanghai – one of Asia's most important manufacturing fairs. Using structural equation modelling, the paper aims to identify different, significant pathways that support successful knowledge acquisition.

EVOLUTIONARY PERSPECTIVES AND ECONOMIC TRANSFORMATION

Session

Evolutionary Economic Geography in Emerging and Developing Economies

Canfei He - Peking University | Shengjun Zhu - Peking University

We invite papers that address the theme of 'Evolutionary Economic Geography in Emerging and Developing Economies'. Evolutionary economic geography (EEG) has made significant inroad in the economic geography literature through examining three specific phenomena and processes: clustering as evolutionary process (entry and exit patterns of firms), related variety and regional growth, and regional branching. Developed countries are normally used as empirical cases to illustrate these processes. As already outlined by Boschma and Capone (2015, Research Policy), the varieties of capitalism (liberal versus coordinated market economies) could have a significant impact on the patterns of diversification in (un)related activities. With different institutional environment, the emerging and developing economies could provide interesting insights for some of the well-studied hypotheses outlined in the EEG. Will the long-standing hypotheses of EEG hold for the emerging and developing economies? Will some of these explanatory variables play different roles in the evolutionary processes in regional development of emerging and developing economies? What may be the potential theoretical contributions to the EEG?

We encourage empirically or theoretically informed paper submissions that reflect on the domains of institutions and institutional environment, and its dynamic analysis. Research questions and issues could include (but are not limited to):

Issues:

- To what extent the different institutional environment in emerging and developing economies matter for the evolutionary processes and the subsequent clustering of firms?
- To what extent the technical change and innovation (through localized learning), related and unrelated varieties contribute to the regional development in emerging and developing economies?
- Will the product relatedness play different roles in the regional branching of emerging and developing economies?
- Are there specific patterns in the spatial evolution of industries, especially how economic actors and social institutions may or may not be able to break out of the existing lock-in through diversification of its products in these economies?
- What may be the potential theoretical implication for complexity and path dependency theories?
- The wider theoretical and methodological issues between firm-based evolutionary theories of economic change (c.f., Nelson & Winter, 1982) in the EEG (and its criticisms on the excessive focus on micro-scale actors and processes) and the potential importance of institutions, including social institutions and their wider power relations.

Please send expressions of interests/queries and abstracts (of no more than 250 words) to Canfei He (hecanfei@pku.edu.cn) or Shengjun Zhu (zhus@pku.edu.cn) by 15 March 2018. The GCEG 2018 website (<https://www.gceg2018.com/home.html>) provides more information about the conference.

Evolutionary Economic Geography in Emerging and Developing Economies I

Railroads, inter-regional knowledge spillovers and changing industrial dynamics in Chinese regions

Shengjun Zhu - Peking University | Canfei He - Peking University

Recent evolutionary economic geography (EEG) studies have argued that regional diversification emerges as a path-dependent process, as a region often branches into industries that are related to preexisting industrial structure, whereas industries that are not closely related have a high probability of exiting the region. This paper contributes to the ongoing debates on path dependence and path creation with a new analytical framework that emphasizes the need to bring in a wider range of factors that contributes to regional industrial evolution. It suggests that regional industrial dynamics are not only conditioned by preexisting regional capabilities and technological relatedness, but also by the ways in which technological relatedness is interconnected with inter-regional knowledge spillovers. Based on a firm-level dataset of China's manufacturing industries during 1998-2008, this paper has studied regional industrial evolution in China by examining regional industrial diversification at the city level. It shows that regional industrial development is a path dependent process in China, one that is also inflected by inter-regional knowledge spillovers. We pay particular attention to the network of different types of railroads, and to how they have shaped regional industrial dynamics. We also examine if different types of railroad networks have reinforced or alleviated regional disparity from the perspective of knowledge spillovers and technological diversification.

Path dependency of the company towns of the chemical industry in Japan

Daisuke Sotohebo - Shimonoseki City University

In Japan, there are some company towns where employment is dependent on the small number of large companies. The purpose of this paper is to introduce the path dependency of the company towns of the chemical industry in Japan from an evolutionary economic geographic approach. This paper aims at the technological trajectory of companies and the relations among actors, as the path dependency. Three case studies form the foundation place of huge company as well as are the mother factory of the company.

In Nobeoka City, a company town of Asahi Kasei Corporation, the core business of the company converted from the textile industry to the medical industry by utilizing technological trajectory. By the technological trajectory, fiber technology was inherited by product of a kidney dialysis. The company has vast a site and corporate culture, which make much account of the foundation place.

In Minami-ashigara City, a company town of Fujifilm Corporation, the core business of the company converted from producing photographic film to producing a part of a liquid crystal display product by utilizing technological trajectory. The company also constructed a new laboratory to enhance R&D. Through this restructuring, the company transformed itself from a traditional producer of photographic film to a producer of high-value-added products.

In Ube City, a company town of Ube Industries, industry-university-government collaboration in recent years promoted industrial restructuring. Traditionally, the core of actors' relations in Ube City was Ube Industries. Many SMEs are subcontractors of Ube Industries, and relations between university and actors were gradually built. Industry-university-government collaboration overcame air pollution in the 1950s. In the 1980s, a university began to develop joint researches with local companies. By subcontracting, SMEs can advance in industry-university-government collaboration.

Research on the Evolution of Hi-tech Industrial Clusters in Suwa Region, Nagano Prefecture, Japan

Chengyun Wang - Shanghai Normal University | **Xiande Li** - Shanghai Normal University

The Suwa Region, Nagano Prefecture, Japan, known as "Toyo Switzerland" has a special status in the economic history of Japan. Since the Meiji Restoration, Suwa had become Japan's most important raw silk production center. The invention of nylon combined with the global economic crisis in the 1930s reduced the global market demand for raw silk, and the raw silk industry in the Suwa gradually disappeared. During the Second World War, some mechanical companies such as clocks maker Seiko in Tokyo moved to the Suwa in order to escape air raids of U.S. After the end of World War II, with the political, economic and social changes in the world and Japan, the industrial space in Suwa has undergone continuous evolution. Nowadays, a lot of high-tech companies with unique precision machining technologies such as cutting, forging, electronic information and mold processing technologies are concentrated in Suwa Region, forming diversified high-tech industrial clusters.

This study uses Japanese industrial census data and memoirs of senior executives of Seiko Epson Corporation to analyze the evolution of industrial space and its mechanisms in the Suwa Region since 1945.

The study found that: (1) The strong industrial atmosphere and higher labor quality since the Meiji Restoration in the Suwa region have promoted industrial agglomeration and evolution. (2) The economic, cultural, and social network connection between Suwa and Tokyo are important factors affecting the industrial evolution. (3) The technological relatedness between industries has promoted the transformation of leading products in Suwa from watches and clocks into electronic information manufacturing products such as printers and projectors. (4) Factors such as internationalization (change in global competition and market structure, exodus of firms etc.), macroeconomic changes in Japan (high economic growth from 1950s to 1960s, bubble economy and its collapse from 1980 to 1990, aging and depopulation since 1990s etc.) have an important influence on industrial evolution of Suwa Region.

The transition from political-rentier economy to knowledge based economy in the Tehran

Zahra Ahmadipour - Azad University Central Tehran Branch

Iran's economy is reliant on oil revenues and is a political-rentier economy. This model is functioning in an essentially unequal manner and leads to spatial inequality, social gaps and ultimately increases of poverty. Meanwhile, as the capital of Iran, Tehran is the political center which hosts more than 10 million people and is an embodiment of population centralization because of the development of major spatial inequalities rooted in this economic type. For this reason, Tehran needs to create and develop necessary settings for knowledge-based economy that is appropriate to its capacities and competitive advantages in order to address a socio-economic challenge that is rooted in so called "rentier economy" and to be able to step in the sustainable economic development path. This paper seeks to analyze the path of knowledge-based development of economy in Tehran according to its

capacities and advantages while considering the structure of current non-productive and rentier economy in order to identify mechanisms that help the development of knowledge-based economy in this city with the descriptive-analytical approach.
Keywords: rentier economy, knowledge based economy, Tehran

Evolutionary Economic Geography in Emerging and Developing Economies II

Density of relatedness and variety of relatedness

Canfei He - Peking University | **Shengjun Zhu** - Peking University

Recent evolutionary economic geography (EEG) studies on technological relatedness and cognitive proximity can be roughly divided into two camps: one focuses mostly on the concept of relatedness while the other pays more attention to the idea of variety. The first camp uses the co-occurrence approach to compute relatedness and density indicators as a proxy of technological relatedness. However, it fails to acknowledge the non-linear relationship between technological relatedness and knowledge spillovers, and overlooks the inner structure of the overall technological relatedness between a certain industry and a region's industrial structure. In contrast, the second camp adopts the entropy approach to calculate different variety indicators. However, the detailed information on relatedness between industries is dropped off in the variety indicators. To the best of our knowledge, this paper is the first piece of work that points out the shortcomings of those two camps of literature, and seeks to bridge those two camps of literature. First, we develop a new variety indicator to measure the variety of relatedness, and make sure it is compatible with the density indicator (density of relatedness) so that those two can be included in one model. Empirical results show that we need to take into account both the density and variety of relatedness to measure the distance between an industry and a region's industrial structure more precisely. EEG studies would benefit from incorporating both approaches in their conceptualization and methodology. Our findings also confirm the inverted 'U'-shaped relationship between density and industry entry/economic performance.

Local level institutional complementarities and comparative economic growth in China - a Tale of Two Cities

Alexandre De Podesta Gomes - University of London

This research seeks to compare the relative economic performance of two Chinese cities located in the Yangtze River Delta – Nanjing and Suzhou. Succinctly, I attempt to demonstrate how different institutional arrangements, at the city level, render distinct growth performances; and under which macro-economic conditions (more specifically, the macroeconomic demand regime) one particular institutional arrangement outperform the other.

While Suzhou features an industrial base heavily concentrated on information and communication technologies (ICT), traditionally dominated by foreign-invested enterprises (FIEs), geared towards external markets and reliant on lower wages, Nanjing, by contrast, has an industrial base dominated by State-Owned Enterprises (SOEs), is more sectorially diversified, and is less reliant on exports and cheap labour. Analysing local economic data, especially regarding total, industrial and manufacturing output, as well as labour productivity growth, we observe that in the years before the 2008 crisis Suzhou clearly outperformed Nanjing, notably in the industrial sector, but after 2009 the scenario is reversed, with Nanjing taking the lead.

The research aims to explain these divergent patterns of economic growth and performance, illuminating how particular institutional forms at the local level may match (or not) distinct compositions of the aggregate demand at the macro level. It is the coherence (or lack of it) between institutional forms at the local level and the macro composition of demand which will render localities relatively faster (or slower) growth rates.

Theoretically, the research applies the notion of institutional complementarity in order to tackle the coherence (or otherwise) of institutional configurations, and also explicitly incorporate Kaldorian insights on economic growth, especially when dealing with the macro-level demand composition and its impacts on city-level growth. Finally, as the main concern of the research is local level growth, I also dialogue with the “variegated capitalism” approach and critically engage with other mainstream theories.

Specialization tendency and geographical evolution of industries in Turkey

Irfan Kaygalak - Balikesir University

This study aims to delineate specialization tendency of industrial clusters and their geographical evolution in Turkey between 1992 and 2016. Considering relationship between structural transformation of manufacturing and its geographical evolution, the study focuses on structural change of manufacturing in case of twenty industries and spatial reflection of this change at the provincial

level (NUTs 3) by the time. For this purpose firstly specialization and clustering tendency of manufacturing is examined for each industry by using diverse indexes such as local geographic concentration indicators and coefficient of variance and then recent structural characteristics of manufacturing in the country are examined by some descriptive statistics. Then deploying exploratory spatial data analysis, geographical evolution of manufacturing and role of spatiality are examined for each industry. The preliminary results highlight to certain structural changes in manufacturing that represents transformation from low technology based industry to medium-high technology based industry. While the results of spatial autocorrelation point to enlargement of agglomerations in manufacturing, geographically concentration of manufacturing is happening in favor of the western part of the country and that paves the way to widening gap between the east and the west. Additionally results of spatial statistics indicate the explicit presence of spatial dependence across provinces during spatial concentration. This on the other hand, highlights to spatial spillover effect of existence clusters during the time under consideration. Therefore geographical evolution of manufacturing is happening under the spatial dependency and structural transformation. Analysis at the province level proves that old industrial centers in the country diversify their sectoral structure while emerging clusters specialize in certain industries. It also looks like spatial evolution of manufacturing justifies some assumptions of new economic geography as well.

Keywords: Industrial diversification, evolution, industrial clusters, specialization.

The “occupational skills space” and transferability of human capital : An application to the hydrocarbon sector in Mexico.

Miguel Flores - Tecnológico de Monterrey | **Grissel Olivera** - Tecnológico de Monterrey

As a consequence of the Mexican Energy Reform the hydrocarbon industry faces great challenges in terms of human capital formation. On the one hand, the attraction of foreign investment involves the use of new technologies and production processes and, on the other hand, estimated retirements rates from the existing industry intends to push the labor demand in the sector. In order to identify the potential skill transferability to the oil and gas sector, this article distribution analyses the “occupational skills space” related the production process - upstream, midstream and downstream. The methodology is based on Hausman and Hidalgo (2009) and the data are obtained from the National Employment Survey (ENOE) from which it is possible to assess a matrix of occupations/skills and specific economic activities related to the energy sector. The results of this search aim to identify the current stock of occupational skills and future requirements due to the energy reform which in turn provide insights in the design public policies.

Session

Moving beyond the ‘single path view’ in Economic Geography

Michaela Trippel - University of Vienna | **Björn Asheim** - University of Stavanger

Over the past years much progress has been achieved in understanding how new regional industrial paths emerge in different spatial contexts. Most conceptualisations and empirical analyses in economic geography to date have been focused on one path or new path development activities in one field only. This ‘single path view’ prevailing in the literature seems to be a severe limitation. Many regions host a variety of new path development activities in different fields occurring more or less at the same time. Scholarly work has thus far neglected potential relationships between new growth paths and as a consequence little is known about how they shape each other’s evolution. This calls for conceptual and empirical research on 1) the ways by which new paths complement and reinforce each other in their development (supportive relationship), providing opportunities for path coupling; and 2) when and how they compete with each other over scarce resources (such as highly qualified labour or private risk capital), mobilisation of stakeholders, policy support, etc. (competitive relationship).

We welcome abstracts which connect to one of the following questions: What are the determinants of inter-path relationships and how do competing and supportive relations affect new path development? What is the geography of “path coupling”? Why do some regions succeed in creating supportive relationships between new growth paths whilst others fail? Which institutional capacities of regional innovation systems favour mobilisation and orchestration of heterogeneous actors involved in path coupling to ensure experimentation and technological, social and institutional learning between new growth paths? How do actors, policy incentives and other influences at higher spatial scales affect inter-path relationships? Which policy implications emanate from insights into supportive and competing relationships between new regional industrial growth paths? What is the role of policy in building connections and balancing competition and cooperation between newly emerging paths?

Moving beyond the 'single path view' in Economic Geography I

Towards a comprehensive understanding of new path development

Robert Hassink - Kiel University | **Arne Isaksen** - University of Agder | **Michaela Tripl** - University of Vienna

New path development is a key concept in economic geography, as it explains regional economic inequalities and forms the basis for place-based regional innovation policies. So far, particularly scholars within the Utrecht school of evolutionary economic geography have been conceptualizing and researching new path development. In this paper, we critically discuss their work and conclude that their understanding of new path development is too narrow. Based on that critique, we develop a future research agenda on new path development, which stresses non-firm actors, non-technological knowledge, non-local networks and finally both supporting and competing relations between paths.

Beyond the single path view: Inter-path relationships in regional contexts

Michaela Tripl - University of Vienna | **Camilla Chlebna** - University of Oldenburg | **Alexandra Frangenheim** - University of Vienna

Recurrent economic and financial crises, globalisation, digitalisation and climate change are posing major challenges on regional economies to renew their industrial structures and to nurture new development paths. Over the past few years much progress has been made in understanding how new path development unfolds in a regional context. However, most conceptualisations and empirical analyses to date have mainly been focused on one new path or path development activities in one nascent industry only. Scholarly accounts of new path development have neglected potential relationships between newly emerging paths and as a consequence little is known about how they shape each other's evolution. The aims of this paper are twofold. First, we seek to provide a better understanding of the meaning and nature of relationships between multiple new regional growth paths. The paper suggests a distinction between neutral, competing and supportive relationships and analyses in a conceptual way how these relationships affect new path development. Second, we discuss the policy implications and challenges that emanate from insights into inter-path relationships in a regional context.

The role of clusters for new path development in smart specialisation strategies

Bjorn Asheim - University of Stavanger

Smart Specialisation (S3) is not about 'specialisation' as is known from previous regional development strategies, but about diversified specialisation. Places should identify 'domains' of existing and potential competitive advantage, where they can specialise in a diversified way compared to other countries and regions. Diversification should be based on existing strengths and capabilities by moving into (un-)related sectors.

In the globalizing knowledge economy firms can obtain competitive advantage from being co-located in space as well as being integrated in global value chains. These emergent patterns can find theoretical support in classical writings on clusters (or more precisely on 'Growth Poles') by Perroux. He referred to the exploitation of non-agglomerated external economies as 'Growth Poles' in 'abstract economic space'. He later added to his theory that companies exploiting agglomerated external economies could intensify the benefits of external economies. He called this a 'Growth Pole' in 'concrete geographic space'.

When designing smart specialisation strategies for economic diversification, it is necessary to go beyond 'path extension'. The focus must be on promoting new industrial path development, i.e. path upgrading (renewal, climbing GVC, niche development), path importation, path branching (related knowledge combinations), path diversification (unrelated knowledge combinations), and path creation which represents the most radical form of change.

What role can clusters play for new path development in S3? How could S3 take competing and supportive relations between new paths into account? The paper will discuss these issues using the framework of the opportunity space for regional industrial path development in concrete geographic and abstract economic space. As examples of this one could mention upgrading strategies of climbing GVC, cross-fertilization between clusters locally and non-locally based on related and unrelated knowledge combinations to promote path diversification and new path creation. Empirical illustrations will be taken from Scandinavian, Austrian and Italian clusters.

New path development: evolutionary trajectories of failures

Viktor Květoň - Charles University | **Jiří Blažek** - Charles University

Over the last years, the new path development model elaborating various evolutionary trajectories of regions has been widely established within economic geography. However, evolutionary trajectories that have been conceptualized so far encompass predominately „positive“ pathways, while in reality numerous regions are undergoing „negative“ trajectories. Therefore, the aim of this presentation is to provide an initial proposal for a typology of these „negative“ pathways and to illustrate them either empirically or via reference to the literature. For example, instead of arguably „positive“ trajectory „path branching“ some regions might suffer from path contraction, i.e. narrowing the portfolio of industrial branches. Likewise, instead of path importation some regions might suffer from loss of (talented) labour force and delocalisation of capital (path delocalisation). It will be argued that these „negative“ evolutionary trajectories can be not only closely mutually interwoven, but can be even closely linked to subsequent „positive“ trajectories. Finally, it has to be underlined that these "negative" regional trajectories represent a major challenge from a policy perspective.

Moving beyond the ‘single path view’ in Economic Geography II

Public procurement as instrument for path renewal

Alexandra Frangenheim - University of Vienna

In evolutionary economic geography and innovation studies the active role of the state in shaping path renewal is increasingly appreciated. Academic studies on the challenge of public sector innovation, power relations and decision making have implicitly acknowledged the state as an actor in transition processes. However, we do not know much about the actual nature of the state in different contexts which would help to understand its impact on regional path development.

In the academic and policy debate, a recent trend towards challenge-led science and innovation calls for a redefinition of innovation policy from supporting R&D aiming at enhancing regional competition to facilitating the development of innovations that tackle societal challenges. Although, demand-side policies such as public procurement are meant to have the potential to nurture innovations with goal-orientation, the multiplicity of knowledge sources, actors, activities and relations involved poses major challenges on public sector bodies to nurture collaboration in economic search processes.

In the food sector, current claims for a social and ecological transition give rise to cities as food policy actors in growing cooperation with civil society groups. This paper empirically compares the public procurement of food by the city of Vienna, Austria and the city of Malmö, Sweden. It aims to analyse the governance of transitions in different country and place specific contexts. More collaborative forms of economic search and more inclusive forms of regional governance will be taken into account in the analysis of the policy process. Through the lens of an innovation system framework that allows for a multi-actors approach as well as the consideration of networks and institutions, context specific actors' constellations, interaction patterns and barriers to transformation are analysed in order to provide recommendations to increase the pace and quality of transformation.

How does path interdependence affect new path development?

Yijia Chen - Kiel University | **Robert Hassink** - Kiel University

The notion of new path development has recently received increasing attention in economic geography (Martin and Sunley, 2006; Boschma, 2017; Isaksen and Trippel, 2017; Trippel, Grillitsch and Isaksen, 2017). However, most scholarly work to date focuses on single-path and neglects multi-paths views. In fact, except for path extension, most kinds of new path development have to interplay with other paths, especially path modernization, path branching and path creation (Grillitsch and Trippel, 2016; Isaksen and Trippel, 2016; Grillitsch, Asheim, and Trippel, 2017). This conceptual paper examines three questions, namely why path interdependence happens, what are the determinants of inter-path relationships, and how competing and supportive relations affect new path development. (1). New path development is not only conditioned by pre-existing regional structure, but also by distributed actors jointly aligning and anchoring key resources (e.g., material, knowledge, market, finance, and institution) (Garud, Kumaraswamy and Karnøe, 2010; Binz, Truffer and Coenen, 2016; Grillitsch and Sotarauta, 2018). Since the resources that a new path wants to mobilize are usually structured and structuring other paths (although it may exist in vacuum), a new path has to cooperate or compete with other paths wherein path interdependence occurs. (2) The specific relationship depends on how multi-paths react to the alignment. Based on ‘capital logics’ (Harvey, 2010) and ‘institutional logics’ (Scott, 1995), if the alignment improves all paths’ competitive dynamics (i.e., lower cost, optimize technology, expand markets and access finance) and their social-political legitimacy, the relationship is supportive. Otherwise, competing relations occur. (3) This inter-path relationship affects new path growth by three scenarios. First, the supportive relationship facilitates the new path to mobilize resources and

promotes its development. Second, although facing a competing relationship, the new path successfully mobilizes the resources and grows. Third, the new path fails to align resources under competition.

Exploring patterns of labour mobility and skill-relatedness within regional economies in Spain (2009-2013)

Simón Sánchez-Moral - Complutense University of Madrid | **Alfonso Arellano** - Complutense University of Madrid | **Mario Vale** - University of Lisbon

The recent economic crisis has forced many Spanish regions to search for new sources of growth and employment. This has also increased the interest of developing a knowledge-based economy in the long term. In this context, different policy agendas (i.e. Europe 2020 and EU Cohesion Policy and OECD) have highlighted the positive role of ‘related variety’ within regional economies. Some prior studies have examined the related variety within Spanish regions by exploring, for example, the industries’ common, production patterns. However, our research studies the ‘skill-relatedness’ based on the exploration of the existing cross-sectoral flows of workers between 2009 and 2013. The analysis is based on the information of the Continuous Sample of Working Histories (CSWH), a set of anonymous microdata obtained from a random non-stratified sample. The reference population is made up of people who have been affiliated with the Spanish Social Security Agency during the reference year and those who receive some type of contributory pension. In particular, we have analyzed the working histories of a total of 1,765,992 active salaried workers in order to estimate a skill-relatedness index, similar to Neffke and Henning (2010)’s methodology. The resulting ‘map’ of human capital flows allows us to reflect on the employment behaviour around some key industries (i.e. building activities, tourism and especially knowledge-based industries) and on the potential contribution of related variety to the economic change of different sorts of Spanish regions (i.e. metropolitan regions, former industrial regions and tourism-oriented regions).

Measuring the Bioeconomy – Detecting structural patterns of an emerging political leitmotif

Leonard Prochaska - University of Greifswald | **Daniel Schiller** - University of Greifswald

Lately, the nature of innovation policy has been much debated. Conventional policies aim for market-fixing mechanisms, leaving open space for mission-oriented and thereby market-shaping strategies. Mazzucato & Perez’ (2015) notion of ‘tilting the playing field’ towards the direction of governmental-identified markets or technologies, generates the opportunity and necessity to anticipate and trigger demanded technological paths. Furthermore, as global challenges become increasingly complex due to their far-reaching interrelations, the need to find solutions across different branches and technologies is inevitable. Given these facts, complementary to a strategy and funding scheme to tackle grand societal changes introduced by the EU’s Horizon 2020-programme, individual governments also engage in different innovation strategies to approach these tasks. Due to the urgency to overcome dependence on fossil resources as well as to face anthropogenic climate change, the bioeconomy has become an integral element of innovation strategies. However, the bio-based economy is a holistic and rather intangible political leitmotif, which contains several industries, technological paths and is furthermore dependent on the broad acceptance and sensitisation of the public. We therefore raise the question whether a mission-oriented policy will be able to shape numerous paths simultaneously. Frenken (2017) argues that societal challenges are not easily adopted into innovation policy due to their lacks of a translation into clear technological projects. Against this backdrop, our aim is to break the bioeconomy into its components to evaluate the development of the nationwide innovation policy and its regional variance. We answer the question how the structure of innovation policy in terms of the transformation from an oil-based towards a bioeconomy developed and which spatial patterns underlie these advancements. To this end, we created a distinct database containing all subsidised projects by the federal ministries, captured in the German subsidy database and playing a role in the implementation of a bio-based economy.

Session

Shaping regional growth paths

Markus Grillitsch - Lund University | **Markku Sotarauta** - University of Tampere

Regions have different preconditions to compete, innovate, and stimulate economic growth. Structural factors such as industrial composition, the size of the region, capital and labour endowments, and infrastructure partly explain regional growth paths. What remains unexplained are structural factors that are difficult to capture quantitatively such as institutions and agentic processes that underpin new path development. The current conceptualization of path-dependency in economic geography suggests that history shapes but does not predetermine the further development of regional and industrial paths. Embedded, distributed and foresightful agency comes into play as a major cause for new path development.

The special session is devoted to papers that i) disentangle the structural and agentic effects on regional growth, ii) provide insights into the interplay between structure and agency and iii) focus on the micro-level processes that cause new industrial path development in regions. Contributing to this line of inquiry, the special session invites papers that address questions of the following sort:

- To what extent, under which conditions, and how can agency contribute to regional growth paths beyond what could be expected due to structural preconditions?
 - Which processes within and beyond firms underpin regional growth paths?
 - What are the causal factors explaining new path development in (different types of) regions?
 - How do different regional industrial paths interplay and shape regional growth paths?
 - Why and how does regional path development differ by regional contexts?
 - What is the role of policy in shaping regional growth paths?
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Shaping regional growth paths I

Rethinking Regional Path Creation: A Multi-Actor and Multi-Scalar Approach

Danny MacKinnon - Newcastle University | **Andrew Cumbers** - University of Glasgow | **Stuart Dawley** - Newcastle University | **Andy Pike** - Newcastle University

A burgeoning strand of Evolutionary Economic Geography (EEG) research has focused on questions of regional path creation, based upon the idea that place-specific legacies and conditions play a critical role in the development of new economic activities. Yet there has been little effort thus far to take stock of this emerging body of research. In response, the aim of this paper is to provide a systematic theoretical framework to inform further research on path creation. To accomplish this, the paper undertakes two closely related tasks. First, it presents a critical appraisal of the state of the art in path creation research, aiming to consolidate and extend existing research. In addition to EEG research, this assessment incorporates work on social and institutional processes, extra-regional linkages and technological niches to address identified gaps in EEG research. Second, and informed by the preceding theoretical review, the paper develops a multi-actor and multi-scalar framework for understanding the causal factors that explain new path development in regions. Underpinned by a Geographical Political Economy (GPE) approach, this framework is based upon the identification of the key dimensions of regional path creation and their constitutive inter-relations. Accordingly, the paper argues that it is knowledgeable actors, operating within multi-scalar institutional environments, who ultimately create paths through the strategic coupling of regional and extra-regional assets to mechanisms of path creation and associated markets. After providing a brief application of the framework to different types of regions, the paper identifies a number of directions for further research in conclusion.

Regional Growth Paths: From Structure to Agency and Back

Markku Sotarauta - University of Tampere | **Markus Grillitsch** - University of Lund

The study of regional growth paths is a key theme in economic geography and of elemental interest for policy makers concerned with regional development. Evolutionary theory explains the path-dependent nature of regional development, and points to its open-ended nature. This paper addresses the interplay between path-dependent, structural forces and the construction and utilization of opportunities through agentic processes. Extending to the evolutionary framework, it is argued that not only history but also perceived futures influence agentic processes in the present and thus shape regional growth paths. Building on recent work about foresightful, strategic and distributed agency, this paper identifies three forms of agency, Schumpeterian innovative entrepreneurship, institutional entrepreneurship and place leadership, that call for and necessitate each other in the process of shaping regional growth paths. It is argued that such a holistic view is essential to understand regional development processes and in particular structural change as manifested in economic diversification and new industrial path development.

Modelling the evolution of (bio)clusters: the role of place dependency, path dependency and agency

Ram Kamath - Leibniz Institute of Agricultural Development in Transition Economies | **David Ayrapetyan** - Leibniz Institute of Agricultural Development in Transition Economies | **Frans Hermans** - Leibniz Institute of Agricultural Development in Transition Economies | **Kerstin Wilde** - Leibniz Institute of Agricultural Development in Transition Economies

This study aims to answer the question: How do different regional innovation systems lead to different pathways of cluster development? The study will analyze the evolution of three different bioclusters: Paper province Varmland (Sweden), IAR-Pole (France) and the Eesti wooden houses cluster (Estonia). Bioclusters are agglomerations of geographically proximate and interconnected firms and organizations that operate in sectors relevant to the bioeconomy. We chose to study bioclusters over other types of clusters because the localization of value chains in bioclusters is beneficial for SUSTAINABLE regional development. Each of these clusters is located in a different type of RIS that vary on the basis of degree of specialization and institutional thickness. At the GCEG 2018, we will present an event history analysis of IAR-Pole and explain how its trajectory evolved through the dynamic interplay of: • Path dependency emerging from actors adopting socio-technical structures from industrial regimes • Place dependency emerging from the socio-spatial structures that characterize the RIS, • Purposeful actions: instances of technological and multiscalar institutional entrepreneurship. Both the socio-technical and socio-spatial structures are captured by the domains of Policy, Economics, Knowledge & Technology and Culture. Purposeful actions will, therefore, aim to influence these domains at the level of the cluster, the RIS or beyond. The eventual output of the study will be an agent based model. The model will permit us to explore the range of behaviors a (bio)cluster exhibits under different RIS conditions. To conclude, our study will advance understanding of how 1. A cluster's ability to undergo path extension/renewal or path creation is influenced by the characteristics of the Regional Innovation System (RIS) within which the cluster is located (Isaksen & Trippel, 2014; Trippel, Grillitsch et al., 2015). 2. Purposeful actions (Trippel, Grillitsch et al., 2015) of actors (such as firms, universities etc.) within a cluster

The multiple roles of demand in regional development – a conceptual analysis

Roman Martin - University of Gothenburg | **Hanna Martin** - Karlstad University | **Elena Zukauskaitė** - Halmstad University

This paper contributes to the literature on new regional industrial path development by highlighting the various roles that demand can play in regional development. We develop a conceptual framework relating different roles of demand with different types of new path development. Based on the literature on regional development, we differentiate between the role of demand as anonymous customer, sophisticated buyer, active co-developer, public procurer, and norm and value setter. These roles influence different types of new path development, including path extension, path renewal and new path creation. New path development can be triggered by changing norms and values in the society (e.g. environmental concerns and the growing demand for cleaner technologies), public procurement for innovation (governments demand new products or services and thereby steer economic development) or by users modifying existing products or developing novel solutions that are not yet on the market (e.g. user innovations). To lead to a new growth path, local firms need to sustain, establish and grow their market shares, pointing to the role of anonymous customers. The various roles of demand, as well as its effect on new path development, depends on the geographical context. Changes of demand in one region might contribute to path extension, path renewal or new path creation in other regions. We argue that a nuanced view on demand will add a novel, and as we argue important, dimension to the debate on new path development.

Shaping regional growth paths II

Enabling Creative Destruction - Entrepreneurial Ecosystem Policy

Erik Stam - Utrecht University

In times of technological change and globalization more and more regional and national governments are confronted the task of stimulating new industries in order to compensate for the decline of old industries. They face the challenge of stimulating what Joseph Schumpeter called creative destruction (Schumpeter 1942). Policy makers are turning to the industrial cluster approach to stimulate industrial renewal. However, industrial cluster policy faces the paradox that once it is needed – during industry emergence – it does not have enough information on what activities to target, and once there is sufficient information on established highly productive and internationally competitive industries, there is little additionality of government intervention. The policy rationale for backing winners – the focus of industrial cluster policy – is rather weak. But how to enable creative destruction? Backing challengers should be the focus here: being agnostic on which industry to target and focusing policy attention on taking away the barriers for entrepreneurship and industrial renewal.

The recently emerging entrepreneurial ecosystem approach provides useful policy guidance for enabling creative destruction. In this paper we show how entrepreneurial ecosystem policy provides generic principles for uncovering context specific weaknesses of entrepreneurial ecosystems. We discuss the differences between industrial cluster policy and entrepreneurial ecosystem policy, and discuss for which purposes entrepreneurial ecosystem policy might provide the best policy approach. We provide an overview of the different steps in the entrepreneurial ecosystem policy process, in which diagnosis of the entrepreneurial ecosystem and dialogue to identify a shared interpretation of the weaknesses of the entrepreneurial ecosystem and to priority policies are central.

Entrepreneurship and regional path dependence

Marcin Rataj - Umeå University | **Rikard Eriksson** - Umeå University

It is generally agreed that entrepreneurship is important for regional development (Fritsch and Wyrwich, 2016). An important question in this regard is whether it is local or non-local entrepreneurs that contribute to regional change? On the one hand the literature on embeddedness argue that local entrepreneurs have a home-advantage through access to local networks, information or locally recognizable credibility (Dahl and Sorenson, 2012; Stam, 2007; Schujtens and Völker 2010). On the other hand, it is also argued that locals are less prone to engage in new opportunities and hence less willing to become agents of change (Akgün et al 2011). This latter notion is confirmed in recent studies emphasizing that non-local actors induce significantly more structural change into the regional economy than local actors (Neffke et al., 2014).

To address this potential contradiction regarding the home-advantage, and the competitive advantage of non-locals, this paper takes a perspective of individual entrepreneurs' in the context of evolution of regional industrial diversity. By means of matched longitudinal employer-employee data on all firms and workers in Sweden, the aim of this paper is to assess whether the performance of all start-ups established between 1995 and 1997 is conditioned by their embeddedness in the region. This is proxied as entrepreneurs' previous experience from the region and the degree of fit of the new firm in preexisting regional industrial structures. The findings point towards the self-reinforcing character of entrepreneurial activities of non-local entrepreneurs. As soon as more structural change is introduced into a regional economy, regional conditions become more favorable for non-local entrepreneurs who in turn have a capacity to introduce more structural change. Nonetheless, the possible outcome of this mechanism might be also a lock-in effect, as according to the results regions with little structural change are the least favorable environment for non-local entrepreneurs.

Towards a relatedness framework for understanding new industry development in regions

Teis Hansen - Lund University | **Antje Klitkou** - NIFU | **Anne Tanner** - Technical University of Denmark

The aim of this article is to establish a relatedness framework for understanding new industry development in regions. The evolutionary economic geography (EEG) literature has made significant progress to understand processes of regional diversification. Nevertheless, the EEG approach suffers from a number of shortcomings, which this article addresses. First, the EEG approach face difficulties in explaining why some industries develop in certain regions and not in others despite the regions provide similar initial conditions. Second, the EEG approach tends to overemphasise technological relatedness between pre-existing and emerging economic activities, which result in a neglect of other critical regional characteristics. This paper develops a framework to understand industry emergence in regions by addressing these shortcomings. First, we argue that the reason some regions diversify into some industries and others do not is caused by the mobilisation of resources in the creation of innovation system processes. Second, we unfold the concept of relatedness by arguing that it is multidimensional encompassing besides technological relatedness, also product-market, institutional and natural resource relatedness. The paper draws on extant contributions in economic geography, which supports and exemplifies the proposed relatedness framework.

Divergent urban responses to the credit crisis: the employment growth paths of Amsterdam and Rotterdam, 2000-2015

Jan Jacob Trip - Delft University of Technology | **Koen Caminada** - Leiden University | **Robert C. Kloosterman** - University of Amsterdam | **Arie Romein** - Delft University of Technology

This paper addresses the responses of urban economies to the credit crisis. Based on employment data time series, it looks into how two different urban economies within one national institutional framework, i.e. Amsterdam and Rotterdam, have coped with the effects of the credit crisis of 2008.

Our data show that both cities displayed similar patterns of growth and moved in step with the national trends before 2008. After 2008, both Rotterdam and the Netherlands struggled and employment decreased. Amsterdam, however, recovered much faster after 2008 and has bounced back beyond its pre-crisis level to what appears to be a new growth path with an accelerated growth of employment.

We have applied a shift-share analysis to the employment trends of both cities before and after the outbreak of the credit crisis to be able to identify, on the one hand, the effects of the local sectoral composition and, on the other, those related to more local factors. Our results suggest that this divergence cannot be primarily explained by the differences in sectoral composition. Instead, It appears that particularly city-specific factors play a decisive role in the strong recovery of Amsterdam after 2008.

The final part of the paper zooms in on these local factors. We focus particularly on the question to which extent on the business and occupational structure and labour market in Amsterdam may explain this city's distinct growth trajectory.

Session

Economic Transformation in Myanmar

Frauke Kraas - University of Cologne | **Khin Khin Soe** - University of Yangon

Myanmar is, latest since 2010, experiencing strong and multiple processes of economic transformation. They can be characterised and summarised as follows: To date the rich potential of the landscape and natural resources has only been partially tapped. Agriculture provides employment and thus the economic basis for a large proportion of the population. The many political and economic reforms passed after 1988 and particularly after 2010 aim to improve countrywide infrastructure, promote the private sector and attract direct foreign investment. They promote decentralisation of the administration and institutional transformation, the eradication of price controls and subsidies, the modernisation of the tax and customs system, the diversification of the export sector, the improvement of import and export procedures, and the restructuring of wages and prices. They also provide increased freedom of choice for farmers in terms of the crops they cultivate and the processing, transport and trading of those products. However, these measures have not yet overcome state capitalism to a significant extent.

The greatest obstacles to the mobilisation of direct foreign investment are related to the ongoing problems of macro-economic stability, extensive bureaucracy, widespread infrastructural deficits, economic diversification, the ensuring of long-term guarantees, a lack of openness of the financial sector to foreign competition, and restrictions on the transfer of foreign capital and profits. However, the privatisation measures of recent years have led to the emergence of numerous manufacturing, trading and services companies that supplement the large, efficient, state-owned enterprises with their export trade. In addition to growing numbers of companies involved in textile, garment and food production there are more and more service enterprises (especially in the tourism sector). Foreign investment is particularly over-concentrated in the metropolitan areas of Yangon and Mandalay.

Against this background, it is the aim of the session to analyse and discuss the recent economic transformation processes of the country and to develop recommendations for improved transformation processes country-wide and for its different States and Regions.

The Development of Special Economic Zones in Myanmar

Sina Hardaker - Julius-Maximilians-Universität Würzburg

The presentation discusses the role of Special Economic Zones (SEZs) within the economic policy of Myanmar. With the transition from junta rule to constitutional government in 2011 came a dramatic change in the political and economic mindset of the Myanmar government. One main objective of the reforms is to bring about structural change and enhanced economic development. The efforts to push forward several of these reforms and objectives culminate in the development of three SEZs: Thilawa Port and the SEZ on the outskirts of Yangon, Dawei SEZ near the Thai border, west of Bangkok and Kyaukphyu SEZ near the border with Bangladesh - in collaboration with the respective governments of Japan, Thailand and China. The presentation examines the remarkable development plans of SEZ in Myanmar in more detail. It begins with the economic context by addressing the main features of the economy, highlighting current performances and key issues. With the development of the three SEZs, the presentation draws attention to the arising questions as to why the establishment of SEZ has been chosen and whether economic development can be achieved through their installment. With site visits of the three developing SEZs in Myanmar and three initial interviews conducted with respective managing representatives, the presentation draws on evidence from the South-East Asia region to explore the wider social and environmental impacts of SEZs, and argues that Myanmar's recent SEZ policy has the potential to diminish trade expenses, activate productivity enhancements, and push-start manufacturing activity. However, it is reasoned that despite the fact that foreign direct investment (FDI) is very likely to be stipulated, the development of SEZs employs a number of risks and it is questionable whether mainly low quality and low-paid jobs are on offer.

Industrial Zones in Myanmar: Challenges and Options

Frauke Kraas - University of Cologne

Although the secondary sector has been growing in recent years, prior to the post-2011 reforms its role in the country's economic development was relatively minor by comparison with the primary and tertiary sectors: its contribution to GDP was 9.7% in 2000/01 and 17.5% in 2005/06. Since 2010/11 its share has risen steadily from 26.5% to 34.4% (2014/15), with processing and manufacturing accounting for nearly 20% of this. Geographically, enterprises in the secondary sector that contribute to the gross domestic product (GDP) are concentrated on the one hand in some centres of mining and energy generation and on the other in industrial manufacturing sites, the majority of which are located in the central lowlands and the leading centres of Yangon and Mandalay and in some regional cities. In the peripheral parts of the country, GDP is generated mainly by the construction sector. Privately owned factories are concentrated in two separate areas: the Mandalay Region (2009: 17.7% of all companies in

Myanmar) and the Yangon Region (14.0%). With the addition of the Bago, Sagaing and Ayeyarwady Regions, almost 70% of all private-sector industrial companies are located in these five areas.

Privatisation in the secondary sector is rising, thus industrial zones are gaining importance. The creation of special industrial zones is intended to foster industrialisation throughout the country. However, many of these zones – especially apart those which are located in or near the big cities, notably Yangon and Mandalay – are only partly successful. Development is hindered by bureaucratic obstacles, the time-consuming process of obtaining licences, small-scale development as a result of

Agriculture Development in Pyay Township: Potentials, Perceptions and Activities

Khin Khin Soe - University of Yangon

Agriculture Development in Pyay Township: Potentials, Perceptions and Activities Khin Khin Soe Abstract Agriculture is the mainstay of the economy of Myanmar. It contributes 32 percent of GDP and 17.5 percent of total export earnings. In addition, 61.2 percent of labour force is engaged in agriculture (MOAL, Nay Pyi Taw, 2013). Most of the people are farmers and live in rural areas. In accordance with the market-oriented economy, government promoted the use of modern technologies, especially the use of special seeds (High Yield Varieties), pesticides, insecticides, and chemical fertilizers (Mi Mi Kyi, 2005). Pyay Township is a flat plain which lies on its western part of Ayeyarwady River. Due to its favourable physical conditions are significant in agricultural activities. In this research examines four major types of agriculture such as cereal crops, oil seeds, industrial crops and gardening. After the construction of Nawaday Bridge, warehouses business and the communication sector have improved. The total cultivated was 42825.49 hectares in 1999-2000 and increased to 44492.80 hectares in 2014-2016. The economy of the study area depends heavily on agricultural sector. Recently, farmers could earn more income by using multiple cropping systems and practicing intensive cultivation with changes in crop patterns and farming methods. The main aim is to analysis on the importance of Agriculture sector in Pyay. The main objectives are to examine spatial and temporal variation of type of crops and to analysis farmer's perceptions on agricultural activities. The paper is based on quantitative and qualitative fieldwork in 2013, 2014 and 2016 in Pyay. First a literature review took place and secondary data (numbers and types of crops) was collected from General Administrative Department, Agriculture and irrigation Department. Then key actors were asked in qualitative open interviews with local experts (farmers). Finally, a SWOT analysis comes to a comprehensive assessment.

Session

Multi-Scalar & Multi-Dimensional Aspects of Technological Change and Regional Economic Development

Dieter F. Kogler - University College Dublin | **Ron Boschma** - Utrecht University/University of Stavanger | **David L. Rigby** - UCLA

Questions regarding the persistent nature of uneven regional development and inequality are at the core of Economic Geography inquiry. What are the factors that determine the socio-economic fabric of places, their economic performance, and the well-being of people living and working in these jurisdictions? It is clear that the fortunes of places have diverged dramatically over time. Some have shown themselves resilient to maturation of key technologies and industry life cycles, able to diversify at key moments, while others appear locked-in to increasingly obsolete practices, consequently losing their ability to sustain wages and jobs.

Contemporary work in Economic Geography, and in particular Evolutionary Economic Geography, is exploring the multi-scalar and multi-dimensional aspects of regional economic development. Essentially, recent inquiries are moving from a hierarchical to a networked view of places, and from models that aimed to identify individual factors of economic stimulus to ones that attribute increased attention to the interaction among the significant dimensions that shape economic development, i.e. the relational and ever evolving networks between individual actors, organizations, institutions, traded and untraded interdependencies, as well as policy instruments that penetrate jurisdictional boundaries, amongst others.

We seek papers of a theoretical or empirical nature that explore the dynamics of regional economies, how economic agents in different places generate opportunity, how they respond to economic shocks, and continuous technological change. Contributions that focus on the development of new growth paths in regions, and on the impact of institutions and directed policy measures such as Smart Specialization Strategies are of special interest. Finally, the way in which these processes are linked to inequality, within and between regions, are most welcome.

Multi-Scalar & Multi-Dimensional Aspects of Technological Change and Regional Economic Development I

Personality, Proximity, and Firm's Knowledge Management in Technological Changes and Regional Economic Development: A Theoretical Framework

Sam Ock Park - Seoul National University | **Mihye Park** - Seoul National University

During the last decade, regional economies in the world have experienced dynamic changes with rapid technological changes, global knowledge flows, global recession, regional resilience, etc., resulting disparities in diverse spatial scales. Individual personality and firm's knowledge management strategy in terms of knowledge exploration and exploitation are relatively neglected in the research of the dynamic regional economy and technological changes.

The purpose of this study is to develop theoretical notion of dynamic regional economy and regional development with integration of spatial and non-spatial factors in innovation process. Regional economy evolve over time through diverse interactions with individuals, firms, and institutions in local, regional, national, and global context, representing multidimensional aspects of development. At the individual level, personality or character is a significant factor for innovation network, while at the firm level, strategic behavior and management strategies for knowledge exploitation and exploration are significant for innovation and firm growth. Personality, knowledge flows, and firm knowledge management strategy are all related to the knowledge creation and innovation process. In this non-spatial dimension, cognitive, social, institutional, and organizational proximities are important for an innovation process. In the spatial dimension, geographical proximity, core-periphery relations, and local-global networks are related to an innovation process. Then, the spatial and non-spatial dimensions are interlinked to the different types of knowledge bases and resulting dynamic regional economy.

Considering rapid technological changes with regard to the 4th industrial revolution, the interrelated notion of knowledge bases, proximity dimensions, and firm's knowledge management strategies become more complex and important in the regional economic development and policies. The integrated theoretical notion for dynamic regional economic development will be developed and some examples will be discussed.

Approaching multi-scalar systems of resource mobilisation

Jonas Heiberg - Swiss Federal Institute of Aquatic Science and Technology | **Bernhard Truffer** - Swiss Federal Institute of Aquatic Science and Technology

Research in EEG and transition studies has recently advocated a more systemic, multi-scalar understanding of industry formation and diversification processes (Boschma et al 2017). The global innovation system (GIS) framework (Binz & Truffer, 2017) provides a new theoretical perspective, proposing ways to address different spatial scales of resource formation and structural couplings in technological innovation systems (TIS). While recent studies started to investigate the mobilisation of specific system resources without predefining a specific spatial scale (Stephan et al., 2017, Jeannerat & Kebir, 2016, Markard et al., 2016), they mostly focused on globally dispersed knowledge networks and their evolution (Binz et al., 2014, Sengers & Raven, 2015). Other system resources like financial investment, market formation and legitimacy (Binz et al., 2016) were only cursorily addressed in a multi-scalar perspective. Building upon a review of possible data sources and methodologies for GIS research, we argue in line with Binz et al. (2014) for a high potential of social network analysis (SNA) and related techniques to identify subsystems and structural couplings that are key to resource formation processes. More specifically, we apply Discourse Network Analysis (DNA) (Leifeld, 2009, 2018), a methodology combining elements from discourse analysis and SNA, to a global sample of newspaper articles covering legitimacy formation processes for emerging water technologies (Larsen et al., 2016). Preliminary results indicate that a variety of data sources may be operationalised with help of SNA related methodologies when mapping linkages between subsystems of resource mobilisation. The exemplary study applying DNA indicates that legitimacy for new technologies in the water sector forms in discourse coalitions that often transcend regional boundaries, either supporting the dominant global regime (Fuenfschilling & Binz, 2018) or supporting the emerging GIS. From a regional perspective, the kind of legitimacy dynamics at work may indicate potentials for unrelated or related regional diversification processes

Inventing by Doing

Christopher Esposito - University of California

How do inventors develop new technologies? In this study, I use detailed patent records to show that invention is best understood as a learning process. Inventors develop new technologies by reassembling existing components into new forms. This process is cumbersome, however, because inventors do not know how to develop technologies that do not already exist. In order to penetrate

the technological frontier, inventors have to overcome a high degree of uncertainty – an uncertainty only overcome through an iterative learning process. The theoretical and empirical models developed in this study generate powerful predictions for the geographical location of inventive activities and the geographical income inequality that is expanding across the United States and much of Europe.

An integrated or isolated landscape? (In)dependency of the Polish aviation industry from global production networks. The Case of United Technology Holdings (UTH)

Lech Suwala - Technische Universität | **Grzegorz Micek** - Jagiellonian University | **Arkadiusz Kocaj** - Jagiellonian University

The paper discusses the development path of the Polish Aviation Industry (PAI) as a growing, complex (international) network of interrelated actors and institutions. This promising path, however, was not possible without a massive international involvement. Against this background, the paper juxtaposes a latent (in) dependency of this industry from global production networks (GPN), represented here by the leading, global corporation US-based United Technologies Holding (UTH) which own significant assets in Poland.

Hereby, we aim to explicitly combine different theoretical approaches (dynamic strategic coupling, liability of foreignness, and main three interrelated GPNs conceptual categories of value, embeddedness, and power) in order to shed some light if and how a(n) (in)dependency is prevalent. This eclectic theoretical framework allows (1) to observe the position of the PAI in value added activities, (2) to locate the PAI in the realm power relations, (3) to make statement if and how embeddedness or foreignness/ otherness strategies are implemented against a thin line between strategic coupling and strategic isolation. The case study rests unique database on over 50 in-depth interviews with manifold stakeholders of the PAI (enterprises, politicians, academics, business developers) and almost all UTH branches in Poland.

The results show that the PAI is on a promising - albeit stony and arduous - path with an unpredictable outcome. The massive presence of the UTH has ambivalent effects; on the one hand a profound modernization of former state-owned enterprises took place, a general access to the GPN, and transfer of knowledge and technology was provided; on the other almost all significant large Polish enterprises have lost its sovereignty, names and the question remains whether we only observe a retrocursive trend of the PAI towards a peripheral workbench in the realm of a low-cost location or a genuine involvement of indigenous firms in upgrading processes.

Multi-Scalar & Multi-Dimensional Aspects of Technological Change and Regional Economic Development II

Complexity and the Geographical Flow of Tacit and Codified Knowledge

David Rigby - University of California Los Angeles

At least since the work of Jaffe et al. (1993), researchers have tracked the flow of knowledge using patent citations. Early results, using a case-control design to correct for the geography of knowledge production, showed that knowledge spillovers or disembodied flows of knowledge, were localized. Later studies highlighted the importance of technological aggregation, the originator of citations and social networks in regulating knowledge flow. Arguments about the changing geography of flows over time were put to rest by Sonn and Storper (2008), who revealed that since 1980 there has been no reduction in the local character of citations. While most work to date has focused on patents in general, Sorenson et al. (2006) and Balland and Rigby (2017) have suggested that more complex forms of knowledge do not tend to travel as well as less complex forms. Building on Kogut and Zander (1992), who contend that complexity is a critical dimension of tacit forms of knowledge, we thus have limited evidence of the movement of tacit and codified forms of knowledge. This paper explores over 60 years of U.S. citation data spanning the period since 1950. The complexity of patents is estimated and the role of complexity in shaping the geography of knowledge flows is detailed. The results cast new light on the relative mobility of tacit and codified forms of knowledge and how that mobility has shifted over time.

New or Less-related Technology Recombination and Regional Productivity

Changjun Lee - Spatial Dynamics Lab, University College Dublin | **Dieter Kogler** - University College Dublin

Most novel innovations originate by combining previously unconnected technologies (New or Less-related recombination, NLR), or via improvement on already existing technological knowledge combinations (High-related recombination, HLR). Scholars in

Evolutionary Economic Geography have taken the positive relationship between new recombination and productivity for granted; however, important questions concerning the relationship between the recombinant types of knowledge and the regional productivity remain unanswered. By virtue of the knowledge space methodology, meta-frontier analysis, and a newly updated patent database, it is now feasible to investigate the different effect of NLR and HLR on regional productivity. PATSTAT and regional socio-economic data (1981-2014) are utilized to investigate regional knowledge spaces and their productivity. First, we measure each regional capacity in NLR and HLR by considering the accumulated pan-European knowledge space. Second, we divide the regions into four groups; NLR, HLR-focusing, ambidextrous, and handless. Lastly, the within-group efficiency is measured by Stochastic Frontier Analysis and the between-group efficiency is measured by Meta-Frontier Analysis. The main findings show that the average technical efficiency of HLR-focusing group has always been higher compared to the other groups since 1981, yet in the perspective of a meta-frontier analysis, the NLR-categorized group caught up or even turned the table during the periods of 1991-1996 and 2001-2005. We conduct the same analysis in three different sectors (manufacturing, service, and agriculture). Policy implications are discussed in the context of regional and sectoral innovation strategies for sustainable growth driven by high productivity.

Recombinant innovation in solar photovoltaic technology: do knowledge bases of regions matter?

Deyu Li - Utrecht University

The regional diversification literature has been focusing on the role of local related capabilities in the development of new technologies in regions. Less attention has been paid to new technologies which differ from the existing knowledge base of a particular sector and whether they require different level of local capabilities. The recombinant approach of innovation provides new insights into the regional diversification process that radical new inventions are the results of the recombination of existing technologies. However, the key question that whether technologies present in the same region are more likely to be combined remains less explored. Bringing together both literatures, the paper proposes that the extent of local capabilities used in an invention exhibit an inverted U-shaped relationship with the likelihood of creating new combinations. Our analyses of the solar photovoltaic patents applied between 1998 and 2012 show that inventions with intermediate level of local capabilities are most likely associated with the creation of new combinations. Furthermore, our results show that the knowledge diversity of a region positively moderates the inverted U-shaped relationship, whereas the prior experience of a region in solar photovoltaic technology negatively moderates the inverted U-shaped relationship between the level of local capabilities used in an invention and the novelty of that invention.

Knowledge Spaces – The Evolution of the Inventor-Firm-Location Nexus

Dieter Franz Kogler - University College Dublin

The spatial footprint of an entity is usually determined by its headquarter location as well as the location of its branch offices and subsidiaries. To date, the inventive or technical knowledge footprint of entities determined by the location (residency) of its associated inventors has not been considered systematically. Insights into the inventor-firm location nexus will provide the opportunity to explore how patterns of collaborations, citations, re-combination and technological development change when firms move over space. Findings of the proposed investigation will enhance existing and develop new theories concerning the location strategies of firms and provide important insights for regional economic policies that aim to achieve technology upgrading by attracting talent. Multiple location and knowledge attributes of inventors and firms significantly adds complexity to the original knowledge space methodology (Kogler et al., 2013; 2017).

Multi-Scalar & Multi-Dimensional Aspects of Technological Change and Regional Economic Development III

Sectoral specificities in the regional path creation trajectories of cleantech industries – A reinterpretation of the evidence from China

Christian Binz - Eawag - Swiss Federal Institute of Aquatic Science and Technology | **Jorrit Gosens** - Aalborg University | **Xiaoshan Yap** - Utrecht University | **Zhen Yu** - University of Hull

The spatial determinants of industrial path creation differ between industries with varying technology characteristics (Huenteler et al. 2016). In some cases, specialized regional supplier industries and related capabilities are a key prerequisite for successful industry formation (Garud and Karnoe 2003). In others, multi-scalar actor networks and internationalized institutional structures are more important to explain how and where new industries locate (Quitow et al. 2016). To date, these differences have not been

systematically conceptualized, in particular not for emerging cleantech industries (Boschma et al. 2017). We address this gap by connecting the literature on industrial path creation with recent work on global innovation systems (GIS) (Binz and Truffer 2017). GIS literature distinguishes between four generic industry types with 1) 'footloose' (e.g. smartphones, PV panels); 2) 'spatially sticky' (e.g. steel, off-shore wind); 3) 'market-anchored' (e.g. airplanes, water recycling); and 4) 'production-anchored' (e.g. wine, solar water heaters) innovation system structures. We expect the international industry formation trajectories and regional precondition for successful path creation to systematically differ between these four industry types. This assumption is explored based on a comparative case study of the industry formation patterns in four Chinese cleantech industries (solar PV, wind power, water recycling and solar water heaters) that each exemplify one of the generic GIS configurations. A structured cross-comparison of existing evidence and the author's prior expertise in each industry (backed by more than 150 expert interviews) allows us to formulate new hypotheses. I.e. related diversification processes play a more important role in industry types 2-4 than in industries with a footloose GIS configuration (type 1). Similarly, shifts in the spatial configuration of the industry happen faster and more often in 'footloose' GIS industries. We conclude by outlining the broader implications of these findings for path creation literature, as well as industrial policy making and smart specialization strategies.

Knowledge space evolution and the adaptive resilience of European economies

Silvia Rocchetta - University College Dublin | **Dieter Kogler** - University College Dublin | **Chanjung Lee** - University College Dublin | **Andrea Mina** - Sant' Anna school of advanced studies

In this paper we explore the effect of the different technological structures on the resilience of regional economies throughout a destabilizing shock. We conduct an econometric examination of the drivers of resilience by exploiting a panel of European NUTS II level data that covers the 2004-2011 period. Our results indicate that, during the crisis period, regions with a coherent knowledge base are better able to deal with unforeseen disturbances. Moreover, our evidence suggests that the ability of regions to be resilient is driven by their capacity to undertake processes of technological renewal.

Diversification of Cities in Times of Major Crisis: how resilient are US cities during the period 1836-2002?

Ron Boschma - Utrecht University/University of Stavanger | **Pierre-Alexandre Balland** - Universiteit Utrecht | **Sergio Petralia** - Universiteit Utrecht | **David Rigby** - University of California Los Angeles | **Mathieu Steijn** - Universiteit Utrecht

Regional resilience is high on the scientific and policy agenda. However, little is known about whether major economic crises are good or bad for regional diversification, and whether more diverse regions are more capable of diversifying into new activities in highly unstable periods. This paper investigates the effects of three of the most turbulent and pervasive crises in U.S. history (the Long Depression 1873-1879, the Great Depression 1929-1934, and the Oil Crisis 1973-1975) on the entry of major technologies in 367 U.S. metropolitan areas. We find that American cities diversify less in times of crises, and also diversify in more related activities during crises. Diverse cities diversify relatively more in less related technologies, compared to more specialized cities. We found no difference between diverse and specialized cities in how they change their diversification pattern when a major crisis occurs.

The Production of Renewable Energy Knowledge in Geographic, Social, and Technological Space

Peter Kedron - Arizona State University

How regional differences interact to shape and re-direct regional development trajectories remains an unanswered question at the center of economic geography. While knowledge formation is acknowledged as a key driver of technological change and economic performance, a consensus has yet to emerge on how a region's knowledge affects the development of related ideas in proximate regions and the subsequent economic performance of those locations. This ongoing uncertainty is in part the result of differences in the industries responsible for the growth of different regions. To address this issue in one industrial context, we examine the United States' production of renewable energy knowledge within geographic, social, and knowledge space. Renewable energy production is expected to provide a platform for regional economic growth, while simultaneously alleviating dependence on conventional energy sources. Resource geography suggests the uneven distribution of renewable resources will constrain the developmental benefits of energy production to resource rich areas, but offers limited insight into the spatial patterns and associated benefits of renewable energy knowledge production. By examining the direct and indirect effects of a region's knowledge and characteristics in three spaces, we provide a foundational analysis of the mechanisms of knowledge formation and regional development in one industrial context.

Session
Factors of Economic Development

Hans-Christian Busch - University of Cologne

Path creation in the evolution of the London and Singapore software clusters

Jack Harris - National University of Singapore

Recent debates in evolutionary economic geography have looked at how path creation has shaped the economic environment in terms of technological, regional and industrial evolution. This paper uses an institutional approach to path creation, arguing that with both top-down government-led institutions and bottom-up firm-led institutions capable of providing cluster externalities, how the configuration of these institutions changes over time will have important effects on the evolutionary trajectories of clusters, particularly in clusters that have received such attention from policy-makers. Using qualitative interviews and historical secondary data, I look at how the evolution of the London and Singapore software clusters has been driven by changes in their institutional configurations.

Multiple phases of path creation can be identified that are responsible for transitioning the clusters through the various stages of cluster evolution, from emergence, through growth, and into two types of cluster reorientation. At each of these stages, government or firm actors are responsible for moments of path creation through institutional change, both influencing the cluster through their provision of externalities, and by changing the conditions available for future path creation. My findings suggest that clusters do not always emerge and transition to the growth stage of cluster evolution naturally, but may need purposive action by either firm or government actors in order to realise the externalities needed for these changes. Furthermore, cluster re-orientation from software clusters more broadly to ones which have a significant focus on FinTech, and from an early-stage startup focus to a later-stage scaleup focus, were also brought about by purposive action between firm and government actors. There is also evidence that lock-in had begun to occur during the various phases that may have led instead to cluster stagnation, without these moments of path creation.

Status of life of tribal peasants in a riparian village in Nagaon District in India

Gajendra Mohan Dev Sarma - Raha College

Agriculture, till today, remains the principal livelihood for more than sixty percent of the Indian population, the majority of whom till the soil mainly for their sustenance and unknowingly contribute to the national agricultural production. Being deprived of modern amenities, the peasants live a life blessed by the traditional knowledge base mainly dependent on nature. They suffer from numerous socioeconomic curses like illiteracy, superstitions, social deprivation, lack of sanitation and pure drinking water, malnutrition, difficult access to medical aid and life insurance, etc. and exhibit a very low status for the indicators of human development index (HDI). Very often they do not get the justified prices for their agricultural output and, some of them, out of severe depression, sometimes choose even the most tragic option of committing suicide. The present study is an investigation on the status of life of the peasants representing the Tiwa tribe living in a village settled along the embankment of the Kopili, a tributary of the river Bramaputra in Nagaon district in Assam in India. Most of the respondent peasants were found to work as agricultural labourers in lands owned by others and live below the poverty line (BPL).

Keywords : status of life, peasants, Tiwa, Nagaon, Assam, India.

Corruption and Uneven Spatial Development

Barney Warf - University of Kansas

Government corruption is a debilitating obstacle to economic growth around the world. Corruption creates and accentuates inequality and inefficiency in the delivery of public services, encourages the pillage of natural resources, and creates widespread distrust of the state among the public. This paper opens with an overview of the causes of corruption, and then dwells at length on its economic impacts. Using data from Transparency International, it offers an empirical analysis of how corruption varies spatially worldwide, including the geography of bribes, and corruption's statistical relations to GDP growth, FDI, literacy, income inequality, freedom of the media, and measures of how emphatically (or not) governments have sought to combat it. It concludes by emphasizing how conclusion and uneven development are simultaneously determinant phenomena, and notes that anti-corruption strategies have largely failed because they do not address the structural determinants of corruption.

Lead firms or system suppliers: A case for 'practice-oriented' approaches?

Godfrey Yeung - NUS

Lead firms play a dominant role in the governance structure in conventional global production networks (GPN) analysis. Suppliers and contractors have to utilize local endowments to couple with lead firms strategically to engage in the GPNs. This is especially the case of producer-driven chains in automobiles, electronics or shipbuilding where competitive advantages of international oligopolies (lead firms) on technologies and scale economies allow them to play an instrumental role in connecting competent local suppliers to GPNs. Based on a retroductive approach, the specific inter-firm practices and relationships in automotive sector questions the asymmetrical power relationship commanded by lead firms portrayed in conventional GPN analysis. This is especially the case in sub-sectors where (new) technologies could have a disruptive effect on the governance structure of inter-firm practices. The conventional boundary of lead firms becomes permeable when there is an external shock, be it a result of a combination of extra-firm factors, such as new regulations or massive shift in consumers demand, or the entrance of an entirely new lead firm, which could have a technological breakthrough or with an innovative adoption of existing technologies on a product. This external shock could have disruptive effects on the GPN, from strategic decoupling, the exit of current lead firms and system suppliers to the entrance of new system suppliers or lead firms. Subsequently, an augmented GPN with newly established boundary is established.

Session

Economic Geography perspectives in Germany

Boris Braun - University of Cologne

Fiscal effects of core-periphery structures on municipal budgets

Frauke Richter - University of Greifswald | **Daniel Schiller** - University of Greifswald

Municipalities are key actors for the provision of public services in Germany. To sustain an appropriate level of life quality providing a sufficient amount of public services and infrastructure is essential. Therefore, cities and communities need to meet a broad range of tasks and functions. In addition to their obligatory duties, the municipalities fulfill voluntary functions to secure appropriate living standards in their community. In order to ensure the self-government and local authority of municipalities, an adequate financial basis is necessary.

The financial basis of a municipality consists of taxes from inhabitants and companies. These taxpayers also utilise public goods and services. Thus, inhabitants are not only taxpayers but also users or consumers. Asymmetries result if users of tax-funded public services are not inhabitants in the same municipality. Financial asymmetries occur frequently because of suburbanization processes or structures of the central place system. People move to the surrounding area of cities, but keep on using the infrastructure and public services of the core city.

Against this backdrop, the main purpose of our paper is to constitute the financial relations between core (centres) and the periphery (surrounding area). First, we discuss the effects of core-peripheral structures on municipal budgets from a theoretical perspective. Economic theories mostly explain the development of core and periphery due to market-based processes. For the provision of public goods and services these market approaches fail to explain financial mechanisms. Using approaches from the fields of economic geography, planning, regional economics, public administration and related disciplines, we derive hypothesis, which are then tested using empirical data from the German free state Saxony.

Second, some core regions already receive additional money to provide central-specific infrastructures and services via the financial equalization system between municipalities. We will analyse indicators to measure these financial flows and debate their appropriateness.

The impact of regional redistribution policies on interregional mobility in Germany

Sven Wardenburg - Philipps-University | **Thomas Brenner** - Philipps-University Marburg

Fostering equivalent living conditions between regions is one of the central motives in German regional planning strategies and written down in German constitution. Due to this, redistribution policies provide funds or fiscal transfer for structurally lagging regions and firms in these regions to reduce inequalities. In contrast to this claim, population development in Germany is split into prosperous growing cities and peripheral regions falling short of this development and challenged by the demographic situation. Our main research question is, whether redistribution policies have any impact on residence mobility between German regions, which is used as an indicator for the development of regional living conditions. Especially regional inequalities in the availability

of jobs, payment and social infrastructure are push factors causing mobility between German regions. The emerging accumulation of human capital reinforces future inequalities and diminishes economic development potentials.

Although empirical research examining the economic effects of redistribution policies is very popular, there is little empirical work on socio-economic consequences, directly affecting living conditions, public services and social fairness. The contribution of the paper is to close this gap in empirical research and expand the knowledge about the impact of regional policies on interregional migration by analyzing the effects of different redistribution policies to migration flow in German administrative districts. We focus on the community task “Improving regional Economic Structure” (GRW), vertical fiscal equalization on municipality level and third the impact of universities and research institutions.

We extract causal effects on migration balance of different age cohorts by using a spatial vector-autoregressive panel model (SpVAR) with least squares estimations including fixed effects, while controlling for potential endogenous socio-economic variables and spatial spillovers. From that we can compute Impulse-Response-Functions that include direct and indirect effects between variables. A panel data set for the 402 German administrative districts is used.

The East German Transition Process: Are There Regional Differences?

Oliver Ludewig - Institute for Employment Research - IAB | **Michaela Fuchs** - Institute for Employment Research - IAB | **Oskar Jost** - Institute for Employment Research - IAB | **Klara Kaufmann** - Institute for Employment Research - IAB | **Antje Weyh** - Institute for Employment Research - IAB

Even almost thirty years after Reunification, the East German economy is still lagging behind in several areas. While unemployment rates between East and West continue to converge, productivity and pay are substantially and relatively stable below the West German level. These facts give rise to the questions whether the convergence and reconstruction process of the East German economy came to a standstill or not? And whether there are regional differences in the reconstruction process or not? Labour reallocation is one major channel of adjustment processes in market economies. Jobs are lost in shrinking or closing companies, which produce less demanded products and services or are unproductive. At the same time, new jobs are created in growing or newly established companies that offer goods which are in greater demand or are more productive. This job turnover describes the permanent adaption process.

We use the job turnover to describe the East German reconstruction process. However there is a permanent adjustment process in dynamic market processes. That is, only a part of the East German job turnover is reflecting the transition process. We are able to identify the East Germany transition component, by subtracting the West German job reallocation rates from the East German rate by matching similar West German establishments to every East German establishment. We show, using this adjusted labour turnover rate, that there are four distinct periods – rapid reconstruction, stagnation with job loss, slow reconstruction and a petering out of the transformation process – between 1993 and 2016. Building on these results we compare difference in timing and length of these periods on regional level (Bundesländer). We try to identify more and less successful adjustment paths and accommodating factors on the federal state level.

Temporary workplaces in urban settings

Anna Growe - Universität Heidelberg

In geography, work processes in the knowledge economy have long been analysed mainly through the lens of social theories with a focus on actors, networks, and interaction. However, actors, networks, and interactions are grounded in specific physical places, also used in temporary constellations and interrelating with actors and their immaterial interactions.

Knowledge exchange through face-to-face interactions as well as knowledge generation at specific locations play a central role in generating intangible products in the knowledge economy. These geographies of knowledge creation imply that it is not so much on the urban or regional scales where knowledge creation happens but on the smaller scale of locations like offices, transportation hubs, conference venues and cafés. Here, the space-time dynamics of knowledge production creation coincide with physical characteristics of places. Some places are used frequently, others temporary and at rare intervals within the work process. The question of how exactly social processes of knowledge creation are connected to these physical places is still debated.

The paper addresses two aspects. First, on the basis of qualitative interviews with actors of different knowledge intensive business services, the paper identifies types of temporary workplaces embedded in different logics to one another. Second, using the example of three specific case studies – the Heidelberg SAP APP House, the Heidelberg Dezernat 16, and the online platform Spacebase – possibilities to use the in the first step identified types of relating workplaces for developing urban quarters are discussed.

FIRMS, INDUSTRY AND TRADE

Session

Foreign Investment, Multinationals and Regional Development

Riccardo Crescenzi - London School of Economics | **Alexander Jaax**

In order to maximize their economic development potential in terms of employment, growth, and innovation, regions cannot rely exclusively on local knowledge assets, but should benefit from a combination of “local buzz” and “global pipelines” or, more generally, global networks. A crucial role in this respect is attributed to foreign investment (FDI) and multinational enterprises (MNEs) that tap into pools of knowledge outside their place of origin, generating multidirectional flows of capital, labour and knowledge between places, with potential contributions to local and regional innovation and development. Policy makers in virtually all countries and regions have adopted a variety of measures and incentives to attract MNEs in order to leverage these potential benefits.

This special session invites papers that explore the linkages between regional trajectories and economic development and Foreign Direct Investment and Multinationals. We particularly welcome submissions that analyse longitudinal data to explore the following areas:

- Location behaviour and strategies
- Local impacts regarding economic development, growth, employment, and innovation
- Local and regional policies targeting FDI
- New methodological approaches to the measurement of firm performance and local impacts
- The relevance of entry mode (greenfield vs. M&A) and business function of subsidiaries
- The link between FDI and labour mobility
- Relations between domestic agents (e.g. firms, inventors) and subsidiaries of multinational enterprises

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Foreign Investment, Multinationals and Regional Development I

Uneven Ties: The Imposition of Inequality through Interscalar Networks

Ronald Wall - IHS/WITS University | **Uma Kollamparambil** - IHS/WITS University

The current globalization discourse increasingly expresses a concern for the rising risk of inequality (Alvaredo et al. 2018). Based on observed changes in Gini coefficients, inequality has escalated in most countries over the past two decades (IMF, 2007). Income inequality at the country level can be decomposed into inter-city (or inter-region) inequality and intra-city (or intra-region) inequality (Kanbur 2014). However, studies on the impact of globalization on inequality at the country level (IMF, 2007) have not been able to decompose this effect across international network scales of investment (FDI). For this reason our study bridges inequality theories with world city network literature. Hereby, the complexity of contemporary economic globalization and its impact on territorial development are integrated (Alderson and Beckfield 2004, Coe et al. 2008, Wall 2009).

In this way we argue that not only is the economic status of a city defined by its position within transnational networks (Sheppard, 2002), but more importantly its performance in terms of income distribution. More importantly, we show that city and country inequalities are affected by different scales of network centralities of FDI (e.g. betweenness, closeness, degree, structural holes, sectoral variety and network distance). Furthermore, the study focuses on the impact of FDI on inter-regional and intra-regional inequality, by covering the world’s major cities and their respective countries - hereby contributing to literature by providing comparative analysis at the city and country level (multilevel analysis), based on a unique, comprehensive database. Also, the study reveals the direct and indirect effects of FDI on income inequality at city and country level through multilevel structural equation modelling.

Importantly, the study validates that a country’s inequality is not only determined by intra-city inequality across countries, but also inter-city inequality within countries. This effect is predominantly indicative of the disproportionate concentration of FDI in a few city locations within each country. This suggests that countries need to attract FDI to multiple centers within a country, so as to reduce intra and inter-regional inequality. The study shows that while controlling for agglomeration factors like GDP growth and unemployment rates, that indeed wage inequality is significantly affected by centrality measures of FDI networks i.e. indegree, network distance, sectoral variety, clustering coefficients, structural holes and closeness. The true nature of these will be explained in the paper.

SMEs tapping into global networks: Global links at the local level

Lenka Wildnerova - OECD | **Alexander Lembcke** - OECD

It has been well-documented that global networks provide positive externalities to participating firms. Less is known about how the performance of non-participating firms, especially those that are small or medium-sized, changes with exposure to an increase in the presence of globally integrated firms in their vicinity. With global trade being dominated by large firms, the benefits for SMEs are often indirect, e.g. through input relationships with larger companies or through knowledge spillovers that facilitate the adoption of best practices in firms with access to globally integrated peers. This paper aims to further the understanding of the link between the performance in SMEs and their exposure to global networks. The analysis combines industry and regional exposure to global links (foreign ownership, estimated GVC participation, access to trade facilitating infrastructure) and firm-level microdata for multiple OECD countries, allowing for local spillovers (or crowding out) within the same industry and across industries. Levels and growth along three core dimensions are considered as indicators for SME performance is: firm turnover, employment and multi-factor productivity estimated using Wooldridge's (2009) extension of the Levinsohn and Petrin (2003) method. The empirical analysis is complemented by a concluding chapter with concrete policy recommendations on how to leverage global links at the local level to support the performance of firms of all sizes.

Local experts and global knowledge flows – active knowledge absorption by latecomer MNEs

Kerstin Schäfer - Leibniz University Hannover | **Uma Kollamparambil** - IHS/WITS University

In order to gain global competitiveness, an increasing number of multinational enterprises (MNEs) from emerging markets engages in knowledge absorption in industrialized countries. In some cases, those MNEs were able to use their latecomer position to rapidly catch-up and finally achieve global leadership positions in their industry. We want to shed light onto the question what strategies they used to close the knowledge gap to their more established competitors through the internationalization of research and development (R&D) activities. Subsequently, we examine how their particular strategy affects the respective industry in their host as well as home regions.

As a technological leader in telecommunications in China, our case study Huawei has little to learn in their home country and is strongly motivated to access knowledge abroad to become more competitive on a global scale. Beginning in the early phase of their internationalization, analyzing the development of Huawei's Greenfield R&D helps us to understand how they tapped local knowledge sources in host regions and distributed the knowledge within their global network. In this study, we employ both quantitative and qualitative methods. We use patent- and publication data to track their global knowledge flows. Further, we conduct half-structured interviews with local experts at subsidiaries in the US, Canada and Europe to create a regionally differentiated picture of their efforts to access knowledge.

We find that Huawei actively absorbs knowledge spillovers abroad by recruiting local employees from more established competitors. There is evidence that Huawei's location choice in many cases aimed at absorbing employees that lost their jobs due to downsizing or closure of competitors. We further find that they send their employees back and forth between their offshore locations and China to transfer new ideas directly to China where a large number of young engineers uses them to develop new products.

Can FDI Improve Host Regions' Technical Vocational Education and Training Systems in emerging economies? – Empirical Evidence from Southeast Asia

Joeran Wrana - University of Cologne | **Moritz Breul** - University of Cologne | **Eduardo Ibarra-Olivo** - London School of Economics | **Thomas Neise** - University of Cologne

Multinational Enterprise (MNEs) can significantly enlarge and improve host regions' human capital base through skill upgrading activities for suppliers and training programs for their own employees who may eventually move to local firms where they apply their acquired technical knowledge. However, many emerging economies that have undergone an industrial take-off phase, due to foreign direct investment (FDI) flowing into labor-intensive manufacturing sectors, eventually experience economic growth rate slow-downs and become stuck in the middle-income trap. One reason behind it might be the fact that governments often prefer investing in higher education institutions rather than in Technical Vocational and Education Training (TVET). This could result in national education systems failing to keep up with the changing skill demand, consequence of rapid industrial development.

In recent years, qualitative case studies have demonstrated that MNEs may boost regional development through upgrading host regions' TVET systems, thereby ensuring a rising supply of well-skilled future graduates. Quantitative evidence on this relationship is thin and mainly focused on tertiary education systems rather than TVET. We intend to fill this research gap by employing a panel data dataset of more than 100 provinces from Indonesia, the Philippines, and Vietnam from 2007 to 2016. The

aim is to explore whether greenfield investments can generate broader regional impacts by rising numbers of graduates in host regions' TVET systems.

Foreign Investment, Multinationals and Regional Development II

Spatial Scale, Agglomeration and Heterogeneity: An empirical examination of the Geographical Dimension of FDI spillovers in Indonesia

Jacob Jordaán - Utrecht University School of Economics | **Vassilis Monastiriotis** - London School of Economics | **Dea Tusha** - Utrecht School of Economics

Although recent research on the economic effects of Multinational Enterprises provides important evidence on contextual factors that may influence FDI spillovers, the geographical dimension of these externalities remains relatively under-explored. This is particularly noteworthy given the synergies that may exist between channels that transmit FDI spillovers and mechanisms generating spatially confined externalities from agglomeration and innovation. The importance of examining the geographical dimension is further underlined by the key role that agglomeration plays in FDI location processes within host economies. In this paper we use firm level data from the Annual Manufacturing Survey for Indonesia for 2002-2007 to examine three key elements of the geographical dimension of FDI spillovers in the form of spatial scale, regional industry agglomeration and spatial heterogeneity. Estimating a variety of panel data fixed effects and multilevel models, we find that all three elements are important for both intra- and inter-industry spillovers. The importance of spatial scale is indicated by our finding that the sign and level of spillovers are affected by the use of different spatial classifications and aggregations. Furthermore, we find that the size of regional industries and the degrees of absolute and relative regional industry specialisation influence the level of FDI spillovers, in line with the idea that region-industry characteristics affect the channels underlying these externalities. Finally, our findings show that regional levels of absorptive capacity, agglomeration of manufacturing activities and agglomeration of FDI firms all matter for the materialisation of FDI spillovers, confirming the importance of spatial heterogeneity. Taken together, our findings constitute important new evidence that the geographical dimension of FDI spillovers needs to be considered when examining the spillover effects of Multinational Enterprises and when designing policies that use the attraction and promotion of FDI to foster regional development in host economies.

Multinational enterprises, spillovers and employment growth in the Netherlands

Nicola Cortinovis - Erasmus School of Economics

The economic and international business literatures have for long time investigated the effects of multinational enterprises (MNEs) on the local economy. Empirical research – mostly focused on local productivity - suggests these spillover effects materialize through buyer-supplier relations (Javorcik 2004). Building on these contribution, my paper exploits an establishment-level database on Dutch firms to study the impact of MNEs on the creation of employment in local firms. More specifically, two main novelties are introduced: i) the focus on employment growth rather than productivity; ii) a comprehensive approach for capturing spillovers both through input-output (I-O) linkages and using industrial relatedness (Hidalgo et al. 2007).

The preliminary results offer important insights on the heterogeneous impacts of MNEs on local firms, both in relation to the different channels of spillovers as well as with respect to sectoral heterogeneity. In particular, in line with the previous literature, the presence of MNEs in the same industry reduces employment growth. Besides, my empirical analysis confirms the importance of I-O relations to MNEs for stimulating employment growth. Finally, even when controlling for I-O linkages, the presence of MNEs in related industries is found to positively affect employment growth in domestic establishments, even though relatedness-mediated effects are heterogeneous across sectors.

Whereas not fully causal in nature, these preliminary results cast interesting indications for further research, especially concerning the heterogeneous micro-impact of MNEs across industries as well as channels for MNE spillovers largely overlooked by previous research.

Innovation and the global location decisions of multinational firms

Riccardo Crescenzi - London School of Economics | **David Arnold** - London School of Economics | **Sergio Petralia** - London School of Economics

This paper aims at understanding the dynamics of regional and national location characteristics, and how they combine with firm characteristics, in influencing the location decisions of multinational firms around the world. To examine these issues, we track

over 3,000 of the most innovative companies in the world and explore their investment location decisions between 2003 and 2014 for over 1,500 regions around the world. We construct a novel dataset that combines a comprehensive set of firm characteristics and regional and national level location characteristics. Drawing on the fDi Markets dataset of foreign inward investments across the world for the full period, we are able to assign each investment with specific characteristics of the investing company and detailed characteristics of the home and host locations at both the regional and national level. Our geographical coverage accounts for the location of over 94 per cent of all foreign investments, thus providing a comprehensive coverage of location options. By focusing on a sample of the most innovative companies in the world, we are able to account for the majority of innovation investment projects and evaluate the location characteristics that attract innovation investments. Moreover, we are able to explore whether or not firms with specific characteristics display varying location preferences for innovation-related FDI.

Spatial Distribution and Locational Determinants of Chinese Outward Foreign Direct Investment

Hao Huang - Illinois Institute of Technology

This research investigates the spatial patterns and locational determinants of Chinese outward foreign direct investment at both the country level and the city level. We emphasize institutional-based view, with China's new international economic cooperation initiatives driving the new stage of globalization, especially after One Belt One Road Initiative. The results indicate that Chinese OFDI are mainly located in North America, Asia, and Europe. The United States is the largest concentration of Chinese OFDI. Besides the United States, Canada is the other concentration in North America. In Asia, Chinese OFDI are mainly concentrated in Hong Kong and Singapore. Germany, United Kingdom, and Netherlands are main concentrations of Chinese OFDI in Europe. We found that Hong Kong, Singapore, Tokyo, and London are hotspots of Chinese OFDI among cities. Chinese OFDI are attracted to the country or regions with good institutional quality, rich natural resources, and high technology innovation. And diplomatic policies, and cultural and geographical distances are also significant to Chinese OFDI location decisions.

Foreign Investment, Multinationals and Regional Development III

A Review of Research on Foreign Direct Investment from the Perspective of Relationship

Yutian Liang - Sun Yat-sen University | **Zhengke Zhou** - Sun Yat-sen University

With the implementation of the strategy of "Going out" and the initiative of "Belt and Road" policy, Chinese companies are accelerating their integration into the economic globalization. Although China's foreign direct investment has become a hot topic in the academic field both at home and abroad, domestic economic geography studies on Chinese enterprises' direct foreign investment are still relatively few or have just begun. In view of this, this article reviews the research progress of foreign direct investment from home and abroad based on the relationship perspective, and believes that traditional FDI theories which are used to explain Chinese companies' outward foreign direct investments still work, but they must be supplemented with Chinese-specific variables. The review focuses on the impact of global production networks and ethnic networks on corporate cross-border investment, and considers overseas Chinese networks as the key variables with Chinese characteristics affecting China's foreign direct investment. Some research directions for Chinese companies' outward investment with Chinese characteristics are proposed: ① Constructing the theoretical framework of foreign direct investment based on Chinese characteristics; ② Exploring the research on foreign direct investment based on the perspective of global production network, and ③ Analyzing the influence mechanism of overseas Chinese network on Chinese companies' outward foreign direct investment.

The space of local communities in the rural agriculture sector the global production networks through the petroleum industry in Tanzania

Opportuna Kweka - University of Dar es Salaam

Recently literature on resource curse has been criticized for not paying attention to the subnational resource curse. Local content literature shows different efforts of resource rich countries to ensure that the nation is benefiting. Petroleum industry is considered to be a large scale investment in which its consumption is linked to global food production networks and in Tanzania it has led to high expectations from the local communities. In this paper, I examine the processes of investment in the petroleum sector to uncover the space of the local communities in the rural agriculture sector to join the global food production networks through the petroleum sector. I argue in this paper that while neoliberalism produces discourses of free and fair market competition, in the global production networks of petroleum sector is surfaced with exclusion and politics such that local communities are unable to join the production stream even in their localities where extraction takes place. Such exclusion can be seen in the processes of tendering and procurement through "standards" and "quality" set by the Petroleum investors. There is a need for designing of regulations that will ensure the local communities are benefiting from the sector to avoid the subnational resource curse.

FDI policy design, implementation and learning in Iran and Saudi Arabia, with a focus on innovation and upskilling in the digital technology sector

Náder Alyani - Bloomsbert Associates & LLAKES Centre, University College London | **Hadeel A. Al-Mutairi** - Saudi Aramco | **Alireza Eliaderani** - Atieh Dadeh Pardaz (ADP Digital) | **Ali Tehraninasr** - SabaIdea

FDI policy design in Iran and Saudi Arabia have for over six decades attempted to systematically explore and find optimal means and methods to upskill and distribute the natural (hydrocarbon) resources in aid of national economic and social development and nation building, recently utilising new models towards the diversification/specialisation nexus. An important source of inspiration has been a pragmatic approach to FDI policies in particular as pathways towards technology transfer and upskilling: processes which have been naturally saturated with issues of power and politics related to national, regional and professional hierarchies embedded in societal and organisational divisions of labour. In light of the above, this paper explores the challenges of policy design and implementation, and policy learning in Iran and Saudi Arabia, specifically with a focus on sectoral capacity-building and FDI for innovation in the digital technology and energy sector. Whilst the trajectories and development pathways of the two countries are distinct based on their unique geopolitical stance and particularly their interaction with the United States, a light sectoral comparison in the last 3 years may be useful. A number of the concepts taken-up as 'best practice' sectorally in these countries are still being critiqued elsewhere or are under redevelopment in different fields. Additionally, coordinating and managing the 'unintended consequences' and 'sequencing' of policies remains a challenge. We further propose to explore; - What are the current upskilling methods for enabling FDI policies? How are spheres of influence, power and political factions implicated in addressing these issues? What is the state of FDI in the modern industrial policy redesign in Iran and Saudi Arabia, and how are horizontal and vertical policies identified and supported by recent evidence? - What roles do the international organisations and global consultancy companies play in policy design and formation? And how are their evidence localised?

Inward FDI and its impact on automobile production networks in Kyushu, Japan

Yoshihiro Miyamachi - University of Oita

Automobile production networks have experienced several significant technological changes during a couple of decades. In this paper, I mainly deal with the modularization of certain components, which caused consolidation and concentration within the automobile component industry. Leading companies such as Bosch, Delphi, Valeo and others have developed into global mega-suppliers.

After acquired by French Renault in 1999, Nissan Motor changed an assembler-supplier relationship profoundly, based fundamentally on cost cutting. So-called 'keiretsu' transaction of Nissan experienced a massive restructuring. Subsequently, Renault's supplier entered to the Kyushu component market, aiming to start service to Nissan in place of the 'keiretsu' suppliers. Then what kind of change has happened in the Kyushu's automobile production network? There are six foreign-affiliated component suppliers: namely, Bosch, Faurecia, Mahle, Plastic Omnium and Valeo. Their business scale has been rather small in terms of number of employees. Most of their direct affiliates in Kyushu employ less than 50 workers. Their activity has been mainly gathering information to find a further opportunity to expand production volume.

So far, customer of these European mega suppliers has been basically limited to Renault-affiliated Nissan. Most of them also supply some portion to the other Japanese assembler such as Toyota and Daihatsu, but those transactions seem to be still limited. Toyota announces that its relationship with suppliers is completely open, however, generally speaking, it is still now based on 'relation-specific skill' which is developed through long term and repeated transactions.

In the paper, I also try to refer to the fundamental impact of new technological development such as an electric vehicle engine.

Session

Management Geography - An Asian Perspective

Rolf Schlunze - Ritsumeikan University | **Taira Atsushi** - Kagawa University

Management geography is a new avenue of economic geography which focuses on the nexus of managerial practices in a globalizing world from a geographical perspective. The research objective is the analysis of the socio-economic and cognitive spatial behavior of managerial subjects influencing organizational performance through preferences, interactions and perceptions. The nexus of managerial practices is created in the overlapping areas of location, workplace and mindscape. In real space the location matters. Concentration of managerial elements and resources define the locational capacity available to the economic actor in space. In the relative space distance is important to managerial mobility and intercultural interactions. In the relational space the workplace matters most. Here managerial subjects relate to each other and embed various managerial processes. The degree of embeddedness matters with the issue of interaction within and among connected workplaces. In the topical space the mindscape

of the managerial subjects is important. Issues of perception are important to grasp the managerial capacity of individual and organizational subjects.

SIEM welcomes submissions in the following issues in relation to International Business (IB):

- i. Theorizing on management practices in geographic space using approaches related to leadership, international human resource management (IHRM), managerial and/or innovative practices, and networking of boundary spanners.
 - ii. Proposing new methodologies for investigating managerial practices, preferences, networking and decision-making in private and governmental organizations transforming spaces of international economy and management.
 - iii. Providing empirical evidence on all kind of management issues including localizing and globalizing practices. In particular, studies that focus on managerial embeddedness, Community of Practices (COPs), GPNs and strategic coupling of transnational firms.
 - iv. Developing implications how to build international social capital in corporate entities and global city locations.
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Management Geography - An Asian Perspective I

When Multinational Enterprise's HRM Practices Meet Dual Labor Market: The Case of IKEA Korea and Japan

Ji-Won Song - Stockholm School of Economics

While most works in the International Business (IB) field focus on the impact of national institutional environment on multinational enterprises (MNEs), this paper explores the opposite relationship, that is, the impact of MNE subsidiaries as agents on host countries' institutional environment. In particular, this paper examines how MNE subsidiaries strategically respond to institutional distance when transferring their human resource management (HRM) practices by bringing the case of IKEA's two subsidiaries, IKEA Korea and Japan. Since both Korea and Japan currently have unique labor market institution, 'dual labor market', which can be a barrier for IKEA to transfer their own HRM practices, the case of this research could provide a particular kind of institutional distance between IKEA and two host countries. In the analysis, we found that these subsidiaries not only adapt the pressures from institutional distance, and but also play an important role to influence on the institutional environment of host countries by introducing new practices. These findings contribute to the IB field by highlighting the potential of MNE subsidiaries as institutional entrepreneurs. Further, this research have some implications on institutional analysis in the field by linking institutional engagement and entrepreneurship of MNEs to understandings of institutional logics. Since the subsidiaries of this research as institutional entrepreneurs add new logics onto extant dominant logics of host countries, we also could shed new light on the discussion around internal diversity within national economy that has not been frequently covered in the comparative capitalism (CC) literature.

Increasing trend of segmentation phenomenon in Korean manufacturing industry; Evidence from industrial network analysis

Changmin Jeong - KAIST | **Duk Hee Lee** - KAIST

This paper explores segmentation of Korean manufacturing industry through network methodology. The industrial structure is networked under the assumption that there is the 'node(industry)' and 'link(relationship among industries)'. SIC 3-digit manufacturing industries at 13 Korean regions during 1999-2011 are used. Relatedness among industries were measured based on Hidalgo(2007)'s method; it calculates conditional probability that both industries have comparative advantage at the same time. MST and Disparity Filter are used to leave important links. In 2000, the inter-node links were intricately intertwined, but as time passed, they have split into two large groups. The industries located in one community are industries with small industrial GDP, while those located in other community are industries with large industrial GDP, it is inferred that there is polarization between industries. Community analysis and modularity Q measurement are used to numerically represent the degree of segmentation of industrial clusters. The Q value is higher than 0.3. It is understood as well-partitioned community. The Q value increases with time. This means as time goes on, industrial clustering has been segmented. Next finding is clustering coefficient is larger than random network and shortest path length is longer than random network. This indicates the Korean industry network tends to be connected to adjacent nodes, but the links that connecting the groups are few. This result suggests the inter-group segregation phenomenon. Local externality between industries is measured. When an industry has high degree of proximity to comparative advantage industries, it is measured whether it affects the industry positively. Local externality does not exist or is negligible. This suggests that Korean manufacturing industry has little influence on each other. This is partly due to the fact that the Korean government implemented policies in top-down way, focusing on fostering of small number of industries, without considering the industrial characteristics of regions

Location Transfers of Geography-related IT Industries - a case study in China since 1990'-

Takehiko, Fujii - The University of Tokyo

This study focuses on geography as an industry especially in the information technology (IT) entrepreneurship field, and has observed the history of its location transfers in China mainly since 1990' when the commercialization of its national economy has rapidly introduced and developed.

Geography-related IT industries contain not only geographical information systems (GIS) and other spatial fields but also wide range of value chains related map. The upstream consists of raw materials such as satellite imageries, aerial photos and surveyed data including global positioning systems (GPS). The midstream is as a manufacturing function to make maps from the raw materials. The downstream are services to make use of maps such as GIS and car navigation systems (CNS) as well as other online mapping services including the Google Maps.

Small and medium-sized "global-niche" firms in Japan and their glocal pipelines

Atsushi Taira - Kagawa University

This study argues the geographical patterns of "global-niche" firms in Japan and characteristics of the glocal pipelines of these firms. The global-niche firms have a significant share in the relevant world market for their highest quality of products based on the state-of-art expertise and technology. Pipelines are defined as personal connections between intra- and inter-firms and relevant agencies. Although the argument about pipelines has been active recently such as Bathelt et al. (2004), empirical case studies are limited. This study tries to fill its gap. While Japan has recently seen its economic recovery, many local areas are suffering from a long-term stagnation. In this situation, small and medium-sized "global niche" firms in these local areas have attracted attention of researchers and local governments for rejuvenating the local economy. In 2013 the Japanese government made an economic recovery plan including a measure to assist global niche firms and it announced 100 global-niche-top firms to promote the plan. Interestingly, in Japan, many of them are located outside the major metropolitan areas, such as Tokyo and Osaka. Shikoku is a representative region in the country to house these "global niche" firms. Nippura in Kagawa, Nitride Semiconductors in Tokushima and others are good examples. This study shows how these firms expand and balance their glocal pipelines in the competitive world market.

Management Geography - An Asian Perspective II

From the shop entrance curtain to the international business group: The institutional geographies of the noren wake system in the Japanese ramen industry

Tim Reiffenstein - Mount Allison University

Noren are the dyed canvas curtains hung on bamboo poles at a ramen shop's entry to signal that it is open for business. Noren wake, a verb that means the splitting of the shop curtain, symbolically describes the enduring relationship between master and apprentice that occurs when the latter establish an independent business. In the world of ramen, masters pass on cookery and business skills to their protégé who gain a reputational benefit from the pedigree of their training. They may also benefit from ongoing mentorship and a degree of preferential access to suppliers and other network linkages. In a competitive business characterized by high rates of entry and exit, these associations confer important advantages in survival.

This paper investigates the managerial geographies of noren wake through a case study of the Menya Kouji Group which is comprised of hundreds of affiliated ramen shops throughout Japan as well as a growing network of operations in the ASEAN region, and North America. Through analysis of Japanese ramen media and interviews with key informants the paper traces Menya Kouji's evolution to its present multi-nodal configuration. In turn it asks whether it is time to update our conceptual models of Japanese business groups and their internationalization.

To this point the literature posits keiretsu business groups as one of the key institutional and managerial features of the Japanese economy. With expansion rooted in networks of training and mentorship, rather than the interlocking equity that defines keiretsu, this paper posits business groupings that follow noren wake as a distinctive form of organization. Specifically, patterns of decentralized expansion based on noren wake encourage variety and innovation rather than replication and this particular ecological advantage is leveraged internationally to allow Japanese businesses to better glocalize their operations via the training and mentorship of local talent.

Regional Management of Depopulated and Aged Community in Japan -A Case of Okinoshima Island-

Kenji Tsutsumi - Osaka University

Since the 1960's, some rural regions in Japan have been lost their population and regional functions. But up to around 2030 through 2040, even the metropolitan areas in this country would experience drastic depopulation and severe ageing of the population. Then soon after the 2050, the national economic power of Japan will decay rapidly, down to that of semi-developed country. Just in front of the scenario, the present situation of already-depopulated region can offer useful examples to think about depopulated and aged society soon we will encounter. Here I refer to sustainable conditions of daily life, education, child and aged care, medical care, main industry, preservation of nature and so on, about an depopulated island Okinoshima, where our research team has been studied for five years, with thinking of regional management of the day. .

Japanese Enterprises' Performance in Brazil

Hachiro Hagiwara - Shikoku University

Japanese people started to immigrate to Brazil in 1908, and Japanese immigrants have been playing a very important role in the agricultural field of the Brazilian society, since then. Today, Brazilian of Japanese origin play an important role in business and the other fields, too.

Investment from Japan to Brazil had its first boom in the mid-1950s, when important national projects emerged in the field of energy and steel, etc. The second boom occurred in the period called the "Brazilian miracle," from 1968 to 1973, when many Japanese enterprises rushed to Brazil.

However, Brazil experienced a "lost decade" in the 1980s followed by Japan in the 1990s, after the collapse of the Bubble Economy. Investment from Japan was minimal during these periods. Since 1994, when the Real Plan started to stabilize the Brazilian economy, investment by Japanese enterprises has been returning to Brazil, which is creating a third boom.

According to a recent questionnaire to Japanese enterprises in Brazil, most wish to localize as much as possible. Though managerial posts are held by Japanese, many administrative posts can be filled locally. There is so-called master-servant (employer-employee) relationship in the case of most Japanese enterprises in Brazil. This conservative scheme has not seemed to change, although human flow has increased a lot due to the Dekasegi phenomenon which began in the 1990s. The presenter will mention Japanese enterprises' tendency in Brazil and typical philosophy of Japanese-Brazilian enterprise managers.

Boundary spanning role of Japanese expatriates and their network practices in the EU

Rolf Dieter Schlunze - Ritsumeikan University

This research seeks to identify the importance of geographically boundary spanning activities in studies of managerial responses to institutional complexity and change within the EU. Expatriates play the role of boundary spanners, gathering market information and bridging internal and external organizational contexts. How do global managers address managerial embeddedness and what kind of network strategy do they follow in purpose to succeed in workplaces overseas? Previous research showed that cultural synergy can be created by the boundary spanner when cooperation and harmony in the workplace is achieved. It was assumed that Japanese managers with a high network density tend to have more supporters in workplaces important to manage the global value chain. Interactions with various supporters provide access to knowledge about the market enabling a successful sales performance. Following a confirmatory sampling method thick evidence for the existence of four different types of managing networks could be provided: The manager with a preference for globalizing practices transfers managerial knowhow; meanwhile the one focusing on localizing practices makes incremental improvements to existing products and services. The manager engaging in networking on a global scale facilitates the corporate network to expand sales in the EU market; meanwhile the one who focuses on embedding creates an integrative atmosphere in the workplace taking care of compliance. Pinpointing on different networking strategies but similar outcomes I conclude that expatriated managers having a boundary spanner role enabling the global firm to manage geographically distributed workplaces and markets successfully. Case study research should outlines the importance of developing our understanding of relational and topical spaces highlighting how the 'receptivity' of a location may affect synergy creation of actors with different cultural backgrounds.

Session

SMEs, Family Firms, and Economic Geography

Lech Suwala - Technische Universität Berlin | **Rodrigo Basco** - American University of Sharjah

In the face of big business, big data and big transitions, there are still small and medium enterprises (SMEs), many of them family firms which provide the economic backbone and continuity in most economies. SMEs and family firms comprise diverse types of businesses from traditional Japanese century-old dynasties, America's family farms, Germany's Mittelstand to novel Shanghai and Silicon Valley' elites. Simultaneously, they are geographically uneven phenomena with regard to their distribution, impact on, and interplay with the local, regional, and national level that require more academic attention, also in the field of economic geography. Against this background, we invite Economic Geographers and scholars from adjacent disciplines such as Regional Economics, Management, Organization Studies, and International Business with interest in spatialities of SMEs and families firms – in particular spaces (locations, places, landscapes) and scales (from local to global) to submit their research. Our rationale is to initiate a profound debate by collecting various work – independent of the methodological approach (qualitative or quantitative) – on SMEs and/or family businesses in a spatial context to shed light on past and current SME and/or family firm peculiarities and trajectories from around the world.

Conceptual, empirical and methodological papers might address, but are not limited to:

- Conceptual and theoretical debates about the nature of SME/Family firms
- Evolution and trajectories of SME/ Family firms
- Contribution and impact of SME/ Family firms on the economy
- SME/ Family firms specific issues (succession, governance, reputation, professionalisation etc.) in a spatial context

The session is a follow-up on two sessions organized at the 2017 Annual RSA meeting in Dublin and intends to launch an interdisciplinary research group.

Hidden Champions in small towns outside of agglomerations: economic and societal relevance

Martin Graffenberger - Leibniz Institute for Regional Geography (IfL) | **Lukas Vonnahme** - Leibniz Institute for Regional Geography (IfL)

Firm-oriented research in economic geography reflects a number of under-investigated, yet relevant areas. Due to a continued focus on agglomerations, particular research gaps can be identified regarding firms located outside of agglomerations. Furthermore, and due to a continued focus on economic impacts, little is known on the wider societal effects of firms, especially in small town contexts. Accordingly, this paper considers both, the economic and societal relevance of firms located in small towns outside of agglomerations and thereby develops a more comprehensive understanding on the impact of firms on their local and regional environments.

These dimensions are explored by mobilising the notion of Hidden Champions (HCs), understood as a heuristic for innovative, successfully operating and locally embedded companies. Thus, HCs located in small town contexts can be considered potentially impactful actors for local development.

Our analysis on the spatial distribution of HCs in Germany shows that a substantial number of these firms locate in small towns and peripheral regions, i.e. HCs do not exhibit a clear preference for agglomerations. Based on analyses of socio-economic factors, this contribution finds that small towns with HCs exhibit higher economic potential than other German small towns. In line with findings on Mittelstand firms, we show that HCs located in small towns outside of agglomerations can be characterised as relatively large and mostly family firms with a long local tradition. These indications form the basis for wider investigations on the relevance of HCs for small town development processes, in particular regarding corporate regional engagement. Accordingly, first findings from qualitative case studies investigating forms and fields of corporate engagement of HCs in small towns in Germany along with associated motivations, opportunities and barriers will be presented.

What is the role of industrial clusters and firm growth in emerging economies? Family firms and regional economic development

William Murithi - De Montfort University | **Christos Kalantaridis** - De Montfort University | **Kassa Woldesenbet Beta** - De Montfort University

African continent is characterised by diverse geographical space, resource base, and unstable market environment. Though the continent has lagged tremendously in economic development and managing resources effectively. However, recent studies suggest the continent is a source of innovations and a high level of entrepreneurial intention and business creation. It is in this context that this study is conceived to examine how family firms embedded in their geographic location and resource environment could play an important role in contributing to regional economic development. Due to their embeddedness in such contexts,

family firms show resilience and endurance in their business operation and hence are likely to contribute more to the economic development when compared to non-family firms. The existing literature point out that family firms stay where they belong even during times of external (e.g. economic and financial) crises (Basco, 2015) as they are better at coping within environments characterised by economic informality (Murithi et al., forthcoming). However, prior studies in the family business and economic geography fields have mainly concentrated on the western economies, studying family firms in other contexts such as in Africa may help in extending or questioning the taken-for-granted assumptions of the existing theories on family businesses. Drawing on the discussion thus far, this paper, in particular, seeks to examine the conditions that mediate family firms' contribution to RED. Based on the empirical data collected from 307 Kenyan firms, this paper examines the mediation effect of firm involvement (both family and nonfamily) in industrial clusters and firms' growth on the relationship between firm-level entrepreneurial behaviour and regional economic development. The preliminary findings indicate that there is a significant difference between family firms' involvement in industrial clusters and firm growth compared to nonfamily firms, thus contributing to the superior influence on regional economic development.

Multiscalar knowledge flows in IT services SMEs in Poland

Grzegorz Micek - Jagiellonian University in Kraków

Knowledge flows are found among one of the most crucial social processes which trigger innovation and regional development. In the paper inter-company knowledge flows between Polish IT services SMEs are studied. The main aim is to identify market and technological knowledge flow channels and their spatial scales. Consequently, the geographical proximity paradox has been tested. The paper is based on the results of 215 CATI questionnaires conducted in IT services (NACE 62) SMEs in Poland.

Knowledge is acquired in various spatial scales and there is certainly a need to move beyond H. Bathelt's dichotomy (local buzz – global pipelines). Multiscalarity of knowledge flows is strongest in the case of private contacts with colleagues from studies or previous workplaces. Spatially miscellaneous study and job experience of entrepreneurs goes along with the observed process of return migration of skilled potential entrepreneurs.

In earlier Central and Eastern European studies (Blažek et al., 2011), knowledge flows were often defined by the dominance of domestic (interregional) flows over weak global interactions. For the surveyed companies, the most important channel of market and technological knowledge flows, are trade relations, especially those occurring of an international scale. The second most important channel is the employment of specialists, which is by far the most frequent and the most important in interregional scale. Due to the small size of the surveyed enterprises, foreign specialists are the least frequently used. Instead of using regional business events as the vehicle of knowledge flows, representatives of the IT services sector prefer attending domestic and even international meetings. As in the studies described by F. Tödtling et al. (2011) buzz is therefore observed more at the national level. In the case of Polish IT services companies paradox of geographical proximity is better described by the dominance of interregional than global knowledge flows.

The presence of family firms in the regions: the role of the quality of regional institutions

Rodrigo Basco - American University of Sharjah | **Fernanda Ricotta** - University of Calabria

By using a fact-based methodological approach, the aim of this article is to investigate whether the quality of institutions influences the presence of family firms at regional level. To explore and test our conjecture we use the EU-EFIGE/Bruegel-UniCredit dataset that provides comparable cross-country data of around 15 thousand manufacturing firms in seven European countries. We use a multilevel framework for analyzing the influence of firm and regional-level (such as quality of regional government) covariates on the likelihood of being family firms. We find evidence that regions seem to have a role in explaining the probability of a firm to be a family firm but this disappears when country effect is considered. Specifically, the high quality of regional government seems to be associated to a lower probability of having family firms. Only the unemployment rate and the share of high educated people show significant coefficients with a negative sign. Concerning firm characteristics, firm size, the condition of belonging to a business group, and the human capital negatively influence the probability to be a family firm. However, the firm age (mature and old firms) positively affects the probability to be family firm. Our article address the call made by Stough, Welter, Block, Wennberg, and Basco (2015) to link the family business and regional science field of research. We tackle the basic research question which focuses on why the presence of family firms is uneven across regions. To answer this research question is important because to better understand the phenomenon of family firms is necessary to know why they exist and under what conditions they are able to flourish. In this sense, we extend previous descriptive studies and less methodological rigor (e.g., Chang, Chrisman, Chua, & Kellermanns, 2008) by applying a multilevel analysis and exploring the cause of uneven family firm distribution across regions beyond the context of one country. Second, our article contributes with the current debate about family business and context (Basco, 2018), the research of family business phenomenon has to incorporate the context to between understand the effect of context on family firm heterogeneity. Our research provides some evidence that the context matters for family firm existence. Finally, this article may have practical implications for policy makers by demonstrating that the regional firm structure (family non-family business composition) is dependent on the quality of the institutions.

Session

The (post)industrial economic geography: from de-industrialisation towards re-industrialisation?

David Bole - Research Centre of the Slovenian Academy of Sciences and Arts | **Marco Bontje** - University of Amsterdam

There is a sense that most post-industrial urban models paint a rather gloomy picture of industrial activities in cities. It is sometimes implied that manufacturing is to be avoided, upgraded into something “better”, more “creative” or “innovative”. Policy prescriptions routinely overlook industry- and place-specific factors that enable or restrict the viability of manufacturing over time (Doussard & Schrock, 2015). The workshop is organised in the scope of the BRIGHT FUTURE project (funded by the JPI Urban Europe programme). The project wishes to open the dialogue on the role of industry, particularly in smaller traditional industrial towns across Europe. We wish to create new developmental paradigms better suited to the industrial reality of our towns and draw on their specific territorial capital and potential.

Papers addressing the following questions are welcome: are there conceptual alternatives for (re)development of former and present industrial cities/regions? What are the positive and the negative development trajectories of (post)industrial cities/regions? Are there good practices of re-development in industrial cities/regions? Do the (neo)industrial cities/regions possess any differences in ideas, interests and politics in comparison to their predominantly expanded successor the ‘capitalist city’? If yes, what are the spatial, social and economic implications? Can the values and heritage of industrial society (unionized work, solidarity, 8-h work time, social security, etc.) still be traced in neo-industrial city vs. post-industrial/capitalist one? Can we talk about greater solidarity, social cohesion, and intergenerational dialogue in (neo)industrial cities? Can we merge all these differences under the umbrella of ‘forgotten heritage of industrial city’? Are there collective and individual practices connected with industrial past that could be used for future development?

These are just some examples of the questions that could be addressed in this workshop. Any other papers challenging the dominant negative notions of industrial cities/regions are also welcome.

The (post)industrial economic geography: from de-industrialisation towards re-industrialisation? I

Making space for a grounded construction sector in Brussels

Sarah De Boeck - Cosmopolis - Center for Urban Research / Vrije Universiteit Brussel | **David Bassens** - Cosmopolis - Center for Urban Research / Vrije Universiteit Brussel | **Michael Ryckewaert** - Cosmopolis - Center for Urban Research / Vrije Universiteit Brussel

Although often embroiled in spectacular urbanism and speculative urban development processes, the construction sector is in many ways fundamental to the reproduction of the city, its built environment and the functions it hosts. Moreover, in many contexts, the sector is underpinned by a large and increasingly international labor force. Despite its intriguing ambiguity, the construction sector has received little attention by policy makers and academics alike, thereby rendering its mundane, yet fundamental role in the reproduction of the city invisible. Meanwhile policy and academic interests are far greater for propelling industries and high-tech and innovative sectors, finance, and knowledge intensive business services. Work on global cities has abundantly shown that such strategies often reinforce competition and that the expected trickle-down effects remain wanting. This paper claims that this ‘overlooking’ of certain economic sectors, such as the construction sector, is a consequence of the rather narrow way of defining the economy, and therefore of a reduced way of practicing urban economic development. Through the reframing and broadening of the definition of the economy, this paper aims to show opportunities to open up and to extend the practice of urban economic development. First, by redirecting policy makers and academics towards more grounded economic sectors related to everyday life such as the construction sector, but also sectors such as food, utilities, public transport etc. which count for thirty percent of all jobs in the Brussels Capital Region. Second, by making important invisibilities visible, such as the almost thirty percent of unaccounted intra-EU posting jobs in construction. And third, by proposing alternative economic key indicators, such as the creation of local employment, to evaluate and support the urban economy. This paper claims that by making discursive and physical space for grounded urban sectors, it lays the base for a renewed vision on urban re-industrialization.

Brescia: beyond the “tondino city”

Marco Tononi - University of Brescia | **Sara Bonati** - University of Florence | **Antonella Pietta** - University of Brescia | **Oria Tallone** - University of Brescia

The Province of Brescia is one of the most developed industrial regions in the Northern Italy. The main factories are located in the city area and in the three valleys to the north (Trompia Valley, Sabbia Valley, Camonica Valley). During the Sixties the local industrial expansion reached its maximum historical level, with over 40.000 (19% of the population) employees in the manufacturing, 61% of which employed in metalworking. Even if the relevance of the industrial sector in workers employment has decreased in last decades, favoured also by recent economic crisis, the census of 2011 has recorded about 15.000 people working in industry in the urban area of Brescia. Accordingly, after the crisis, also the industrial sector has increased by 13% with a positive dynamic for the period 2013-2017, maintaining its economic relevance for the whole province of Brescia. On the other side today Brescia lives a series of environmental problems due to its industries, for instance the retraining of numerous brownfields sites, abandoned industrial areas, and the presence of some disused factories inside the urban perimeter. Thus the aim of this work is to analyse the multiple directions that are opening today in the local urban economy. Brescia has based the new paths of territorial development on a better quality of life and sustainability. In particular approaches to sustainability and greening, like examples of green economy, circular economy, alternative green practices or degrowth, are analysed. Moreover, we investigate the processes of urban regeneration of industrialized land. Cultural aspects, urban events, festivals are part of a new image and a new economy of the city; these processes cannot neglect the industrial past and the local culture of work, rather they should recognize the industrial culture as one of the new elements of development (it is past but also future).

Small and medium-sized industrial towns in Europe: characteristics and performance in a comparative perspective

Marco Bontje - University of Amsterdam | **Myrte Hoekstra** - University of Amsterdam

In dominant post-industrial narratives of the early 21st century advanced capitalist world, focusing mostly on large city-regions and advanced service sectors, small and medium-sized industrial towns (hereafter SMITs) seem to have a double disadvantage. According to such narratives these towns are too small to be competitive and have the ‘wrong’ economic profile. From this perspective it may even become more problematic if the industrial employment in such towns stagnates or declines without immediately having a good alternative. We think, however, that such post-industrial narratives are too one-sided and too negative about SMITs. While some SMITs indeed face dramatic economic challenges, others are performing surprisingly well, and possible future perspectives of SMITs may also be found in industrial innovation next to searching for alternative economic profiles. In this paper we will present the main results of the first phase of the project ‘Bright Future for Black Towns’, a JPI Urban Europe project about the place-based qualities, social innovation potentials and future perspectives of SMITs in Europe (see also Hoekstra, 2017 for a more detailed analysis). After exploring the regional economic contexts of SMITs across Europe (situated in industrial or non-industrial regions), we focus in particular on the characteristics and performance of SMITs in 5 countries in a comparative perspective: Finland, the Netherlands, Slovenia, Romania and the UK.

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The resilience of French industrial territories: a diversity of trajectories

Magali Talandier - Pacte Laboratory / Grenoble-Alpes University | **Marjolaine Gros-Balthazard** - Pacte Laboratory / Grenoble-Alpes University

In recent decades, all former industrial powers have had to cope with a process of deindustrialization. This process is a major economic geography’s topic. Indeed, like the industrial revolution wasn’t geographically neutral, with an emergence of some industrial bastions (e.g. coal mining areas), deindustrialization hasn’t unfolded evenly at sub-national level. More than just a fall in industrial jobs, deindustrialization is part of larger productive changes. A new productive economy, sometimes called “post-industrial” economy, appears. All these productive changes have produced territorial divergences (Martin et al., 2016; Moretti, 2012) influenced by local contexts. Facing these divergences, to better question the idea of crisis that is linked with rebound, we propose to use the concept of « resilience ». Beyond the buzzword, resilience can be defined as the ability, for a territory, to resist disturbances and to find new development trajectories (Martin & Sunley, 2015). Between adaptation and adaptability, it involves different temporalities that are particularly interesting for our topic. In this empirical and theoretical context, we propose to question development trajectories of French industrial territories, particularly small and middle towns, by studying their resilience capacity, in detail and for a long time period. Methodologically, we mobilize two sets of statistical data. The first one is an original database reconstituting population dynamics at the municipal level over two centuries in France. Their statistical and cartographic analysis

show how territories adapt, or not, to macroeconomic changes, especially industrial. The second one contains different data about economic dynamics of French industrial territories between 1975 and 2012. Their analysis highlight various trajectories of economic reconversion. Based on cultural or residential opportunities, some old industrial territories have taken new development trajectories. Others still depend on classic industry. Behind the diversity of trajectories, results reveal different degrees and kinds of territorial resilience that we want to conceptualize.

The (post)industrial economic geography: from de-industrialisation towards re-industrialisation? II

Shifting identities in small industrial towns: story from Velenje, Slovenia

David Bole - Research Centre of the Slovenian Academy of Sciences and Arts | **Jani Kozina** - Research Centre of Slovenian Academy of Sciences and Arts | **Jernej Tiran** - Research Centre of Slovenian Academy of Sciences and Arts

Objective of this presentation is to understand transitional processes and patterns within industrial towns, from identity-based perspective. We argue that traditional industrial towns have several identities that might be in conflict. More grass-root identities are connected with the sense of pride of the industrial past and present, and distinct social and cultural values (workers solidarity, etc.). But in the last decades newer more post-industrial narratives are gaining ground, especially with policy-makers. Those post-industrial narratives are being imported from the 'outside' and are centred more towards highlighting culture-led development and favour individualism (creative workers, etc.).

To prove or reject the above-mentioned thesis we will conduct a qualitative analysis in an industrial town of Velenje, Slovenia. Our analysis will consist on two levels: 1) analysis of industrial town semiotics; 2) analysis of dominant official & unofficial narratives in the town.

Industrial town semiotics will focus on how the industrial past and present is being conveyed through visible and invisible symbols in the town. We will show if industrialism in the town has either negative, positive or mixed connotations. We will make a distinction among those symbols that exist in the institutionalised sphere (public strategies, town emblems, street names ...) and those prevailing within the local community (sports & cultural activities ...).

In the analysis of dominant narratives we will present how different groups see and interpret industrial activities and main developmental paradigms. From site-specific semi-structured interviews we will identify two types: 'official' narratives of (post)industrialism and 'unofficial' ones, which are collectively hidden.

Hopefully this analysis will expose clashes among different developmental concepts (neo-industrial vs. post-industrial) and will contribute to the ongoing debate of making new developmental concepts in economic geography, which are better suited to smaller industrial towns.

Locational change of the machine tool industry in Japan: Focusing on the machine tool firms in the Hokuriku region

Natsuki Kamakura - The University of Tokyo

Machine tools are machine-making machines, and thus, are extremely important in enhancing the technical strength and efficiency of the manufacturing industry. Since 1982, Japan has become the world's leading machine tool producer. However, as the user industry, such as the automobile industry, which has supported the Japanese machine tool industry, advances overseas, an important question has emerged: How have the location and the domestic production system of the machine tool industry in Japan changed? Although the machine tool industry has been analyzed in terms of its history and individual firm strategies, its business relations and locational changes at the regional level have not yet been sufficiently examined. Therefore, in this research, first, using statistical data, we analyzed the Japanese machine tool industry's locational change from the mid-1990s. The industry had been concentrated in three major metropolitan areas, mainly in Tokyo, during the period of high economic growth. In the 2010s, the center of the machine tool industry moved to the Chukyo area, where the automobile industry is concentrated. Moreover, despite the fact that there are no other leading industries such as the automobile industry, the machine tool industry has also grown in the Hokuriku region. To clarify the reason for these locational changes, we interviewed 10 major machine tool firms in the region from 2017 to 2018. Many machine tool firms in the region went bankrupt, but the surviving firms developed new products that correspond to niche markets. These latter firms succeeded because many of them are family firms that can quickly make decisions and many of them have maintained "supplier clubs" and built ongoing relationships with neighboring small and medium enterprises. In this way, the machine tool industry in the Hokuriku region continues to grow.

Session

The changing economic geography of the automotive industry

Petr Pavlinek - Charles University and University of Nebraska at Omaha | **Boleslaw Domański** - Jagiellonian University

The automotive industry continues to be one of the most important industries in terms of employment, potential regional development effects in both more and less developed countries, and the volume of invested capital in foreign locations. It is also one of the most globalized industries, which is dominated by a relatively small group of large assembly firms and global component suppliers. It is facing radical technological changes that have a potential to significantly alter its economic geography. The economic geography of the automotive industry has experienced important changes at different geographic scales as a response to its increasing internationalization and globalization and changing production strategies. This session will consider various theoretical, conceptual and empirical aspects of these changes at the global, macro-regional, national and regional scales. Topics may include global production networks in the automotive industry, geographic shifts, effects of automotive foreign direct investment in host economies, the role of the state in the development of the automotive industry, spillovers of technology from foreign to domestic firms, supplier networks and supplier linkages, labor issues, spatial division of labor, research and development, geographical effects of technological changes, such as electric cars, autonomous and self-driving technologies, and other topics related to economic geography of the contemporary automotive industry.

The changing economic geography of the automotive industry I

Newcomers from the periphery: the international expansion of Polish automotive companies

Boleslaw Domański - Jagiellonian University | **Robert Guzik** - Jagiellonian University | **Krzysztof Gwosdz** - Jagiellonian University

There is a long debate on core-periphery relationships and their stability and/or change over time. Opportunities for the upgrading of the position of the periphery in global production networks (global value chains) are a particularly contentious issue. The economic growth of post-communist Central-Eastern Europe is discussed in this context. CEE may be seen as dependent market economies, the success of which is based on a combination of skilled, but relatively cheap, labour and the provision of capital and innovation within TNCs. CEE may represent a case of syndrome of a 'branch-plant economy' dominated by foreign-owned subsidiaries that possess few local linkages, and may be relocated to other low-cost areas. Thus, there is little doubt that the prospects for upgrading, especially functional upgrading of peripheral economies, i.e. the development of non-production-functions, depend on the growth of indigenous companies. The authors explore the development of domestic-owned producers in automotive sector in Poland, analysing their role in various types of activities/production, e.g. among manufacturers of labour- and capital-intensive products, high- and low-value added ones, final producers and first- and second-tier suppliers. The automotive industry is particularly interesting as it is the leading export-oriented sector in CEE. The focus is on Polish firms expanding in the global markets, among other things through acquisitions and greenfield investments in Western Europe, North America, and Asia. Such expansion of domestic companies is a recent phenomenon, which has attracted very little attention so far. The paper aims to identify paths and mechanisms of development of such producers, the underlying motives and barriers as well as the scope of design capabilities and locally-developed technologies together with the role of local brand names in this process. This leads to discussion on the possible impact of this development on the future position of Polish automotive industry in global production network.

Trade flows in the European automotive industry, 2000 – 2016

Jan Pulec - Charles University

This paper has three aims. First, to evaluate changes in the positions of European countries in the international division of labor in the automotive industry by analyzing changes in trade flows with automotive products between 2000 and 2016 and focusing on the position of Central European countries. Second, to classify and analyze the structure of automotive trade flows, mainly with auto parts and accessories, in which the increasing production is making Central European countries important actors in the European automotive industry. Third, to classify and analyze the changing nature of bilateral trade relations of European countries within the EU automotive industry. Trade flows have been increasing in volume and intensity every year and although the relative position of several West European countries has been worsening, Western European countries continue to dominate trade flows in the automotive industry.

The changing market for new personal cars in Poland and its spatial dimension

Tadeusz Stryjakiewicz - Adam Mickiewicz University | **Jędrzej Gadziński** - Adam Mickiewicz University | **Bartłomiej Kolsut** - Adam Mickiewicz University | **Robert Kudlak** - Adam Mickiewicz University

The purpose of the paper is to offer a spatial and temporal analysis of the market for new personal cars in Poland using different methodological approaches and tools. It covers:

- general characteristics of the car market in Poland in its spatial and temporal dimensions;
- identification of the socio-economic conditions that affect the demand of individual consumers for new cars and their spatial differences; and
- distinguishing different types of the car demand variability in its spatial and temporal dimensions, as well as forecasting the future demand.

Based on a literature review, the potential socio-economic conditions that might affect the car demand have been identified, and subsequently their role in the Polish circumstances has been defined with the use of econometric modelling. The model of multiple regression showed that the demand for new cars was stimulated by incomes of potential consumers and by a net in-migration, and depressed by the level of unemployment together with prices of complementary goods (especially petrol prices). Further analysis with geographically weighted regression (GWR) models revealed general spatial trends in the way that the identified conditions affected the demand for cars. Finally, the use of harmonic analysis allowed for the forecasting of the future car demand at the level of individual territorial units (poviats). The latter were categorised into four types according to their car demand variability. The paper is based on preliminary results of the project „Spatial dimension of car market (r)evolution in Poland” financed by the National Centre of Science.

Spatial restructuring of the European automotive industry: A firm-level analysis of job creation and job loss

Petr Pavlínek - University of Nebraska at Omaha and Charles University

This paper analyzes the changing geography of the European automotive industry between 2005 and 2016. It is based on the firm-level data about job creation and job losses of more than two thousand restructuring events of large automotive industry firms. The analysis suggests a continuing spatial shift in production from western to eastern Europe. It also confirms the growing internationalization of the European automotive industry because job creation is driven mainly by foreign firms and job losses by domestic firms. There are large differences between the role of foreign and domestic firms between western and eastern Europe.

The changing economic geography of the automotive industry II

The Changes of Spatial Distribution, Industrial Agglomeration, and Productivity Growth of Automotive Industry in China

Junzhu Zhao - Central University of Finance and Economics

This study has depicted the changes of spatial distribution and the development of automotive industry in China over the last three decades. The industrial agglomerations in different provinces and regions are identified based on the New Economic Geography (NEG) Framework and the Endogenous Growth Theory. The results show evidently that the relationship between spatial distribution of automotive industry and its growth is bell-shaped. The results also verified the Combined Effect on the Total Factor Productivity (TFP) of the automotive industry at province-level in China. The industrial agglomeration economies can significantly lead to a short-run productivity growth of the industry. However, the growth does not continue in the long-run and a negative impact of Agglomeration Economies has been presented in the long-run.

New engine for a peripheral region or crumbs from the rich man's table? Automotive industry and economic development in Eastern Hungary

Ernő Molnár - University of Debrecen

The automotive industry featured by continuous technological and organisational innovations, export-orientation as well as multiplier effects, is one of the key sectors of the FDI-led modernization process in East Central Europe. As building block of a broader "East Central European Manufacturing Belt" the Hungarian car manufacturing shows clear spatial concentration in the

Northwestern part of the country. At the same time, by establishing new production centres and integrating new suppliers, it has appeared also in Eastern Hungary.

The inclusion of the Eastern Periphery into the automotive value chains aims the involvement of new resources and the reduction of "cost-capability ratio" maintaining the competitiveness of these production networks. On the other hand, the process offers a possibility of growth and economic restructuring / diversification for the underdeveloped host region facing the disadvantageous structural effects of the socialist heritage as well as the dispreferred position in the location choice of foreign direct investments after the change of regime.

However, is the spatial shift of the sector reality or just an illusion? In what way can changes be interpreted within the upgrading discourse? How far can automotive industry contribute to the economic catching-up of the Eastern Periphery and to the mitigation of the duality typical for the Hungarian economy? In order to answer these questions the presentation based on statistical data and some results of field research, analyses the dynamics and local effects as well as the structural and spatial features of the automotive industry in Eastern Hungary.

Linking Strategic Management and Global Production Networks: in the case of Automotive and Rail Industry

Dzulfian Syafrian - Durham University

The Global Production Networks (GPN) approach has become one of the most influential framework to analyse uneven regional economic development (Coe & Yeung, 2015). GPN analysis, especially GPN 2.0, has mentioned the role of transnational company's strategy in shaping uneven regional economic development. However, much of literature neglects intersection between strategic management and economic geography literature (Knight, Wojcik, O'Neill, & Kumar, 2017), including in GPN analysis. This paper, therefore, fills this gap by connecting these two fields to criticise and develop GPN approach.

This paper uses automotive and rail manufacturing companies in Europe as the case studies. There are several findings in this paper. First, both industries applies contrast strategies in competing in global markets. These contrast strategies are mainly shaped by the nature and structure of the industry, especially number of buyers and suppliers (Stuckey & White, 1993).

Secondly, both companies have similar corporate geography policies. The absence of competitors, the availability of resources, access to markets and government supports are some key considerations of their corporate geography strategies. These factors then lead to 'lock in' and 'path dependence' problem in the regions (Martin & Sunley, 2006).

Thirdly, both industries have different value chain strategies (Gereffi, Humphrey, & Sturgeon, 2005). The paper finds that the lead firm in automotive industry prefers to source their key components from local suppliers and disintegrate their value chain. This strategy then forces automotive tier-1 suppliers to co-locate their plants next to the lead firm's site which creates automotive cluster at the region in the host country. On the other hand, the lead firm in rail industry sources their key components from their home country and vertically integrates their value chain, whereas the rest components are sourced from all over the world which creates less intense cluster compared to the automobile cluster.

Session Trading Places

Wouter Jacobs - Erasmus University Rotterdam | **Markus Hesse** - University of Luxembourg

This session welcomes contributions that draw attention to how particular places facilitate, influence and are influenced by international trade. Trading places may be urban and non-urban. They may be a trading floor, building, district, or online platform, they may be a warehouse, terminal, jetty, or indeed a vessel with in-transit stock being traded. They may be a clandestine back alley, a parking lot, or a temporary intermediate place (airport lobbies, an office desk, a coffee corner/ shop) where deals are made. They are locales of exchange (of commodities, manufactured goods, currencies, stocks or risks) which have in common that they are sites in which important information is held and revealed; information on qualities and quantities, on origins and destinations, on possible uses and substitutes, and on the risks that may be levied against them. What differentiates trading places from each other? How do they differ with respect to the processing of (geographically dispersed) information into actions and decisions, in discovering price and price differentials, and in conducting transactions and trade deals? How do some places seem to benefit more from international trade than others despite the widely available and instant access to certain forms of information; why are some places seem better equipped to capture the value of technologically driven informational changes than others. We want to focus on how one set of globally oriented economic activities – trade – influences the economic, social and political development and dynamics of places at various scales. As such, we build upon traditional work within geography, institutional and value chain analysis, and the New Economic Geography, but welcome other approaches within and beyond economic geography. We are interested in contemporary and historical perspectives, approaches, which may range from the theoretical to the empirical, and that employ methods from case studies to quantitative.

Trading Places I

Trading places between vulnerability and robustness: a comparative perspective on impacts and recoveries from port and maritime network disruptions

César Ducruet - CNRS | Laure Rousset - ENS Lyon

Trading places such as major transport nodes and corridors may be affected by disruptions of all kinds, from natural disasters to (geo)political changes, economic crises, and technological transformations of the maritime and ports sector itself. Existing scholarly approaches to such issues usually involve either complex simulation modeling techniques looking at various scenarios, or in-depth fieldwork through numerous monographs of particular places and events. What remains missing is a better understanding of how such shocks can be compared across space and time, depending on the nature and amplitude of the event and the characteristics of the affected location(s). This paper proposes a relational (or network) perspective based on the fact that ports of the world connect each other through vessel movements. Our main hypothesis is that although shocks and places are unique, certain similarities may be revealed in various ways: traffic rerouting patterns and shifts, recovery mechanisms, influence of initial conditions of the port system at different geographic scales, etc. For that purpose, we observed the distribution and evolution of daily vessel movements of merchant vessels at a selected number of disrupted places and compare the effects on their local and global connectivity. Our selection includes places in various world regions (e.g. New Orleans, Kobe, New York, North Korea), shocks of different nature (targeted attack, natural disaster, political crisis, world wars) and different time periods using the same methodology. We conclude to a striking convergence between those (apparently incompatible) cases, demonstrating cartographically and statistically the paramount importance of geographic proximity for temporary or permanent traffic rerouting through external, foreign hub ports absorbing the flow surplus while exploiting such “windows of opportunity” to foster their future growth and connectivity, without ignoring the role of other combined factors such as the policies and strategies of the involved actors.

The Market as a Geographic Coordinate: For Human Exchange and Agglomeration

Jordan Adamson - Chapman University

How does exchange affect the geographic distribution of human activity? The now standard story of increasing-returns and externalities (Krugman 1991; Fujita, Krugman, and Venables 2001) has been expanded to incorporate other supply-side factors into a general equilibrium framework (Rossi-Hansberg 2005; Allen and Arkolakis 2014; Redding and Rossi-Hansberg 2017). I propose an alternative narrative - that markets spatially coordinate trade. I hypothesize that people agglomerate to reap the gains from trade, with a market emerging as a focal point. These agglomeration incentives are stronger for more complex economies, with more things to be traded. I test this idea with a novel economic geography experiment that manipulates the number of goods in a pure-exchange economy. Specifically, I initially distribute individuals uniformly over a rectangular grid and endow them with a particular good. I then observe how the entire grid of players evolves from period to period as individuals change locations to trade their renewing endowment. This experiment is repeated multiple times with economies that have either two or three different goods.

Freeports: The places of storing, trading, and merchandising art

Wouter Jacobs - Erasmus University Rotterdam | Markus Hesse - University of Luxembourg | Catherine Wong - University of Luxembourg

This paper focuses on art as a global commodity of the 21st century. In recent times, processes of globalization and financialization have also shaped the arts sector, making art increasingly relevant for urban and economic geography. As art has emerged as a means of value generation and distinction – not only for the super-rich, but also for cities and regions – the places for trading artworks have also gained significant attention. This belongs to key nodes such as museums, galleries, and trade fairs, but also to various sectors of creative industries. Hot spots for art are not only, and no longer exclusively, global cities such as London, Los Angeles, New York, Paris or Tokyo, but also minor metropolitan areas like Basel, Bilbao, Cologne or Maastricht (NL). In our study of relational cities (which includes Geneva, Luxembourg and Singapore), the storage, trade and display of art play a certain role in their competitive portfolio – either as a traditional asset or as a newly developing field of activity. The key focus of this paper is on Freeports, that is, fortified super-warehouses that serve different purposes: i) they are huge bunkers of art and high-value collectibles; ii) they were created as means to exploit and further develop local art and financial markets; and iii) they are suspected of serving money laundering and illicit trading activities. Based on an empirical study of the three facilities in the three cities and their local environment, the paper aims at situating the world of art merchandising within the system of global trade. It

also discusses whether super-protected warehouses can become a vehicle for economic niche-development strategies, as it is currently discussed for post-Brexit UK.

Sneakerheads and Their Trading Places

Michelle La - Simon Fraser University | **Pamela Stern** - Simon Fraser University

Through the ethnographic study of Metro Vancouver sneaker enthusiasts' (sneakerheads) communities, this research identifies the processes by which limited edition sneakers are sold for often two to upwards of twenty times their retail list price. Sneaker companies, such as Adidas and Nike, have been purposefully limiting and varying the supply of certain sneakers, which drives up the resale price of the shoes. This manipulation of supply contributes to the allure and elusiveness of the shoes. And, it has enabled the establishment of virtual reselling communities where opportunistic individuals monetize, and enhance for the brands' benefit, the product's scarcity. This has particularly been the case in Metro Vancouver where there are only a handful of physical shops that specialize in these limited edition sneakers.

In this paper we focus on the multiple spaces where sneaker speculators, primarily young men, often teenagers, make markets for shoes. We show how they become speculators and traders, and how they ascertain value and assess risk in this informal market. Trading is done in physical and virtual spaces, such as sneaker conventions and in Facebook groups, and is governed by place-specific rules established and enforced by buyers and sellers. We show how the Metro Vancouver reselling sneaker market is embedded in other global markets, and how some particularly entrepreneurial young men learn how to navigate and bypass corporate policies and governmental regulations in order to maximize their profits. To aspirant traders, it seems that anyone can be successful if they learn the basics of buying and reselling; however, this research reveals how privileged information, transnational networks, social and cultural capital, and access to technologies gives certain individuals an economic edge over others.

Trading Places II

Trading services in the periphery

Peter Hall - Simon Fraser University | **Annika Airas** - Simon Fraser University | **Jeremy Arbuthnot** - Simon Fraser University | **Oliver Keane** - Simon Fraser University | **Xuzheng Wang** - Simon Fraser University

Can trading services change developmental trajectories of peripheral regions, or do they tend to reinforce existing patterns? The site for exploring this question is the Province of British Columbia, a region characterized by a long-standing yet evolving resource export economy, dependency on global markets, internal core-periphery relations, and a resurgent goods movement industry. Within the Province, we differentiate the metropolitan core of Vancouver and its immediate southern hinterland, and the northern Port of Prince Rupert and its northern resource hinterland. The emergence of Prince Rupert as a container port since 2007 has surprised many local industry and policy observers, yet the population has continued to decline. Likewise, substantial growth in Port of Vancouver throughput (but not employment) since the mid-1980s has occurred despite, not because of, a post-industrial property-based boom. These outcomes raise questions about how we should think about the economic benefits and other impacts of trade services in remote and semi-peripheral urban regions. In this presentation of ongoing work, we trace the structure and relationships of trade-related business establishments in British Columbia. Our database includes water/shipping, rail, trucking, warehousing, transport service, advanced service firms, goods exporters, business associations, labour organizations, and government agencies. Using social media and related online sources, we visualize and analyse various network relations between establishments within the Province. This analysis combines spatial (co-locational) and sectoral (value chain) dimension with informational, human, associational and corporate network relations. We argue that the insertion of trade services in remote urban regions need to be understood in relation to long-established trajectories of economic development, mediated by existing and emergent institutions. Rather than challenging these trajectories, trade service activities tend to reflect and reproduce uneven economic development and dynamics at various scales.

Distributed places: space, place, and mobility along and around a North American river confluence

Julie Cidell - University of Illinois

Geographies of trade often focus on key nodes in global networks such as ports, airports, or financial centers; alternatively, they consider the role of trade in contributing to the location and historical development of urban areas and "world cities." Recent work on the spatiality of logistics flows has broadened our understanding of how places are affected by the goods that travel through

them in areas ranging from geopolitics to labor relations to air quality. Such “distributed places” have a more complicated topology than nodes in a network, given the way in which they fold and stretch distance in both near and far locations. At the same time, they might not be recognized as globally important, despite their distant reach and network-shaping capabilities. This paper looks at the confluence of the Des Plaines and Kankakee Rivers in northeastern Illinois as one example of a distributed place. The confluence has been a site of trading and transport across multiple eras, vital to Native Americans, white colonizers, the U.S. military-industrial complex, and global logistics networks alike. While the same physical geography that has made it such an important site in multiple networks has also limited its regional development, this is not to say that there have not been profound local effects along the way. The confluence therefore serves as an example of the concept of the distributed place as one way to understand the spatiality of transport and mobility, or how movement and place construct each other.

Impacts of Monetary Shocks and Endogenous Anti-dumping on FDI

Xiaoguang Wu - Chinese Academy of Social Sciences | **Wenli Sun** - Beijing Foreign Studies University

This paper discusses Foreign Direct Investment (FDI) from the perspective of money supply. Specifically, we introduce endogenous anti-dumping under monetary shocks, establish a general equilibrium model consisting of domestic sales, two-way trade, and two-way investment, and examine the impacts of changes in the anti-dumping duty incurred by monetary shocks upon two FDI indices. The main results indicate that, firstly, the increase in the overall trade barriers including the tariff rate and anti-dumping duty can induce FDI with certainty, while this is not necessarily the case when only the tariff rate changes because of the trade-off between barriers; next, from the first FDI index, the fluctuations in money supply can affect the willingness of the domestic firms' FDI behavior through the channel of anti-dumping duty; and finally, the fluctuations in money supply can influence the second FDI index through the channel of anti-dumping duty channel and that of exchange rate, income and variable cost.

GLOBAL COMMODITY CHAINS, GLOBAL PRODUCTION NETWORKS AND THE TRANSNATIONAL VIEW

Session

Emergent global macroeconomic geographies: capturing 21st century globalization

Rory Horner - University of Manchester | Seth Schindler - University of Manchester

Globalization is in flux, giving rise to new global macroeconomic geographies. Richard Baldwin (2016) has suggested that the latest round of ‘unbundling’, facilitated by information and communication technologies, has led to a “great convergence” between the G7 and a number of large emerging economies. This “rise of the South” (UNDP 2013) has played a key role in reducing aggregate global income inequality since the 1990s (Milanovic 2016). However, in the same period, there has been an increase in inequality within many countries. While a populist backlash against globalization has appeared in some OECD countries (e.g. Trump, Brexit, AfD, etc.), Xi Jinping has stated that China will assume leadership of 21st century globalization. Shifting geographies of economic globalization have far-reaching implications and involve and relate to income distribution, the international division of labour, trade patterns, the growth of middle classes, a reduction of extreme poverty and a simultaneous intensification of precarity, political unrest and a general rolling back of liberal-democratic institutions. Meanwhile, dramatic and transformative changes loom, such as the fourth industrial revolution (Schwab 2016) and second machine age (Brynjolfsson and McAfee 2014). Economic geography has previously been accused of “missing the boat” on globalization (Dicken 2004), and it risks doing so again as “macroeconomic geographies... have to varying degrees receded from the foreground into the blurrier background” (Peck 2016: 308). This session invites papers that explore the shifting “tectonic plates of the globalizing economy” (Peck 2016) and their implications for our conceptualisation of economic geography. Topics could include, but are not limited to:

- Global convergence?
- Rise of the South?
- The 4th industrial revolution
- Drivers of 21st century globalization
- the globalization backlash
- Emergent global geographies of:
 - o Trade
 - o Production and consumption
 - o New international divisions of labour and de/industrialization
 - o Finance
 - o Poverty and inequality.

Emergent global macroeconomic geographies: capturing 21st century globalization I

Hegemonic transition in the World-System

Pedro Zubieta Funes - Universidad Privada Boliviana

The paper aims to analyze the global economic context for understanding the potential hegemonic transition between United States and China, and the economic motivations behind China’s current strategic repositioning.

Zubieta proposes an analytical lens based on the world system theory in order to comprehend the nexus between the capital accumulation and consolidation of China’s hegemony and its inevitable outward geo-economic expansion. Zubieta also draws attention to the critical role played by finance in the emergence of this potential hegemon, arguing that a hegemon must have both the capacity and the willingness to bear an unproportioned share of the cost of providing key collective goods and services that are the basis of international cooperation and exchange. Through this, the hegemon helps maintain stability and limits the risk to productive international interactions.

The author argues that Chinese capital and hegemonic expansion, with initiatives as the One Belt One Road or the Asian Infrastructure Investment Bank (AIIB), represents a world system’s new round of capital and production allocation, which will dialectically promote or diminish development opportunities for emerging regions as Latin America. The paper concludes that it is in the economic interest of Latin America to seize the chance of this external shock to increase its development levels by finding the strategic convergence with China’s global political strategy, and by avoiding a new dependency, that is financial in nature, with the “new center” of the global economy.

* This paper was presented at the International Geopolitics Seminar of the National Autonomous University of Mexico in Mexico City, and was included as a chapter of the book “New Regional Geopolitics” edited by the Deutsche Gesellschaft für Internationale Zusammenarbeit in Bolivia.

Globalisation, uneven development and the North–South ‘big switch’

Rory Horner - University of Manchester | **Yuko Aoyama** - Clark University | **Daniel Haberly** - University of Sussex | **Seth Schindler** - University of Manchester

An apparent ‘big switch’ in attitudes towards and discourse over economic globalisation has occurred since the turn of the Millennium. Economic globalisation was formerly widely identified as being orchestrated in the interests of the global North. Sceptics, mostly left-leaning, expressed particular concern for its impacts in the global South. However, a recent backlash against globalisation has emerged within the global North from the political right, while some support for globalisation has been expressed within the global South. This ‘big switch’ defies many theoretical predictions, and can be situated in relation to a shifting geography of global uneven development.

Core-Periphery Patterns and Unequal Exchange as drivers of Uneven Development? A structuralist and complexity-economic perspective on the Evolution of the European Trade Network

Jakob Hafele - University of Vienna | **Claudius Gräbner** - Johannes Kepler University Linz.

The economic development process in the European Union can be described as uneven and structurally divided into cores and peripheries (Becker et al. 2015). Taking this observation as a vantage point, we provide further explanations for the persisting inequalities in the European Union.

We conduct a network theoretic analysis of the European trade network from 1962-2015 (Smith 2017). This allows insights into the structural features of European trade flows, and the evolution of production structures of European countries. Particular attention will be given to diverging developments of Core and Periphery clusters. To deepen the understanding of the productive capabilities of European countries and derive explanatory approaches for the uneven development, we match trade data with information about economic complexity. Based on this, the trade network will be divided into 10 subnetworks, each representing a percentile of the products distribution ranked by their complexity. This novel approach allows for new insights with regard to the evolution of core-periphery structures in the EU and the underlying political-economic mechanisms.

First findings suggest that the structures are relatively stable and that trade patterns are highly uneven with regard to the complexity of the products traded. Over the whole period of investigation core countries have a positive trade balance with peripheries in trade of very complex goods and a negative trade balance in trade of less complex products. As the capability to produce highly complex goods is associated with more sophisticated production structures and higher GDP (Felipe et al. 2012) this can be described as a type of unequal exchange, taking up classical ideas of Raul Prebisch (Prebisch 1950). Such unequal exchange could provide for a plausible explanation of the persistent core-periphery structures in the EU and suggests a number of policy prescriptions to be explored at the end of the paper.

Dynamics of Macroeconomic Trade Networks: Tectonic Movements in the Network Space

Ivo Mossig - University of Bremen | **Michael Lischka** - University of Bremen

Recently, a growing interest in macroeconomic structures is noticeable in globalisation discourses in economic geography. In line with Dicken (2004), we see macroeconomic structures as dynamic outputs. These have an immediate impact on economic and political interactions of (multi-)territorially embedded actors. Peck (2016) emphasises profound changes of macroeconomic structures in the last years calling them shifting “tectonic plates of the globalizing economy”. Applying a dynamic network analytical approach, we trace these tectonic movements in the time span 1995-2017 on a global scale. The synthesis of economic geography and political science approaches allows a precise definition and conceptualisation of trade flows as interdependent network connections between countries. The network dynamics, we show, represent manifestations of disappearing and newly forming economic connections, revealing economic convergence and divergence between nation-states. Fused nation-states (e. g. supranational unions) sometimes have an internal tension that can lead to inner divergence, as results of internal actor decisions. Breaks of these plates, in turn, can lead to convergences between other nation-states and vice versa. This reinforces the notation, that the global economy is a “politically contested, institutionally mediated and geographically variegated sphere” (Peck 2016).

The network space offers a promising analysis platform to trace tectonic movements in the global economy. Such dynamic long-term observations, enable us to discover breaks and redirections of grown pathways and ties of trade. The termination or maintenance of connections partly depends on the strength of interconnectedness and the degree of interdependence (Keohane/Nye 2012: 8). Accordingly, we will show processes of uneven economic development in the network space. This generates insights about the stability and dissolution of tectonic plates, and also evidence for which plates have newly emerged. The measured network parameters deliver important information about the changing structural economic standing of nation-states over time as well as driving forces of the global economy.

Emergent global macroeconomic geographies: capturing 21st century globalization II

Fineprint: a spatially explicit physical trade framework to trace environmental and social impacts along global supply chains

Stefan Giljum - Vienna University of Economics and Business (WU) | **Martin Bruckner** - Vienna University of Economics and Business (WU) | **Victor Maus** - Vienna University of Economics and Business (WU)

In the era of globalisation, supply chains are increasingly international, thus disconnecting the location of production from final consumption. Consumption has developed into a major, geographically distant driver of various local environmental and social impacts in countries producing raw materials. Despite continuous developments, the spatial resolution of methods to assess global supply chains from raw material extraction to final demand has been limited to the national level. This leads to severely distorted footprint results, as the heterogeneity of environmental and social conditions within producing countries is not taken into account. We present a new framework, including spatiotemporal databases and a global input-output model, which allows a detailed tracking of material supply chains, thereby assessing the changing geographies of economic globalisation from the perspective of natural resource use and related environmental impacts. The novel methodology is developed within the ERC-funded project 'FINEPRINT' (www.fineprint.global) and made available open-source on our development platform (github.com/fineprint-global). In a first step, we map the geographical distribution of around 60 biotic and abiotic raw materials in countries world-wide on a detailed (10 km x 10 km) grid cell level and link these global extraction maps to spatially explicit data on related environmental and social impacts, including water scarcity, deforestation, biodiversity loss, and mining conflicts. In a second step, we trace raw material flows and related impacts to specific transportation facilities such as ports and further along global supply chains to the country of final demand. This assessment applies physical input-output modelling on the national and sub-national levels, integrating a range of statistics, such as national commodity flow surveys, port statistics and information from global maritime transport databases. The FINEPRINT framework will allow robust assessments of material footprints and related environmental and social impacts as a basis for designing targeted policy instruments for more sustainable product supply chains.

GPN governance and labour standards: A comparative institutionalist perspective

Rachel Alexander - London School of Economics and Political Science | **Sarah Ashwin** - London School of Economics and Political Science | **Niklas Egels Zandén** - University of Gothenburg | **Jaco Fourie** - University of New South Wales | **Stephen Frenkel** - University of New South Wales | **Nora Lohmeyer** - Freie Universität Berlin | **Chikako Oka** - Royal Holloway University of London | **Elke Schüßler** - Johannes Kepler University Linz

Convergence or divergence of multinational companies is an ongoing debate. Although transnational governance norms continue to evolve (Hassel, 2008; Ruggie, 2013), challenges with labour standards are prevalent across production sites, particularly in the global garment industry where lead firms have been considered to have high power over suppliers (Gereffi 1994; Gereffi et al 2005). Lane and Probert (2009) have examined variations in the ways lead firms govern their global production networks (GPNs) based on their national institutional embeddedness. This paper builds on this approach by comparing recent national developments, particularly exploring links between how lead firms govern their GPN and how they address labour standards. While firms' behaviour related to corporate social responsibility has been seen to be shaped by national pressures, more research is needed to understand such processes (Fransen, 2013). Conversely, we know little about how increasing concerns about labour standards in garment GPNs and developments in international regulation influence national systems of GPN governance. This paper draws on data from an on-going research project on GPN governance in the global garment industry (www.garmentgov.de). Specifically, this paper compares GPN governance structures and practices of garment brands and retailers in four different political economies: Germany, the UK, Australia and Sweden. The analysis seeks to understand the national and transnational institutional factors shaping lead firms' approaches to how they govern GPNs with a focus on labour.

The realities of automation in a digital age: Exploring emergent digitalization in Southern value chains

Christopher Foster - University of Sheffield

In this paper, I will examine digitalization in the global south, focusing on the ways that digitisation is reconfiguring value chain governance. I will consequently reflect on the implications of this work for broader debates relating to automation and labour.

Empirical work on digitisation in East Africa and an extended literature review suggest that digitisation is accelerating GVCs toward dynamic, changeable networks. However, outcomes are highly uneven ranging from ‘thin-integration’ to platform use and full-chain digitalisation.

Research on automation has tended to focus on economic analysis at a national level and has often leaned towards techno-determinist paradigms, without much empirical focus. This work, which integrates value chains and analyses the intricacies of technology use, suggests that future automation is likely to be highly concentrated in value chains, creating new forms of inclusion and exclusion. Moreover, the forms of digital technologies, standards and platforms are becoming an important locus of power, which potentially shapes value chain entry and upgrading trajectories.

In terms of labour, increasing hands-off management facilitated by digitisation threatens producer alliances who were previously central to supporting producers. Flexibility for lead-firms reduces labour power and introduces new instabilities in value chains as suppliers rapidly switch producers. However, more agile producers may exploit knowledge spillovers and open platforms to gain niche opportunities.

From rural poverty to urban precarity? Linking automation, labour markets and rural vulnerability in developing countries

Harald Sterly - University of Bonn

The recent developments in automation and digitalization of production and services, subsumed under keywords of “Industry 4.0”, “Platform Economy” or “Internet of Things” are questioning the existing spatial distribution and organization of global production and value generation. Their possible implications for labor markets are being studied and debated in research but also in media discourses. However, most of these analyses and discourses remain focused on a national level in rich and industrialized countries. Approaching this topic from the perspective of rural livelihoods, development and vulnerability research, it is important to consider the role and importance of industrial and service labour for rural-to-urban migrants in developing countries and emerging economies, and on the role that these migrants and their financial and social remittances play for processes such as rural development, poverty alleviation or adaptation to climate change.

Reflecting the findings from a five-year project on migration and social resilience in rural Thailand, the paper traces the impacts of automation and digitalization on the labour market in an emerging economy and the needs for rural-to-urban migrants to adapt to the current and future changes. It asks for the implications that this might have for economic, welfare, or education policies, and looks for the possible contributions of economic, geographic and development research.

Session

Geographies of Food Waste - Value Chains and beyond

Amelie Bernzen - Institute of Geography | **Christine Bonnin** - University College Dublin

The emerging literature on food waste has identified it as one of the most pressing global challenges today, highlighting both negative environmental and socio-economic implications and the clear urgency to reduce food waste at all scales and stages of the production-consumption chain. While the negative impacts, including CO₂ emissions, groundwater exploitation, contested land use, increasing food prices and associated food and nutrition insecurity have been widely mentioned, it is above all the quantification of total food loss and waste that have been at the core of much of the literature. Bearing in mind that this quantification of food waste depends much on the way it is conceptualised, the Food and Agriculture Organisation estimated that more than 1.3 billion tonnes (representing between one third and half) of all food produced for human consumption is either lost or wasted each year. There is no general agreement, however, on how much of this food waste is produced at different stages of the value chain, and the role of corporate players is particularly ambiguous. This Session welcomes researchers working on diverse aspects relating to the geographies of food waste, including, but not limited to, themes such as food waste governance, redistribution, consumption, environmental impacts, materiality, value chains, global North-South linkages, reduction strategies, sharing economies and food security.

Food Waste: How the Waste of Surplus becomes the Surplus of Waste

Rudolf Messner - Queensland University of Technology Business School | **Bree Hurst** - QUT Business School | **Carol Richards** - QUT Business School

Food waste and its prevention have evolved into a major global challenge deeply affecting society, economy and the environment. In response to that challenge a plethora of different initiatives aiming to prevent food waste have formed in the recent years, mostly conceptualizing their mission as the removal or mitigation of the most proximate food waste causes. These initiatives use

approaches such as efficiency of resource use, reduction of supply chain food loss, retailer food donations, individual consumer behavior, and above all seek ever more creative uses for food waste. However, tackling food waste when and where it happens and trying to prevent food waste after it has occurred is analogous to attacking the symptoms rather than the cause. Besides, the idea of “prevention” itself is beset by a number of conceptual difficulties: it is designated as a proper “method of waste management”, it is an ecological behavior lacking the ostensive and tangible characteristics waste composting or recycling represent, and most importantly, as waste is said to equate to growing wealth, prevention might be indicative of the opposite. To transcend these dissonances of “prevention” and “waste management” some research has proposed to focus attention on the systemic over-production of food as one of the most fundamental causes of food waste. In trying to think “outside the bin”, as suggested by Marie Mourad (2015), this work in progress research explores precisely this under-researched relationship between over-production of food and food waste generation. In terms of theory, the research builds on different perspectives such as “resource regime”, “food regime”, “food waste regime”, and “sustainable socio-technical regime” in order to apprehend key constructs like “over-production”, “food waste”, and “prevention”. While this paper builds on existing empirical research data, future data collection pathways and theoretical approaches will be flagged.

The Moral Economy of Food Waste

Carol Richards - Queensland University of Technology | **Bree Hurst** - Queensland University of Technology | **Rudi Messner** - Queensland University of Technology | **Denise Nogueira** - Queensland University of Technology

Estimates that between 30-50% of edible food is wasted are often juxtaposed with concerns about high levels of food insecurity in both developed and developing nations. This points to a failure of distributive justice not only in the global food system, but the global economic system, given that poverty is the key mediator of hunger. Charitable agencies in developed countries such as Canada, the US, the UK and Australia are reporting growing demands for food relief as social inequalities widen. Through these charitable mechanisms, food that falls outside of the market (due to overproduction, cosmetic appearance, etc) is linked to food insecure people who also exist outside, or on the margins of the formal economy. Described as ‘second class food for second class people’, the food waste/food relief nexus requires further critique. In this paper, we examine the current tensions of food waste and food insecurity through a moral economy lens. Drawing on document analysis and interviews with food system actors in Australia, we demonstrate how the decoupling of social and economic life under modern, (neo)liberal forms of governance have produced unethical impacts. In this vacuum, rights to food have been eroded, but artificially reinstated through corporate social responsibility, voluntary codes of conduct and industry self-regulation.

Crop Value Chain Configurations in Lower Saxony: Resource Cycles in the Bio-Economy

Stefan Nier - University of Greifswald | **Oliver Klein** - University of Greifswald | **Christine Tamásy** - University of Greifswald

The efficient use of renewable raw materials and the closing of material and energy circuits are major challenges for value chains in crop production. Particularly, in Lower Saxony with its 39,500 farms and 612 food processing companies representing all stages of the value chain, large quantities of by-products are generated permanently. Until today, these by-products (e.g. potatoe peels) are mostly fed to animals, heated in biogas plants or simply disposed of as food waste, even though there are promising alternatives which are currently examined in a collaborative research project funded by the Lower Saxony Ministry of Science. The overall aim of this project is to extract food ingredients (e.g. natural aromas) from potatoe and sugar beet peels and rapeseed cakes. It is expected that these naturally produced substances have positive effects on human health and the environment. The focus of our research project are Arginyldipeptide, which enhances the taste of salt, and 4-Vinylguaiaicol, a smoke aroma. By Arginyldipeptide, saline dosages and thus the manifold health risks that occur in the case of excessive consumption of saline can be reduced. 4-Vinylguaiaicol gives numerous products a smoke aroma and represents a health or environmentally friendly alternative to classic smoking. Our lecture presents some interim results of this project from a spatio-relational perspective by analyzing re-resource cycles and value chain configurations in regional crop production (limited to the area of Lower Saxony). We argue that actors networks and forms of collaboration have to be optimized in order to fully tap the innovative potentials of crop by-products.

Sharing economy: contributions and constraints to food security in Australia

Denise Nogueira - Queensland University of Technology | **Robyn Mayes** - Queensland University of Technology | **Carol Richards** - Queensland University of Technology

The sharing economy emerges as a phenomenon that enables alternative access to goods and services by establishing direct connections between individuals (peer-to-peer), or individuals and organisations. Its initiatives, sometimes based on digital

platforms, can reshape traditional supply chains in local or large scale. Moreover, the sharing economy discourse often emphasises a potential contribution to a decentralized, equitable and sustainable economic paradigm. However, there is a lack of evidence on how this phenomenon addresses the inclusion of individuals or groups that currently occupy the edges of the formal economy. To understand the contribution of the sharing economy to equitable access, this investigation focuses on food insecurity, a condition where people are unable to have access to food to meet their needs. Framed by alternative economies and social justice theories, this research explores how the sharing economy is affecting food security in Australia.

This presentation draws on empirical data collected from 15 semi-structured interviews conducted in the last quarter of 2017. Participants were involved in the food security landscape in Australia and were categorised into three groupings of sharing economy practitioners: (i) direct providers, who provide food to people experiencing food insecurity; (ii) providers, who distribute food to organisations that attend the population in need; and (iii) facilitators, who support the initiatives with knowledge, resources and networking. The results outline the sharing economy practices that are most relevant to enhance food insecurity. The findings of this research contribute to the theoretical understanding of sharing economy by exploring typologies associated with transactional or transformational outcomes. Overall, the research provides empirical evidence of the sharing economy contributions and constraints to food security, identifying relevant practices to enhance equitable access to food.

Session

Geopolitics, South-South-Cooperation and Development

Padraig Carmody - Trinity College Dublin | Phyllis Bussler – University of Cologne

In the context of the current neoliberal world economy, many countries in the Global South, especially in sub-Saharan Africa, are following an approach of regional development and economic integration based on the export of raw materials and agricultural commodities. At the same time, and driven by the global crisis of 2008, advanced as well as emerging economies are struggling in a global scramble to secure their (long-term) access to resources and markets, with China in the lead. International cooperation efforts, from traditional donors from the North, as well as from non-traditional cooperation partners, such as the BRICS, are embedded into this logic of geopolitical interest. They entail new configurations in the international aid system, such as south-south and trilateral cooperation, which claim for themselves to follow principles of horizontality and non-interference. While there is a risk for economies in sub-Saharan Africa to fall back into the role of a supplier of commodities for a global economy, re-inscribing colonial patterns, communities on a local level are faced with the social and environmental effects of natural resource extraction, investments into related infrastructure and livelihood issues. Against this background, this session aims to contribute to the debates on south-south-cooperation, (geo-)political interests and development. We welcome theoretical and empirical informed contributions from economic geography, development geography, international relations and related fields dealing with:

- Resource conflicts in the Global South, especially in sub-Saharan Africa
- South-South and Trilateral Cooperation projects and their implications
- BRICS investments in sub-Saharan Africa
- Geopolitics and Neo-Colonialism

Each paper is expected to comply with the 20-minutes time slot. Please send your abstract, including name and affiliation to Phyllis Bussler via bussler@wiso.uni-koeln.de by March 15th.

A Discursive Construction of China's Belt and Road Initiative

Weidong Liu - Chinese Academy of Sciences | Michael Dunford - Chinese Academy of Sciences

An international consensus is emerging around the Belt and Road Initiative (BRI) proposed by the Chinese government, with a growing number of countries in the world seeing it as a way of jointly exploring new international economic governance mechanisms. At the same time, with the crisis of neo-liberalism, economic globalization has arrived at a crossroads. In particular, incessant voices speak out against globalization, making the quest for a new way of promoting global development a major challenge. In this context, more and more political elites and scholars consider that the BRI opens up a possible new globalization path, amongst which inclusive globalization warrants exploration. On the basis of a brief analysis of the course and mechanism of global economic expansion and the limitations of neo-liberalism globalization, along with the putting into practice of the BRI, this paper outlines some of the core features of inclusive globalization, i.e., inclusive growth, inclusive infrastructure development, inclusive development paths, inclusive participation and cultural inclusiveness. Although these features are not sufficient to characterize fully inclusive globalization, they do identify some directions for future research, and provide elements of a discursive construction of the BRI.

Transnational investments and -resistance in the case of ProSAVANA and the Nacala Growth Corridor in Mozambique: Linking Politics of Scale and critical geopolitics

Phyllis Bussler - University of Cologne

In the context of a global scramble for natural resources and the (long-term) access to new markets, global and emerging powers such as the BRICS (with China in the lead), find themselves in the race regarding investments into resource extraction, large scale land acquisitions and related infrastructure. International cooperation efforts from northern as well as from southern donors are embedded into this logic of gaining access to those resources.

While many national governments in sub-Saharan Africa, supported by global governance stakeholder like the World Bank, pursue the establishment of regional Growth Corridors as a strategy for regional development in order to attract those investments, local peasant communities are being confronted with land grabbing, food insecurity and the loss of their livelihoods.

In the case of the Nacala Growth corridor in Mozambique, large coal and natural gas reserves, as well as the availability of land, have attracted foreign investments from all over the world, including from Brazil and Japan. Against this background, the planned implementation of ProSAVANA, a trilateral cooperation program between the governments of Japan, Brazil and Mozambique, that aimed at establishing a competitive agribusiness sector in the region, was met with resistance by peasant communities and civil society organizations. The mobilization soon developed into a transnational mobilization with the involvement of the Brazilian and Japanese civil society.

By conceptualizing Growth corridors as a new geographical scale by following the Politics of Scale literature (e.g. Brenner 2001) and by drawing onto the literature of critical geopolitics (Ó Tuathail 1993), this study seeks to analyze how scale is produced and how this opens up political opportunities for transnational resistance.

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How China “Made America Great Again”: The Paradoxical Impact of Chinese Trade on African Foreign Policy Positions

Padraig Carmody - Trinity College Dublin | Niheer Dasandi - University of Birmingham | Slava Mikhaylov - University of Essex

There has been much recent attention given to China's influence in Africa. Many argue that China's growing economic ties with African states has led to a China having increasing political influence across the continent, at the expense of the US. However, there has so far been little systematic analysis of whether this is indeed the case. In this paper, we examine whether growing trade with China leads to African states having more similar foreign policy preferences to China. We do this by considering the similarity of African states with China in terms of: a) voting patterns in the UN General Assembly; and b) annual statements in the UN General Debate. While the former is a widely used measure of foreign policy congruence, the latter is based on the application of text analytic methods – specifically Wordscore – to a new dataset of UN General Debate speeches. The analysis demonstrates that growing trade with China has a paradoxical impact on African foreign policy positions, in that across most dimensions greater trade with China leads African states to align more closely with the US in terms of foreign policy positions. We argue that this provides support for the view that African states are engaged in balancing behavior with regard to external powers, whereby African elites seek to play off rival powers against each other in order to strengthen their own autonomy.

Session

Global commodity chains, marketization and uneven development

Johanna Herrigel - University of Zurich | Christian Berndt - University of Zurich

Since the turn of the millennium, and paradoxically fuelled by the global economic crisis, enhanced marketization – the deepening of markets as well as the re-engineering of markets and of individual market behavior – is touted by a multiplicity of institutions. Indeed, enhanced marketization is the key element of policies circulating across the Global North and South and fostering the assemblage of a new (global) policy consensus. In light of these dynamics, a renewed analytical focus on the dynamical relationship between globalizing capitalism (reinforced by these pushes for marketization) and the diverse dimensions of uneven development is urgently needed.

Marxist, feminist and postcolonial critiques have long argued that dynamics in globalizing capitalism are co-constitutive with processes of socio-geographical differences and inequalities, and thus with uneven development. They have drawn attention to how globalizing capitalism relies on framing-cum-capitalizing on and thus continuously re-creating its multiple “Outsides”, ranging from nature (nonhuman) to reproduction (subsistence) and non-capitalist social relations of production and exchange (Fraser 2014, Tsing 2015).

It is the aim of this session to engage with the co-constitutive relationship between globalizing capitalism and uneven development through the lens of particular commodity chains, market realms or production networks. We encourage empirical and/or theoretical contributions that focus on the struggle over market b/orders and the (re-)production of multiple differences and inequalities widely understood. We also encourage papers that bring contemporary theoretical perspectives into conversation with one another.

References:

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Global commodity chains, marketization and uneven development I

Calculating in the presence of limited commensurability, and the struggle over market b/orders in bull semen trade

Julia De Gregorio - Uppsala University

Breeding value calculation is "complicated", the breeding director of a German federal state institution for cattle breeding assures me six times during our interview. It is "complex", says the CEO of a bull semen trading company exporting bovine genetics from Germany. And Kevin laughs and asks "confused?" We are on a sales rep tour on New Zealand's North Island. He just explained how breeding values are calculated in New Zealand, how it differs from other countries, and how his company – importing bull semen from overseas – handles those differences. And I was, indeed, confused. Combining recent theoretical developments in the geographical literatures on "marketization" and on the commodification of nature, this paper addresses the transnational markets for dairy cattle genetics. It focuses on breeding value calculation, especially estimations of the genetic 'performance' of bulls. Farmers use breeding values (e.g. total merit indices, performance figures, and conformation traits) in order to select bulls for artificial insemination. The latter plays a central role in today's dairy industry. But breeding value calculation differs between countries. There is no consensus on how to measure genetic 'merit' in order to select for the 'best' bulls. Consequently, the comparability of bulls across borders is limited. As Michel Callon and collaborators have argued, commodities have to be constructed as 'similar yet different' in order to make selection possible. They have to be distinct vis-à-vis comparable commodities. But what happens when the 'similar yet different' principle is threatened? In the case of the transnational markets for bovine genetics, there is difference but limited comparability. Drawing upon fieldwork conducted in Germany and New Zealand in 2016 and 2017, I will show how dis-consensus leads to the calculation of values perceived as incommensurable. What else can we learn from calculating in the presence of limited commensurability?

Marketising Anti-Slavery

Siobhan McGrath - Durham University Geography Department

The rise of anti-trafficking and anti-slavery advocacy can be traced back to the 1990s, becoming a mainstream concern since around the start of the millenium, and growing steadily since then. In recent years, however, there has been an intense focus on supply chains as an arena within which the issue should be addressed. This has spawned a diverse field of initiatives, instigated variously by corporate, state and private actors. This paper is based on research identifying and analysing the characteristics of over 100 such initiatives alongside profit-making initiatives such as consultancies and social enterprises.

The paper conceives of unfreedom in labour relations – produced within as well as articulated to capitalist relations – as incorporated into supply chains through the marketisation of production. This marketisation of production is a key contemporary mechanism of uneven development which is constitutive of supply chain capitalism. But the paper's focus is more specifically about how concerns over exploitation in supply chains are currently being responded to. It considers the extent to which business-oriented anti-slavery initiatives are a means of limiting responsibility through reproducing familiar divisions of North and South, developing and developed – or whether they can also be conceived of as a form of marketisation of ethical concerns.

The gender (& social reproduction) of global commodity chains

Alessandra Mezzadri - soas

The deepening of top-down processes of global outsourcing is complicating patterns of uneven development within international, national and local boundaries, and the structure and governance of global commodity chains (Bair, 2009; Azmeh and Nadvi,

2014). At the same time, a number of bottom-up pressures shape the increasing complexities of the political economy of work within the same chains. In particular, gender and social reproduction play a key role in crafting given labour outcomes, in ways that exceed more conventional stories primarily focused on employers' strategies at labour control. Drawing on evidence from the global garment industry and its 'sweatshop regime' (Mezzadri, 2017) in India, this presentation discusses the nature of gender dynamics within global chains, and the relevance of social reproduction in re-constituting a number of key labour outcomes, effectively perpetuating social differences and inequalities on the shopfloor and beyond. The presentation stresses how a focus on social reproduction helps illustrating the social life of/in global commodity chains (see also Tsing, 2009), whilst contributing to the project of investigating the geography of globalization as not only shaped by capital, but also by labour (see Herod, 2003). Moreover, it also shows that social reproduction should not be merely seen as the realm of subsistence, but rather as the central node through which processes of labouring should be analysed and understood.

Studying the Collapse and Ruins of Global Commodity Chains: Insights from an Outgrower scheme in Ghana

Stefan Ouma - Goethe University Frankfurt | **Azzindow Iddrisu** - University of Ghana | **Joseph Yaro** - University of Ghana

Global commodity chains have morphed into something else. Originally coined as an approach to analyze the incorporation of labor and commodities into far-flung organizational structures for the production and redistribution of surplus value in world-historical perspective, they have been turned into a tool of development policy (as "global value chains") used to foster the global market integration of firms, smallholder farmers and workers in the Global South. The enthusiastic uptake of the value chain approach among development researchers and practitioners has tended to be blind for the power structures, distributional injustices, experiences of exploitation, environmental destruction and multiple producer risks that come along with the integration into global markets. Such "dark sides" (Werner 2016) of global commodity chains have recently been given a more prominent role in the literature by invoking the concept of disarticulations. The concept makes a call for moving beyond celebratory, inclusionist accounts of global commodity/value chains and production networks, sensitizing us for questions such as "production volatility, precipitous booms and busts, (...), historical patterns of dis/investment" (Bair and Werner 2011), as well as a range of other disarticulated effects (e.g. devaluation, enclosure and dispossession) of (world) market integration. This paper contributes to this emerging debate. Building on the example of a scheme of export-oriented mango production in Northern Ghana that has been researched over an extended period of time independently by each of the authors, it engages with four fundamental disarticulations of world market integration (dispossession, resistance, crisis and ruin[s]), and puts two of them under particular scrutiny. It is argued that these are phenomena that are not only often absent from debates on commodity and value, but also that these are difficult to grasp from the positionality of a single researching subject and thus necessitate novel methodological approaches.

Global commodity chains, marketization and uneven development II

Sticky futures: Building regional geographical rent platforms on blue economy

Richard Le Heron - University of Auckland | **Kate Davies** - National Institute of Water and Atmospheric Research | **Stephen FitzHerbert** - National Institute of Water and Atmospheric Research | **Daniel Hikuroa** - University of Auckland | **Erena Le Heron** - University of Auckland | **Nicolas Lewis** - University of Auckland

The challenge of reimagining economy and refocusing economy-environment relations represents perhaps the greatest contemporary planetary challenge. It is also fundamental to revitalising the political and generative capability of economic geography. With the notable exception of the Community Economies Collective, economic geographers have made little collective headway in this regard. Much of the innovative thought necessary has come from anthropologists such as Anna Tsing and Tania Li whose focus on economic practice, the politics of place, and concepts such as resourcefulness allow us to grapple with dynamic relationships between globalising/marketising capitalism and uneven development. Crucially, it is the simultaneous and explicit consideration of methodology, novel concepts, politics and the reimagination of economy that gives their work its potency. In this paper we elaborate an ongoing engagement with their work (Lewis et al. 2013) and relate it to our own conceptualisation of geographical rent, which we are using to build a politics of reimagined economy in New Zealand's resource regions. We aim to bring a gritty concept from economic geography to the question of diverse and socially and environmentally just economic futures. Economic geographers are rediscovering rent in many places. This is a promising start to building a new and engaged politics if uneven development. Our paper outlines efforts by regional economic development agencies in New Zealand to build development projects around marine economies, and our own efforts to inject the notion of geographical rent platforms into the way those projects are being conceptualised and materialised. Our work seeks to interact with and redirect the NZ version of the now ubiquitous 'blue economy' initiatives designed to prepare the marine 'frontier' for marketisation by knowing

it more fully, securing property rights, and managerialising it for exploitation. Our notion of blue economy is one composed of environmentally sound practices in reimagined economy.

Making Markets for Sustainable Urban Planning: The Case of Eco-Urbanism

I-Chun Chang - Macalester College

The literatures of critical urban sustainability research and policy mobilities have demonstrated how planners from leading international consulting firms play pivotal roles in the transnational policy circulation of sustainable urbanism. What the scholarship cannot inform is the structural understanding of how these planning consultancies work to promote sustainable urbanism models and drive policy mobilities. Based on my research on Chinese Eco-cities, I illustrate a policy circulation process mainly driven by consultancies actively creating and maintaining demands for sustainable planning services. Four major strategies are identified. First, planning consultancies commodify sustainable planning visions and techniques by producing de-territorialized and standardized packages for master planning, and promoting those packages with utopian images, narratives, and policy-learning trips. Second, consultancies also help create institutions and tools meant for evaluating and appraising the commodified sustainable planning products and services. In turn, urban sustainability indices and accreditation systems grant credentials that legitimize the planning packages and help establish their market values. Third, the consultancies set up marketplaces where consultancies and clients can meet and make transactions; examples of such spaces include organizations, conferences, summits, and exhibitions that promote sustainable urban planning. Lastly, some consultancies bridge their clients with large financing institutions to both ensure funding and demonstrate the powerful backing of their urban sustainability models. These findings highlight the importance of studying the business operations of sustainable planning industries. I propose that a more comprehensive understanding of the policy circulation of sustainable urbanism requires moving beyond “following the policy” and into “following the money.”

Sustainability Standard Setting in GPNs – the Role of Knowledge—Intensive Intermediaries

Annika Surmeier - Philipps-University Marburg | Simone Strambach - Philipps-University Marburg

Standards increasingly address social and ecological concerns in global production networks (Barrientos et al. 2011; Nadvi 2014). In order to facilitate socio-economic benefits and environmental protection locally, global standards, set and enforced within GPNs, need to integrate the context-specific needs of actors in developing countries. Most research has focused on standard setting processes in the Global North, where the inclusion of actors from developing countries remains limited (Ponte & Cheyns 2013). However, if the local embeddedness into the institutional environment is lacking, the standards' implementation can be challenging and their impacts ineffective (Bartley 2011; Strambach & Surmeier 2013).

Recently, there is evidence that some countries from the Global South are pro-actively influencing transnational and global standard setting. The combination and integration of various knowledge bases across sectors, scales and levels is a decisive factor in these processes. Accordingly, we argue that a dynamic, knowledge-based perspective can provide more detailed insights on how actors from developing countries contribute to multi-scalar standard setting processes within both - South-South and North-South relationships. Special types of organizations – Knowledge-Intensive Intermediaries (KIIs) - play an essential role that is mainly overlooked.

The objective of the presentation is to provide a mainly conceptual contribution on the role of KIIs in sustainability standard setting within GPNs. It builds on the scientific debates of the governance approach in GPNs and the 'regulatory renaissance' literature which places emphasis on the role of developing countries and on modes of public-private interactions in sustainable standard setting (Bartley 2011; Nadvi & Raj-Reichert 2015). We link these approaches with research on the spatial shaping of knowledge dynamics developed in economic geography (Crevoisier & Jeannerat 2009/2016, Strambach & Halkier 2013). Empirically, this contribution investigates the South African organization “Fair Trade in Tourism” to illustrate the strategies that KIIs use to influence global standard setting.

Session

Radicalising global production networks

Carlo Inverardi-Ferri - National University of Singapore | Dennis Stolz - National University of Singapore (NUS)

As a heuristic framework for understanding the organisationally fragmented and spatially dispersed nature of contemporary production, the Global Production Networks (GPN) approach has become one of the most influential paradigms in geography today (Coe & Yeung, 2015). From its earliest formulations, the GPN framework held the promise of a critical investigation of uneven geographical development, integrating elements from world-systems theory, dependency analysis and other radical traditions in political economy (Dicken et al., 2001; Henderson et al., 2002). Later scholarship has in part departed from this initial

agenda (Bair, 2005; Smith, 2015). While intersections between GPN and critical strands of geographical research have certainly emerged in the literature (Arnold & Hess, 2017; Hudson, 2008; Leslie & Reimer, 1999), this session suggests that a more robust engagement with radical schools of economic thinking is needed to fulfil the original promise of the project.

The session invites theoretical, empirical, and methodological contributions that cover themes including, but are not limited to:

Marxian approaches and GPN

Political ecology and GPN

Cultural political economy and GPN

Feminist geography and GPN

Neo-Gramscian approaches and GPN

Polanyian economic geography and GPN

Labour geography and GPN

State and institutions within GPN

GPN, primitive accumulation, and enclosures

Social reproduction and GPN

Food and GPN

Waste and GPN

Animal geographies and GPN

Mobility and migration in GPN

Informality and the illicit in GPN

Radicalising Global Production Networks: GPN and power relations

Strategic coupling: processes of economic integration

Carlo Inverardi-Ferri - National University of Singapore

This paper contributes to literature on the concept of strategic coupling. Strategic coupling is today understood as a dynamic process articulated in different 'modes' (i.e. indigenous, functional, and structural) and 'types' (i.e. global cities, innovation hubs, and others). Theory suggests that strategic coupling is embedded in geographical contexts and conflicts constituted by different combinations of institutions and actors (i.e. political systems, administrations, labour unions, NGOs). The paper draws this scholarship into conversation with 'Polanyian economic geography'. It extends the concept, exploring how processes of strategic coupling intersect with a variety of 'modes of economic integration'. In conclusion, it highlights the implications of a substantivist approach to research on strategic coupling.

Technology as Power in Value Capture of GPNs in the Automotive Industry of Changchun, China

He Wang - City University of Hong Kong

Regional development is examined through value creation, enhancement and capture in GPNs studies. Value capture is crucial, and difficult for firms and regional assets to retain the surplus within their organization boundaries. Comparing to the abundant studies on value capture as "outcome", there has been a lack of explanations of the dynamics and mechanism for value capture. This article revisits the distinction between economic ownership and possession by Doreen Massey (1984) and examines the role of technology in the power relations and dynamics of value capture. Based on 60 interviews conducted in 2009, 2012 and 2016 with firm managers and engineers in OEMs and suppliers, this article takes the automotive industry in Changchun, China as an empirical case study to investigate its joint venture way of participating GPNs from 1986 to 2016. Guided by China's automotive industrial development policy, since 1994, foreign share in original equipment manufacturers cannot exceed 50% to maintain the majority share of Chinese capital in the ownership structure. However, analysis of the production networks along the tiered structures of suppliers reveals how the technological dependence on its foreign partner loses the possession of production process, in supplier, capital, brand, and talent controls.

Lines of Work, Corridors of Power: Extractive Production Networks as Sites of Power and Counter-Power

James Lawson - University of Victoria

Extractive networks that produce energy resources are important sites of social and political contention in North America and around the world. Mapping the sources and beneficiaries of corporate strength through blockage of the material processes of a chain or network also suggests points of corporate vulnerability. That is, transformative interventions from other actors are most likely to be effective at points where corporate power is weakest and counter-powers are strongest. The chapter works with two main approaches to thinking about chain-based power. Some argue that social power arises from specific capacities for monopolistic obstruction at specific points or nodes along the chain or network (e.g., Kaplinsky, Gereffi et al). In their view, this is the foundation of the managerial power that “lead firms” hold over a chain or network. It occurs because firms capture disproportionate shares of economic rent, defined in terms of economic exclusion or blockage. Kaplinsky recommends firms (and for countries) maximize their benefits as participants in globalization this way, even though it is a form of power that depends on depriving other actors of power. Others, however, add that power rests on the economic value embedded in the central material flows along a chain or network. This entails a complex interactive analysis: first, a study of material flows in which value flows may be imbedded; second, a study of the value flows themselves (e.g., Henderson et al). This is a power based critically on production and profitability. In addition, the paper bring to bear a political, strategic sensibility, including some concepts from the critical and mainstream literatures on logistics, especially associated with bulk commodity transport (Mezzadra and Neilson, Lambert, Trace). Because smooth and uninterrupted material flows are crucial for profitability, forces within or beyond ordinary chain operations that jeopardize these flows may threaten corporate power.

Slow Food, Shared Values and Empowerment In An Alternative Global Production NetworkChain

Gordon Winder - LMU Munich | **Wolfgang Kapfhammer** - LMU Munich

This paper explores governance and power relations within the guaraná (*Paullinia cupana*) commodity chain of the Sateré-Mawé, an indigenous group of the Lower Amazon, Brazil. Drawing upon ethnographic and joint field research in Para, Brazil, it combines an economic geography approach with recent anthropological interest in ontological diversity. It describes the guaraná value chain in global production network terms, and discusses issues of narrative, transformation and power in the community of values associated with the GPN. Guaraná is a ritual beverage of central importance to indigenous cosmology and is now a commodity traded within the global Fair-Trade network. We find that the commodity chain is the result of politically motivated indigenous and European actors. It has a simple organization and is based on soft arrangements, with agents at neither end of the GPN controlling relations. Diverse discourses, ideologies and narratives braided around the GPN keep it working. In spite of misunderstandings among actors over the ‘purity’ and ‘naturalness’ of the products, these diverse discourses are strong enough to generate a community of values that bring indigenous and non-indigenous agents together. Indigenous actors are empowered and alternative development proceeds, but this is a precarious outcome because of the situation in the production region and because of tensions within the GPN. Thus, the paper stresses the importance of analysing actors, institutions, regulations and relations at work around the GPN rather than simply along it.

Radicalising Global Production Networks: Labour and GPN

Labour, logistics and GPNs: dockworker organising across scales and networks

Jonathan Jones - Queen Mary University of London

Labour geography has since its inception been an “effort to see the making of the economic geography of capitalism through the eyes of labour” (Herod 1997: 3). Research into logistics work cries out for this kind of lens. The logistics revolution and the rise of transnational supply chains and Global Production Networks (Bonacich and Wilson 2008; Henderson et al 2002; Smith et al 2002) have wrought enormous changes on the world of logistics work. Despite this, Gregson (2015: 2) notes that there have been only a “handful of studies that have considered the implications of the logistics revolution for labour”. And yet the structural position afforded to workers in the logistics industry gives them potential power, raising the possibility of developing links of solidarity within the supply chain. Warehouse workers taking action against WalMart in the US explicitly drew attention to the hidden work of the supply chain and inspired retail workers to take strike action (Eidelson 2013), while in dockers’ unions there have been a many examples of workers taking solidarity action to support colleagues in different countries (Turnbull 2006; Fox-Hoddes 2017).

I will examine attempts by union activists and workers in Essex in the UK to establish trade union organisation at a major new port. Via interviews with key actors I will establish the ways in which campaigners were able to both apply leverage via protests against supply chain customers, engage networks of solidarity with dock workers overseas, and took advantage of tight labour markets in skilled work in order to succeed despite opposition from employers. The research contributes to our understanding of the ways in which workers can utilise various scales and networks in reconfiguring contested social relations in dock work, while posing questions about the challenges of replicating such successes in other forms of logistics work.

Reshaping regulation in South African wine: production networks and the role of worker agency in upholding labour standards

Thomas Hastings - Queen's University

The paper adds to the growing body of work focussed on the role of labour and state forces in developing global production networks (GPNs). Taking the case of farming/wine production in South Africa, the article discusses labour's ability to encourage progressive labour institutions and the realisation of rights at the local level. This is achieved through a focus on labour's relational agency. Through campaigning at the international level, workers are shown to place associational pressure on both private and state regulators to deliver improved labour standards at the local level. In doing so the GPN framework is shown to provide not just a useful framework for exploring the agency of lead firms, but also the role of workers in improving access to institutions and working standards commonly denied by states and corporations.

Radicalising GPN analysis with and through natural resource industries: Frontiers, fetishism, labour and the state

Liam Campling - Queen Mary University of London | **Elena Baglioni** - Queen Mary University of London

Despite 30 years of research on global value chains and 15 year on global production networks, the appropriation of nature in general and natural resource industries in particular remain marginal both theoretically and empirically. There is a parallel ecological deficit in labour process theory and a lack of applied research on natural resource industries. But since historical capitalism is based on the expanding appropriation and transformation of nature by labour, these lacunae must be redressed. Contributing to an emerging body of work in environmental economic geography and the international political economy of the environment, this article theorises global value chains through the lens of the circuit of capital as a tool to unravel some distinctive features of natural resources industries. We propose a framework for the study of natural resource industries as global value chains based on five propositions: (a) commodity frontier theory, (b) the fetishism of natural resources, (c) the socioecological indeterminacy of the labour process, (d) distance and durability in the production of time and (e) the contingency of the capitalist state in (re)producing global value chains. While far from exhaustive, we argue that this original synthetic framework provides crucial bases for a research agenda on global value chains in natural resources.

Linking Mobilities of Labour and Capital in Global Production Networks

Philip Kelly - York University

This paper develops a framework for exploring the connections between mobilities of capital and labour in the contemporary global economy, with a particular focus on Asia. In some strands of GPN studies, labour has received close attention, but it is relatively unusual to find analyses of mobile or migrant labour within production networks, or to seek connections between processes of capital and labour mobility. At the same time, migrant labour has been extensively studied outside of the GPN framework, but the locus of analysis is usually rendered as the individual migrant worker, the collective (im)migrant community, or the state and other actors that play a role in facilitating or regulating mobility. Even though migration is most commonly undertaken in order to reach employment opportunities, the connection with capital mobility is seldom made. Where the two processes have been linked, it has primarily been in the context of global cities where agglomerations of mobile capital come together with the movement of labour. In this paper, I suggest an analytical framework related to spatiality, institutional forms of governance and cultural contexts, to theorize the multi-scale and multi-faceted connections between capital labour mobility in the context of Asia.

Radicalising Global Production Networks: Production networks and value creation

Revisiting ‘Uneven Development’: The seesaw of capital and the relocation of Turkey’s globalized clothing production

Anke Hagemann - Technische Universität Berlin | **Elke Beyer** - Technische Universität Berlin | **Lucas Elsner** - Technische Universität Berlin

In the field of commodity chain research, two important lacunae have been highlighted by various scholars recently: GCC and GPN approaches reveal shortcomings regarding the contextualization within the greater dynamics of the political economy of uneven development (Werner 2016, Starosta 2010), and a yet inadequate conceptualization of space and the built environment (Brown et al. 2010, Pamreiter 2012). This paper aims to address and interlink both issues by revisiting Neil Smith’s theorization of uneven development and discuss it against the backdrop of an empirical, multi-local study of production networks. We argue that Smith’s concept of the “seesaw of capital” (Smith 1984) can be productively employed to develop a better understanding of the recurrent spatial restructuring of production networks and to conceptually grasp the transformation of the built environment within these processes.

As a case study, we draw on recent research on production locations of the globalized clothing industry in Turkey, Bulgaria and Ethiopia, which are currently showing different patterns of investment and disinvestment. The paper traces successive production relocations on various scales: from inner-city Istanbul to its hinterland and to more peripheral regions of Turkey as well as international offshoring to destinations in Bulgaria and Ethiopia. While each of these relocations was triggered by the changing spatial imbalances of wage levels and other production costs, their particular forms were enabled, guided and shaped by very different local trajectories, state incentives, regulations and planning efforts, investments in production facilities and infrastructures, modifying the built environment to varying degrees. Departing from an analysis of these modes of coupling and decoupling (Coe /Yeung 2015, Werner 2016), their spatial conditions and effects, the paper explores in what way insights from Smith’s work on the seesaw movement of capital can contribute to build an explanatory framework for the respective dynamics of uneven spatial development.

Global production networks (GPN) from below: a case study of the shanzhai mobile phone industry in China

Yifan Cai - Clark University

The GPN literature has predominantly focused on the role of lead firms, ascribing little agency to supplier firms in economically peripheral regions. Even in the literature that addresses the development dimension of the GPN, upgrading has largely been conceptualized as a process in which supplier firms gain momentum primarily, if not solely, from their insertion in a certain GPN. This study re-conceptualizes the agency of supplier firms and re-examines GPN from below by investigating the case of the shanzhai mobile phone industry. While shanzhai is conventionally viewed as equivalent to counterfeits and knockoffs, a spectrum of innovation and a number of well-known innovative companies has emerged from the shanzhai mobile phone industry. Data for this research are primarily collected through interviews with various stakeholders involved in the mobile phone industry in Shenzhen and the broader Pearl River Delta (PRD) region. By analyzing the roles of shanzhai firms as 1) learners and innovators, 2) networks, and 3) entrepreneurs, this study articulates the agency of suppliers firms and, respectively, addresses the relationships between the GPN and 1) other GPNs, 2) the regional economy and local production networks, and 3) emerging markets. This research contributes to the existing literature by 1) offering an alternative perspective that views GPN from below and from the periphery, 2) shedding light on the inter-and intra- GPN linkages as well as on the relationships between the GPN and the regional economy, and 3) illuminating the multi-scalar and multi-dimensional process of knowledge production within and throughout the GPN.

Reassembling Hydrocarbon Production Networks: Uncooperative Commodities and Contested Public-Private Partnerships in Indonesia

Alexander Dodge - Norwegian University of Science and Technology | **Ståle Rye** - Norwegian University of Science and Technology

Indonesia is a hydrocarbon-rich, emerging economy that has traditionally exported liquefied natural gas (LNG) at the expense of domestic energy development. While the current government plans to develop domestic liquefied natural gas markets, high capital costs necessitate partnering with commercial actors to secure financing. However, these projects have been marred by delays and have failed to develop. Often the analysis of public-private partnership failure focuses on bilateral relations between states and

private actors, instead of following the dynamics of inter-organizational networks. In this article, we utilize Global Production Network (GPN) Theory to show how the emergence of a more organizationally fragmented and financialized global LNG production network has important implications for projects in Indonesia. However, we note two conceptual limitations of the GPN framework. First, we argue that the literature has yet to fully account for the uneven geographic character of emerging relations of production, in terms of the exclusions that become necessary through capital accumulation and market-making in GPNs. Second, the socio-material conditions by which value creation and commodity production is made possible, and the casual power of actors to potentially transform such conditions must be further conceptualized. Building on assemblage thinking, we argue for a stronger focus on the correspondence of inter-firm and extra-firm networks with material entities. Based on qualitative empirical sources, we argue that as the emerging interactions between financial intermediaries, new natural gas recourses, and technology in LNG production networks transform the socio-material conditions that make value creation possible, state actors in Indonesia articulate new state hegemonic projects in the form of domestic energy market development. Nevertheless, the actualization of such possible interlinkages simultaneously excludes certain political-economic possibilities and territories, through which such state hegemonic projects were articulated. These exclusions result in multiple contradictions and contestations, and thus public-private partnerships fail.

Exploring the interconnection of the internationalization of production and the emergence of financialised capitalism

Jeff Powell - University of Greenwich | **Davide Villani** - Open University

Milberg & Winkler (2008; 2010, 2013) first introduced a GVC lens into an analysis of financialisation. They argue that an increasing share of US firms' profits come from high mark-ups facilitated by their position within these chains. Competitive pressures ensure that firms learn to manage (what are better described as) GPNs through complex combinations of subsidiaries, outsourced partners and offshore tax structures, in order to capture rents from oligopolistic power. Econometric evidence suggests that, rather than re-investing these profits in core activities, firms pay higher dividends, buy back shares to drive up stock prices, and pursue mergers and acquisitions. In Marxist labour value terms, Chesnais (2016:166) argues that the source of the additional profits which has fed financialisation must necessarily be rooted in the "trend towards a global homogenisation of productivity levels ... while the socio-political context is that of strong or very strong national differences in necessary labour time." While GVC analysis implies that additional value is created ('added') and implicitly realised at each step in the chain, Marxian analysis highlights the fact that profits may be captured in a distinct location from where value is created. This research adopts an innovative empirical approach to try to better understand how GPN transformation impacts firm financialisation. Data from the World Input-Output Database (WIOD) are used to capture changes over time in the value-added share of firms headquartered in the core countries of GPNs. Value-added is understood as a proxy here not for value created, but for profits captured. This is then compared with the changes in industry balance sheet indicators which act as proxies of financialised behaviour. Taken together, this will support a deepened understanding of how changes in firm balance sheet behaviour have accompanied their entry into and evolution through their participation in GPNs.

Panel Session: Radicalising Global Production Networks

Carlo Inverardi-Ferri - National University of Singapore | **Dennis Stolz** - National University of Singapore (NUS)

Panelists:

Martin Hess - University of Manchester

Alex Hughes - Newcastle University

Jamie Peck - UBC

Suzanne Reimer - University of Southampton

Adrian Smith - Queen Mary University of London

Session

Production networks and development in an era of polycentric trade

Khalid Nadvi - University of Manchester | **Rory Horner**

Global production networks, and related global value chains, analysis has made valuable insights into the linkages that transform raw materials into final products and services, illustrating how value is created, and also differentially captured. A common, and

arguably dominant, perspective amongst GPN and GVC scholars and policymakers has been an implicit focus on global trade involving North-South flows, stretching from initial stages of production in the global South to end markets in the global North. Now, however, whether it be the prominence of the global South in manufacturing exports, its growing share of consumption or the fact that the dominant trade direction is now South-South rather than South-North, considerable change is afoot. Rather than emphasizing North-South oriented value chains/production networks, contemporary trade involves overlapping, multiple production networks oriented towards different end markets – domestic, regional and global – across both global North and South. This session invites papers that explore shifting geographies of trade and which consider the existence of multiple, and often overlapping value chains and production networks, which include those targeted towards end markets in the global South. Topics could include, but are not limited to:

- Conceptualising polycentric production networks
 - Domestic and Regional, as well as global, end markets
 - New lead firms
 - Standards in Southern end markets
 - Network segmentation, switching and diversification
 - Development strategies and outcomes (economic, social, environmental) across multiple value chains
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Global Value Chains and Structural Upgrading

Roman Stöllinger - Vienna Institute for International Economic Studies (wiiw)

Participation in global value chains (GVCs) is increasingly seen as part of the industrial policy toolkit. Geographically-dispersed production makes it easier for countries to link into manufacturing production as it suffices to master only a segment of the entire production process. Moreover, multinational firms tend to be more prepared to share knowledge with partners from the production network they are managing. Relying on a global sample of 53 countries observed over the period 1995-2010 we investigate econometrically how countries' active participation in GVCs affects structural upgrading. In order to assess the potential of GVC-participation to facilitate structural upgrading we compare its effect with that of overall trade. A sizeable structural change bonus arising from increasing participation in GVCs is identified for emerging and transition economies but not for the full sample of countries. However, even for emerging and transition economies this bonus is not stronger for GVC-trade than for trade in general. The main policy implication is that the role of GVCs as an industrial policy tool should not be overvalued as there does not seem to be any additionality in GVC-trade compared to trade in general with regards to structural upgrading.

Polycentric Trade and Rising Power Firms: New Geographies of Global Value Chains

Khalid Nadvi - University of Manchester

Recent evidence illustrates that trade amongst developing economies (often termed South-South trade) exceeds trade between developing and developed economies (or North-South trade). Developing country producers (firms or farms) often engage simultaneously in multiple trading channels, linking them into global, regional and national value chains. This has been described as a world of polycentric trade. Key to the growth of polycentric trade is the role of emerging economies, such as China, India and Brazil, which have large (and increasingly mature) domestic markets and extensive trade linkages across the developing (and developed) world. Thus, these so-called 'Rising Powers' impact global economic geography, not only as centres for manufacturing, agricultural and commodities production, but also as key markets for consumption. While much has been written on this, especially the role of China, what is less well understood is how lead firms from the Rising Powers engage with, and shape, our understanding of global value chains (GVCs) and global production networks (GPNs). To date the GVC and GPN literatures tend to view Chinese, Indian and Brazilian firms as suppliers to the global North. Thus, these frameworks have concentrated in developing an understanding of how (Northern) lead firms govern linkages over (Southern) suppliers, especially through forms of strategic coupling. These approaches retain a rather restricted view of the agency and role of southern actors in driving the value chain. This paper argues that the reality is changing. The emergence of lead (global) firms from China, Brazil and India illustrate that such firms can and do orchestrate GVCs and GPNs in their own right. Drawing on secondary evidence and primary interviews undertaken with over seventy Chinese, Indian and Brazilian lead firms this paper illustrates how Rising Power firms organise GVC linkages, innovate and upgrade, and raise questions on the future dynamics of 21st Century globalisation.

The socio-spatial structures of India-South Production Networks. How small and medium pharmaceutical enterprises from Ahmedabad and Mumbai mobilize resources to enter Global South markets.

Yves-Marie Rault - Université Paris Diderot

The Indian pharmaceutical companies generate one-fourth of their revenues from exports to the Global South. The entry is generally easier than in 'regulated markets', so many small and medium enterprises (SMEs) with limited resources are into business with the 'rest of the world' (RoW). We recently learnt about some of their specific strategies and practices related to the Indian-South networks (Kale 2007; Horner 2014; Horner and Murphy 2017), but little attention has been paid to the informal resources surrounding their entrepreneurial activities. In the field of pharmaceutical exports, the agents' economic behaviours (their export model, their market choices) are significantly shaped by the social and spatial structures (the communities, the places) in which they are embedded. For instance, two Indian States, Gujarat and Maharashtra, account for around 40% of India's WHO (World Health Organization) certified units and 60% of total export revenues. Locally, the small and medium enterprises focusing on exports to RoW markets are often managed either by families from business castes with a historical involvement in global trade or by former executives with an experience of foreign pharmaceutical markets. They can mobilize different resources through the Indian diaspora (around one-third of African Indians are Gujarati) or through former professional connexions. In this paper, we would like to demonstrate how socio-spatial structures play an important role in shaping India-South production networks, and more generally, in today's emerging polycentric trade. In order to do so, we will mostly rely on primary data collected through semi-structured interviews with 113 managing directors of SMEs mainly based in Ahmedabad (Gujarat) and Mumbai (Maharashtra), online questionnaires answered by 215 managing directors of India-based pharmaceutical companies, and secondary sources from corporate websites and government agencies.

Business associations as actors in governing polycentric global production networks

Corinna Braun-Munzinger - University of Manchester

The global production networks (GPN) framework has shown how various types of firms and non-firm actors at different geographic scales interact in shaping production processes in the global economy. Yet, one actor that has been largely overlooked are business associations. This paper argues that in a context of polycentric governance, Southern business associations deserve increasing attention as actors shaping the ways in which production for global and domestic markets takes place.

Business associations have been described as collective actors in early contributions to the GPN framework, but their roles have not been conceptualised in detail. This paper argues that business associations are particular types of GPN actors because they comprise firms engaged directly in production and at the same time form part of the institutional environment around these firms. As such hybrid types of actors, business associations can arguably combine collective action among firms with intermediary roles between member firms and external actors that influence firm behaviour and production processes.

Empirically, the paper applies this conceptual lens the roles of the China National Textile and Apparel Council (CNTAC) as a Southern business association in shaping the CSC9000T standard as the first Chinese CSR management system in a major emerging market. Data on the case study has been collected through 58 semi-structured interviews in China in the period 2014-2015. The paper examines the extent to which the two lenses of self-regulation and intermediation help to better explain the association's roles in the standards initiative, which aims at both global end-markets and at a growing domestic market. Furthermore, the case study highlights the need to consider an associations' embeddedness in the local institutional context in order to understand its roles in the governance of polycentric GPNs.

Session

The economic geographies of by-products from agriculture and food production

Kim Schumacher - University of Vechta | **John Overton** - Victoria University of Wellington

The global sourcing and production of agrarian products (food and fibre) has received broad attention in geographical research, especially their global chains and networks, including social geographies tied to production, distribution and consumption. There is also a growing body of literature on the geographies of waste, like e-waste. In this session we want to focus on a often neglected part of food production: the economic geographies of by-products, from agriculture and food production. By-products in the sense of this session might be for example residues from livestock farming like manure or waste from slaughterhouses as well as by-products from the processing of food.

These by-products are essential but neglected parts of the production process and of the production network. They often resemble burdens for the environment or population and are often overlooked as well as not included into the pricing of the commodity, therefore contributing to unequal developments.

We want to give a forum for the discussion of empirical case studies but also welcome contributions to a conceptual debate on a more inclusive discussion of agriculture and food production that also takes into account its by-products and side-products and their geographies.

The economic geographies of by-products from agriculture and food production I

Food systems in transition – the social-technical regime of potato processing in Germany

Christian Kircher - Universität Vechta

The global food systems are facing tremendous sustainability challenges. Growing population, a general increase in demand for food, a global switch from a more sustainable plant-based diet to an “unsustainable” meat-based nutrition, the increase of food waste along the global supply chains and the use of agriculture plants for energy and fuel production put pressure on the prevailing socio-technical structures.

This presentation examines the recent development of the sustainability transition frameworks and analyzes the interface to the spatial dimension of transitions, using the German potato industry and its side streams as a case study. The case study is based on the triple embeddedness framework (TEF), which has been developed to describe and analyze complex, long-term processes of sustainability transition in traditional industries like automotive, oil, and agro-food and their negative externalities for incumbent firms in those industries (Geels, 2014).

Based on the TEF this presentation will investigate the strategic responses from the potato industry regime towards external pressure and will integrate aspects of economic geography into the process of transition. The dimension of space, place and scale has not been explicitly an issue of concern in the TEF. Especially in the food industry, the appreciation of its multi-scalar characteristics will yield additional insights into the industry dynamics and explain uneven development.

Global supply chains, large transnational companies and oligopolistic structures among retailers on one side and local/national small enterprises, a trend for regional food, national governments and regional policies on the other side, offer useful ways to identify and explain local differences in the process of sustainability transition and variations in strategic responses.

Looking at the evolution of the potato food systems and its spatial dimension the case study shows, that global networks and stakeholders can delay fundamental changes in an industry.

Sustainable usage of by-products in the bioeconomy: mapping, analysis and comparison of sugar industry value chains in the Baltic Region

Max Mittenzwei - University of Greifswald | **Daniel Schiller** - University of Greifswald

On a global level, it is widely agreed in both scientific and political circles that the current situation of the fossil-based economy is not a viable solution for the future. The bioeconomy therefore aims to create an alternative to fossil-based industry through a sustainable approach. The concept is based on the processing of biomass and the optimal utilization of it and its by-products by exploiting well known approaches such as cascading, recycling and reuse. In this comparatively young bioeconomy the aspect of sustainability has always been regarded as one of its key elements. However, it is far from being applied in an appropriate and widespread manner. Particularly the sugar industry, although being a well-established industry sector, possesses large differences in sustainability and by-product usage between companies. These differences can, however, be used to draw valuable conclusions. Thus, providing value chains that are comparable, the sugar industry is well suited as a research framework. With the help of an initial value chain mapping of four sugar industry value chains located in Germany, Poland, Sweden and Denmark, a subsequent analysis and qualitative research, we aim to identify differences in the biomass processing steps, by-product utilization and sustainability in general. While presenting problems, blockages and constraints on the one hand, the focus also lies on outlining possibilities, drivers and effects of the four value chains. If possible, this cross-country comparison tries to find innovative approaches to sustainable and economically efficient by-product use and formulate recommendations based on the conclusions drawn.

Economic geographies of manure and nutrients in northern Germany

Kim Philip Schumacher - University of Vechta

An overlooked part of food production are the by-products from agriculture, that do not end up with the costumers, for example residues from livestock farming like manure or waste from slaughterhouses as well as by-products from food processing. These by-products are an essential but neglected part of the production process and of the production network. They can pose threats for

the environment, mostly not included into the pricing of the commodity. Manure is an interesting example, because in traditional agriculture it was part of the nutrient cycling within the farm and only by the integration of farming in global production networks and imports of e.g. feedstuff surpluses and possible environmental problems have surfaced.

The northwest of Lower Saxony is the center of livestock farming in Germany, connected to the development of Germany's best developed agribusiness cluster. The subsidies for renewable energies added a very successful development of biogas production (2004-2012). Both developments result in a very high production of liquid and solid manure and digestate. Even so this problem is known since the 1970s and a characteristic of the outside view of the region, new attention has been drawn in recent years due to new EU-regulations and a stricter environmental and fertilizing regulations. This has led to the introduction of a database and reporting system for nutrients and on the other hand to the development of an intra-regional export system for manure as spatial quick fix.

The presentation depicts and discusses the turn of a neglected agricultural by-product into a tradable and valued commodity, the development of the intra-regional export value chain with its network of actors who organize and govern this branch of an agricultural value chain within the (global) production network of meat production in northwestern Germany.

Nutrients and nutrition; affluence and effluent: Discourses of development and waste in the New Zealand dairy industry

John Overton - Victoria University of Wellington | **Warwick Murray** - Victoria University of Wellington

The New Zealand dairy industry has expanded greatly in the past two decades. Driven by accelerating demand from China especially, prices for dairy products have risen substantially over the period, albeit with some fluctuations, and there has been particular growth in the export of dried milk powder. This shift in the composition and direction of exports has seen a shift from discourses relating to 'craft' and 'high valued added' products to those which focus on supposedly better nutrition for people, especially infants, in developing economies. On the supply side, the growth of the industry has been made possible by the conversion of former dryland sheep and beef farms to very large, irrigated and highly capitalised dairy operations. Dairy production in New Zealand has a comparative advantage in that animals do not have to be kept indoors over the mild winters and pasture growth, rather than feed lots, is capable of maintaining high 'natural' milk production. Critical in this process is the flow of nutrients. Ideally, reliable rainfall (or irrigation) is coupled with a nutrient flow whereby cow manure on the pastures, through careful herd and pasture management, can support good grass growth without the need for large amounts of artificial fertilisers. Dairy waste products in the form of manure, then, contribute to a very efficient, semi-closed system of grass and milk production. Cow manure is a key resource. However, in recent years and with the spread of increasingly large herds onto irrigated dryland, this ideal nutrient cycle has instead seen nutrients flow into waterways and, along with high irrigation demands on water supplies, considerable public concern over the declining quality of the country's rivers. Rival discourses have sharpened seeing dairy 'development', 'prosperity' and 'feeding the world' stories pitched against narratives stressing 'dirty dairying', 'pollution' and 'industrialisation of the countryside'.

The economic geographies of by-products from agriculture and food production II

Integrated farming in smallholder subsistence farming in the Romanian Carpathian Mountains

Moritz von Oppenkowski - Philipps-Universität Marburg | **Markus Hassler** - Philipps-Universität | **Tim Roesler** - Philipps-Universität

This paper examines, how and why integrated subsistence farming systems in Romania, which are ecologically and socially sustainable are functioning and can be fostered. The United Nations Commission on Trade and Development stated in 2013, small scale farming systems are the only way to feed the growing world population. Thus, it seems critical that exactly these systems are passing. Which wheels must be turned to make these structures also economically viable? On the one hand, people are taking their milk with bikes to collection stations of big internationally acting processors from abroad and get barely acceptable prizes paid. On the other hand, the produced food is non-certified but from ecological integrated farming systems, using all residuals of the farm in almost closed circle agriculture. The study site farms had milk and dairy products as the main or only commodities which were sold on the market. However, the whole production system would not be possible without the farmers using the integrated potentials, meaning by- and secondary products from residuals on their farm. These include different woody products for construction and burning, non-perishable processed fruits, liqueur, woven products and tree hay. These products are crucial for the livelihood of Romanian peasants and important parts of the highly sustainable no-input-systems which are in place. They are not only part of the important bartering among farmers but also enable them to buy products, which they cannot manufacture themselves. By conducting interviews with farmers, local, regional and national politicians, NGO representatives, researchers, consultants, bank employees and processors it was possible to draw a holistic picture of the production network. Desirable subsidy

designs through discussing with farmers and other stakeholders, problems in collaboration, infrastructural problems, illegal informal structures and pressure by international companies were discovered.

A Heritage of Innovation: exploiting a sustainable path dependency in rural McLaren Vale, South Australia

Douglas Bardsley - The University of Adelaide | **Elisa Palazzo** - The University of Adelaide | **Marco Pütz** - Swiss Federal Institute for Forest, Snow and Landscape Research WSL

The adaptation of agricultural systems to rapidly changing environmental conditions remains one of humanity's greatest challenges. Regions with complex, knowledge-intensive farming practices have many components that can be adjusted to increase systemic resilience. An argument for the importance of evolutionary adaptation pathways is developed through a case-study of the viticultural region of the McLaren Vale, South Australia. While the concept of path dependence has been well-developed in economic geography to help define both opportunities and barriers to regional development, it could also be seen as important for explaining the evolution of effective adaptation responses within agricultural regions. In a series of walk-and-talk interviews, farmers describe their business risks and the opportunities that biodiversity provides to adapt to those risks. Their responses suggest a sophisticated ecological understanding facilitated by their life-experiences, learning networks and relationships with governance, research and marketing organisations. They exploit diversity within agro-ecosystems to spread the risks of production and to respond to a range of complex trends in environmental and market conditions. While the emerging agricultural multifunctionality is enabling authentic systemic relationships with the regional environmental complexity, unique individual and cooperative pathways have evolved from the region's particular heritage to facilitate the development of an adaptation cluster. Sustainable agricultural development paths could be increasingly beholden to farmer knowledge of risks and their capacities to exploit adaptation opportunities at a regional scale. Regions such as the McLaren Vale, with a path dependence of knowledge-intensive adaptation, could be vital first-movers in the search to inform effective climate change adaptation, especially within highly-competitive situations such as that faced by the economically mature wine industry.

Session

Thinking through services in, and as, global production networks

Neil Coe - National University of Singapore | **James Faulconbridge** - Lancaster University

As a now maturing theoretical framework, the global production network (GPN) approach offers a sophisticated conceptualisation of the operations of globally fragmented-yet-integrated production systems. In theoretical terms, it is open to the activities of value creation, enhancement and capture across independent or intersecting manufacturing and service networks. Empirical testing and verification of its ideas, however, is still arguably more developed in relation to manufacturing sectors than their service equivalents. This downplaying of services can be seen in two ways. Services such as advertising, finance, logistics, accountancy, retailing, staffing and telecommunications, among others, are integral to the value creation and enhancement processes of manufacturing global production networks, but they are also increasingly delivered and organised themselves through global production networks. In this session, we thus build on existing studies that consider both the role of services in global production networks and the global production networks of services. We seek to enrich empirical understanding of the organisation of services in/as global production networks, and critically reflect on the conceptual tools within the global production network approach. In relation to the latter we are interested both in existing tools that can be used to theorise the role/nature of services, and those which are currently under-developed or absent but crucial for understanding services in/as GPNs. We thus encourage papers that draw on both case studies and conceptual analysis. Papers might address (but are not limited to) topics such as:

- The nature and role of services in resource or manufacturing GPNs;
- The relevance of the theoretical tools of the GPN approach to service GPNs;
- Comparing and contrasting the GPNs of different service sectors;
- Intersections between different kinds of service GPNs;
- The regulatory and institutional contexts and sensitivities of service GPNs;
- Measuring the contributions of services to GPNs of all kinds;
- The intermediating role of services in GPNs;
- Knowledge dynamics and services in GPNs;
- Value creation, enhancement and capture, and strategic coupling in service GPNs
- Ways of enhancing the analytical power of the GPN conceptual framework through studies of services.

Making the connections, but under pressure: the logistics industry in Asia

Neil M. Coe - National University of Singapore

This paper offers one of the first studies of the organizational geographies of the leading third party logistics (3PL) in Asia and their intersections with client and supplier global production networks. Conceptually, logistics is seen as not only a vital contributor to a wide range of client global production networks, but also as a globally organized sector that in itself can be analysed as a global production network. The analysis is based on over 30 interviews with senior managers from the top 40 3PL firms in the region and extensive secondary data analysis. It reveals an industry that is highly variegated in terms of: the origins, ownership patterns and geographic/sectoral specialisms of the 3PL firms; their expansion modes and patterns across Asia; and their strategies in relation to asset ownership and management. While 3PL firms are undoubtedly important actors within the global economy and are strategic partners of their major clients, this study also diagnoses that these firms are under considerable competitive pressure in a post-2008 context. This pressure results from a range of inter-connecting dynamics: over-capacity and cost-competition; strong forces of commoditization and standardization within the sector; the challenge of new asset-light competitors; the entrance of other new players ranging from postal services to Amazon; and the explosive growth of B2C e-commerce and new logistics models. These dynamics pose a challenge to profitability, leading to ongoing processes of consolidation and an industry in which creating a distinctive niche is hard and increasingly requires significant investment in assets.

The Panama Papers, the Geography of Political Hideaways, and a New Regulatory Imaginary

Jessie Poon - University at Buffalo | **Trina Hamilton** - University at Buffalo | **Gordan Tan** - University at Buffalo

While studies have paid attention to the activities of firms and their investment flows in offshore tax havens and secrecy jurisdictions, there is scant work on the offshore finance of political elites. Yet such a study is needed in light of the recent release of the Panama Papers and the fallout of major political figures as a result of the leaks. This paper aims to shed light on the political economy of elites' hideaways through a network lens. We highlight the role of networks in mediating and linking political elites, intermediary providers (advanced business firms), and, offshore destinations and their institutions. While lax regulations have traditionally favored certain island economies in the Caribbean and English Channel as principal sites of offshore capital accumulation, this paper shows that it is rather the strength of regulation in established financial centers that facilitates the offshoring of political elites' wealth and assets. As such, we highlight the role of intermediary spaces in the geography of political hideaways, and argue for a new regulatory imaginary.

Heritage and Space Manufacturing: Firm-level Competitiveness, Risk Mitigation and Insurance

Chloe Billing - Birmingham Business School

The UK space sector supports economic activity and everyday living by (i) generating GDP; (ii) providing employment opportunities; (iii) influencing technologies in other sectors; and (iv) increasing the productivity of individuals and businesses through satellite-enabled services. Nevertheless, understanding the competitiveness of the space sector has been overlooked in the academic literature. This paper addresses this gap in the research by identifying the sources of competitiveness for UK satellite companies. The analysis focuses on 'heritage'. Heritage is a core firm-specific advantage for UK satellite firms, which is embedded in products and reduces risks global production networks. In this context, heritage exists when components, satellites and software have measurable flight time in space. Understanding heritage is important since central to the developing literature on GVC/GPN is a concern with the management of risk and uncertainty. In the space industry, risks are related to launch, extreme conditions in space, and the unrealistic cost of repair and these risks are mediated by 'heritage'. Part of understanding the importance of heritage in the space sector is placing the industry within its wider context of international regulation and insurance, since the emphasis placed on heritage is intensified by the interaction between space manufacturing and insurance. The global insurance industry encourages conservatism by using heritage as a proxy measure of risk, as heritage impacts on the cost of premiums for damage insurance. Heritage in this context reduces innovation and encourages the use of proven technology. Therefore, innovation in space technology is partly constrained by the service sector, specifically insurance providers.

Corporate ownership and Global Production Networks: An empirical analysis

Jakob Engel - University of Oxford

This paper empirically links variations in the concentration of corporate ownership in leading global firms with the literature on global value chains and production networks, in order to assess how ownership concentration manifests itself along the value chain.

A particular focus is on the evolution leading up to and since the Global Financial Crisis. To achieve this, the paper links data on corporate ownership of large firms with market share statistics to approximate the relative significance of corporate owners in different sectors and countries. Finally, in order to trace the significance of different corporate owners along globalized production networks, the paper draws on input-output data . The contribution of this paper lies in the creation of a new database that traces corporate ownership through global networks of exchange to determine how this has evolved over time and across regions.

INNOVATION IN NON-CORE AREAS, PERIPHERIES AND THE ROLE OF UNIVERSITIES

Session

Innovating outside of agglomerations

Thilo Lang - Leibniz-Institute for Regional Geography | **Markus Grillitsch** - Lund University

In a world of ever-increasing opportunities of mobility and communication, innovation is less restricted by geographical proximity. Current debates on the geographies of innovation progressively challenge well-established concepts like co-location and knowledge spillovers. In recent years, a number of empirical studies have stressed the importance of dispersed innovation activities that can appear at, but are not restricted to certain types of agglomeration such as cities and clusters, events like trade fairs, or (global) organisational networks. Another layer which adds to this complexity of innovation patterns is addressed by the topic of this session: innovating outside of agglomerations.

While established theories contribute to the argument of a negative correlation of innovation and periphery, recent empirical work demonstrates quite the opposite: through a broad variety of activities, firms can be highly innovative in such areas. Taking these findings into account, a more nuanced view on the geographies of innovation is needed. The aim of this session is to improve our understanding of innovation originating from 'peripheries' by uncovering concrete firm strategies, determinants, activities and impacts of innovation in such areas.

We call in particular for empirical contributions which explore:

- firm innovation in different 'peripheral' areas of the world
 - specific firm-based strategies to innovation and main determinants of innovation
 - the potential of firm innovations for regional and local development in such areas
 - differences in innovation activities in different 'peripheral' settings
 - ideas and approaches to better conceptualize the geographies innovation from a 'peripheral' perspective
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Evolution of a SME in a periphery of Japan to a “hidden champion”

Kenji Yamamoto - Teikyo University

The purpose of this paper is to examine a question, if a small and medium-sized enterprise can evolve to a “hidden champion”, even if it is located in a periphery and even if it had no special technology. If it is possible, we should ask how a SME can do it, and if there is some relationship with its local environment.

In Japan, there are successful SMEs in the manufacturing industry not only in the metropolitan areas, but also in peripheral rural areas. We can find some typical cases in Kyushu, about 1000 km westward away from Tokyo. I introduce a small and medium-sized engineering company which has been able to become a “hidden champion” in the business of develop a very special metalworking machine: Fine Blanking Press. FB Press was invented in 1922 by a Swiss engineer in order to work a thin metal plate for parts of a precision machine. It has been gradually improved by several companies and is now mostly utilized by parts suppliers to the automotive manufacturers. One can fabricate even a thick metal plate into three dimensional form with a smooth surface without secondary processing work of polishing.

As that Japanese small company in Kyushu entered into the business of FB Press in the beginning of the 1980s, German and Swiss companies dominated the Japanese market. But the SME has gotten more than 70 % share of the niche market in Japan since 2000, and it has been able to sell FB Press with its own brand to Asian and American markets. It may be now the second important FB Press manufacturer next to Feintool, a Swiss big corporation in this business. I will show the evolution process of the Japanese SME and reconsider the relationship between this company and its local environment.

Innovations in rural areas – lessons from cooperatives in Germany applying Boschma’s proximity approach

Katrin Martens - Humboldt University zu Berlin

Recently we have been facing an innovation paradox in politics when focusing on early-industrialized countries. Governments compete with each other using indicators such as patent applications, venture capital investments or amount of doctorate graduates aiming at creating location advantages for domestic and foreign investors. However, linking the term innovation to those indicators excludes rural areas of these countries, most of them facing increasing demographic and socio-economic problems, which harms location advantages. Although there is an upcoming stream of literature aiming at solving this innovation paradox, findings show

that it remains difficult to apply a useful innovation approach that includes innovative activities in rural areas because its dynamic is hardly understood.

Thus, why should we not learn from a business model that has managed to sustain and re-innovate in rural areas as long as it exists, such as cooperatives? Especially, within development studies cooperatives are institutionalised as important stakeholders in regard to poverty reduction, resilience and knowledge transfer. Moreover, the past decade has seen a rapid increase of cooperatives in rural Germany.

With this paper I, first, introduce several case studies that show the innovation potential of cooperatives in rural Germany to understand how they manage to innovate despite geographic remoteness. Second, I operationalize Boschmas' approach, who claims that next to geographic proximity, different proximities such as cognitive, social, organisational or institutional proximities can explain innovation. Third, I argue that due to the organisational structure of cooperatives in Germany, cooperatives substitute geographical proximity. Hence, with this paper we enhance knowledge about the dynamic of rural innovations, which aims at solving the innovation paradox not without critically reflecting on the role of politics and science in this regard.

Distance matters: geography – knowledge diffusion - innovation

Aleid Brouwer - University of Groningen | **Killian McCarthy** - University of Groningen

This study investigates the impact of geography on post-acquisition performance for technological acquisitions. Based on literature from economic geography, transaction costs and international business we propose that geographical distance, cognitive and cultural proximity and borders have an influence on post-acquisition innovative performance.

Examining the patent portfolios of 3683 high tech acquirers in the period 2000- 2012 we support three hypothesis regarding geography's influence on innovative performance. The larger the physical distance and the cultural distance between acquirer and acquiesce the lower the innovative performance. the cognitive distance is expected to have an inverted U shape effect on innovativeness, to close and it results in lock in, to large and it results in chaos. The optimum is expected in between.

The physical distance can be measured in several ways; kilometers as the crows fly, connectivity and accessibility between the two partners. Cultural distance has several known measurements, such as Hofstede's cultural distance, but also an index of similar language, religion and educational system. Furthermore, similarity between the institutional setting of the branches plays an important role. Cognitive distance can be measured in several ways: how similar the products of the two branches are, how similar the organizational structure of the braches are and how similar the diversity of the teams are.

The hypotheses will be tested in a multivariate regression analysis.

Adapting innovations to rural needs: example of 'smart mobility' in the Heinsberg region, Germany

Sophia Gross-Fengels - RWTH Aachen University, Institute of Geography, Chair of Economic Geography | **Martina Fromhold-Eisebith** - RWTH Aachen University

Driven by the proliferating digitization of services, an increasing number of new mobility options evolved recently, improving living and working conditions especially in rural areas. Public transport is one field in which 'smart' solutions may not only help to better combine demand and supply tailored to rural needs, but also to achieve sustainable regional development goals. 'Smart mobility' concepts, mainly introduced in urban areas so far, also offer options for organizing sustainable transport solutions in less densely populated areas. The innovation field of 'smart mobility' will offer various chances for peripheral regions, if the transfer and adoption of urban innovations to rural areas is managed successfully.

Accordingly, this conference presentation will not focus on innovations originating from the peripheries, but discuss necessary requirements when attempting to transfer digitally supported transport services from urban to rural context conditions. Referring to the concept of absorptive capacities, we reveal certain supportive, yet also impeding factors that shape the rural use patterns of environmentally friendly transport options based on new communication technologies and platform architectures. Hence, we emphasize the adoption, adaptation and diffusion of suitable innovations as well as development opportunities and possible impacts of mobility innovations on the region itself. Consequently, a German case study illustrates how innovations in the field of 'smart mobility' could be implemented, relating to the rural region of Heinsberg. Preliminary results of an ongoing research project can be presented, which is embedded in the interdisciplinary graduate school ACCESS! that explores urban versus rural mobility futures and requirements on a broader scale. Finally, some planning and policy related conclusions for adapting innovations to rural requirements are derived.

Session
Innovation at the peripheries

Kirsten Martinus - The University of Western Australia | **Johannes Glückler** - Heidelberg University

Over the last few decades, research in innovation studies and in the geography of knowledge has focussed on the role of agglomeration economies, in particular on the density and diversity of large industrial clusters and metropolitan regions for the creation, recombination and diffusion of knowledge. This spatial blinker on gravity centers of innovation implies, though unconsciously, a blind angle: the role of knowledge creation at the peripheries. Recently, however, economic geographers, network researchers and scholars in organization studies have readdressed the question of how new knowledge is created outside spatial, organizational and network hotspots. This session pursues two objectives: to revisit multiple understandings and perspectives of the concept of periphery, and to explore the role of peripheries (in the gravity fields of organizations, networks, geography, governance regimes etc.) in innovation.

We welcome theoretical and empirical papers related, among others, to the following questions:

- Moving beyond a residual category: what are constructive understandings and substantive characteristics of peripheries?
- How do different perspectives on peripheries translate into place and space?
- How can peripheries become sources of innovation?
- Which types of knowledge and innovations flourish in peripheries?
- Are peripheries necessary to foster specific kinds of innovation?
- How can innovation transform peripheries into centers of economic wealth, and how do these dynamics unfold?

Please send your paper title and abstract to Kirsten Martinus (kirsten.martinus@uwa.edu.au) and Johannes Glückler (glueckler@uni-heidelberg.de).

Innovation at the peripheries I

Diverse diversities – Open innovation in small towns and rural regions

Rahel Meili - University of Bern | **Richard Shearmur** - McGill University

Innovation is not a closed process: it is now well recognized that open innovation is the key to high firm performance. One consequence of the acceptance of this idea has been to reinforce the belief that dense – usually urbanised – regions are the most conducive to innovation: it has been argued that the geographical co-location of many potential information sources fosters exchange of knowledge and information that can be rapid, intense and deep. However, notwithstanding the apparent convergence of innovation and economic geographic theories, there has for a long time been evidence that diversity and multiple sources of information can also have their limits. For instance, research in the management literature reveals that there exists an optimum level of diversity, and that too many external partners can reduce innovativeness (Laursen & Salter, 2006). Furthermore, sociologists observe that there is a tendency towards network homophily (McPherson et al. 2001). These observations and results mean that any straightforward connection between urban density and interaction diversity should be questioned. In this paper we examine whether smaller towns and remote regions are in fact as homogenous as the discourse on urban diversity would have us believe. We argue that economic geographers have put forward a one-dimensional view of diversity – places are either diverse or not. We explore this by performing an in-depth examination of seven successful high-tech firms in five small towns in the eastern part of Switzerland. We examine whether, and how, these firms can operate in a diverse environment whilst being located in apparently homogeneous contexts. We are especially interested in how firms stimulate diversity and overcome the lack of it.

The impact of social innovations on rural economies: case study of Baixo Alentejo, Portugal.

Barrai Hennebray - Adam Mickiewicz University in Poznań | **Marina Novikova** - ISCTE-IUL

Portugal has experienced a sharp fall in regional disparities since 2000. The goal of this paper is to explore the possible role played by social innovations in achieving this more balanced regional development. Emphasis will be placed on Baixo Alentejo, a peripheral region in Portugal which has the lowest population density for any region in Portugal but has witnessed an average annual increase in GDP per capita of 4.9% from 2000 to 2014. This paper is divided into two parts. The first part will use existing structural data for NUTS level 3 regions in Portugal to analyse the recent fall in regional disparities. Some of the socio-economic characteristics, especially demographics and population structures, will also be analysed at a regional level to examine their influence on regional disparities.

The second part of the paper will explore the possible role that social innovations played in regional development in Portugal, especially the Baixo Alentejo region. The field of social innovation has received scholarly and policy interest during the last two decades (Adams and Hess, 2010) that was driven by attention to such trends as the social engagement of citizens and different organizations in innovative processes, criticism towards dominant classical business models and narrow economic outlooks on development that sometimes put aside the social development and the needs of societies where innovation is about solving social problems (Van der Have and Rubalcaba, 2016). Based on the literature review regarding the role of social innovation in regional development, this paper will examine the potential impact of social innovation in Baixo Alentejo.

New sites and concepts for understanding innovation at the periphery: network capital and the Alacrity model

David Waite - University of Glasgow | Robert Huggins - Cardiff University

Lifting the economic performance and shifting the growth trajectories of peripheral regions continues to puzzle economic development practitioners and analysts. In an effort to contribute solutions to this puzzle, this paper examines a policy intervention – the Alacrity Foundation in the region of Wales, UK - that promotes regional development through a public-private sector initiative centred on innovation-focused entrepreneurship. Reporting findings to date - which show that the Foundation's model offers a novel means of attempting to facilitate regional development through the intertwining of entrepreneurship, networks, and innovation objectives - this paper then sets out promising avenues for future research. In doing this, we point to empirical and conceptual openings within a proposed research agenda. Taking an empirical lens, firstly, comparative research on other Alacrity sites around the world is helpful to shed light on how different contextual settings mediate the role of network structures in underpinning innovation. In essence, we consider the issues in developing a common framework to appraise a like intervention set in very different geographic settings (some core, some peripheral). Second, conceptually, the paper explores how a network lens sets broader innovation policies – and interests in areas such as smart specialisation – in a new light, moving researchers and policymakers away from centring innovation approaches around locally held assets and resources. Through such dual empirical and conceptual developments, we contend that research on the geographies of innovation in the periphery has the potential to specify the heterogeneous mechanisms that bind territorial and relational economic growth systems.

When the knowledge source is not there? The role of proximities and the challenges of entrepreneurial discovery processes in peripheral regions

Seija Virkkala - University of Vaasa

Periphery is a relative category which has been defined with high travel and transport costs to centres of economic activity, and which show an absence of agglomeration advantages, such as low rates of entrepreneurship and innovation. (Lorenzen 2012; Crone 2012) The innovation systems in peripheral regions is characterized with low interaction between knowledge producers and knowledge users, lack of a critical mass of innovative firms, a weak endowment with other key organizations and institutions and low level of clustering (Isaksen 2015). The stakeholders might lack of knowledge for innovation and their absorption capacity to acquire necessary knowledge might be low. Entrepreneurial discovery process (EDP) is one of the central concepts of the latest regional innovation strategy of the EU, smart specialization. The main idea of EDP is to define the regional assets and utilize them for economic renewal (Foray et al. 2012). EDP needs a broad partnership of public and private stakeholders. However, in peripheral regions, there might be only few relevant stakeholders, and they are too distant to each other, which might lead to weak or lacking interaction. These areas might have weak capacity to support the renewal of the regional economy via EDP (Blažek et al., 2014). The paper argues that by focusing on proximities and distances between stakeholders, one is able to stimulate the regional EDP. EDP is a search for new business areas but also a process towards an optimal proximity between actors. This means changes in knowledge space during the discovery process. Based on the literature review, the paper looks at a variety of approaches to compensating for the lack of geographical, cognitive, and social proximity between an industry and its knowledge base in EDPs. The paper presents empirical case studies from Finland. Virkkala(2007) Innovation and networking in peripheral areas: European Planning Studies, Virkkala et al(2018) A connectivity

Innovation at the peripheries II

Knowledge Bases and the Core-Periphery Pattern in Austria: Towards a Regional Typology

Jakob Eder - Austrian Academy of Sciences

The differentiated knowledge base approach has deepened our understanding of innovation processes by distinguishing between the analytical, synthetic and symbolic base. These bases exhibit specific characteristics which imply that the analytical and symbolic base are integral parts of urban areas, while the synthetic base should be more evenly distributed across space and also extended to peripheral areas. So far, case studies have often failed to test this hypothesis and integrate their findings into a broader national or international context. However, this seems necessary in order to understand the innovation landscape on a larger scale. Focussing on the analytical and the synthetic base in the case of Austria, the aim of the paper is twofold: first, it analyses the correlation between the core-periphery dichotomy and firm-level R&D spending in general. Second, it conducts a cluster analysis to classify the 95 Austrian districts according to their geographical location and their knowledge base characteristics. In this way, the analysis combines periphery indicators (e.g. accessibility or population dynamics) with data on knowledge bases (e.g. R&D types, education of R&D staff, R&D cooperation, and patents). Therefore, the findings not only contribute to the scientific debate on the spatial pattern of knowledge bases, but also serve as an important basis for policy makers, who aim to provide a tailor-made regional innovation policy.

Openness values and regional innovation: a set-analysis

Roel Rutten - Tilburg School of Social and Behavioural Sciences

Existing empirical research has demonstrated that openness values matter for regional innovation and why they matter but not how they matter. Answering the how-question requires going beyond the 'net-effects approach' of statistical analysis in order to explain how causes sometimes combine to produce the outcome and sometimes they do not. Problematically, in a statistical analysis cases where cause and outcome are both absent contribute equally to the correlation coefficient (the explanation) as cases where cause and outcome are both present. But the former cases shed no light on how a cause contributes to an outcome. Set-analysis identifies equifinal configurations of conditions that are sufficient for the outcome. The configurations reflect different mechanisms that explain the occurrence of the outcome and thus answer the how question. Sufficiency means that the cases that have membership in the configuration (cause) are a subset of the cases that have membership in the outcome. This study argues that innovation is knowledge plus ideas and that openness values encourages the creation, dissemination and adoption of ideas. The paper performs a set-analysis of seven conditions; 'analytical knowledge creation', 'synthetic knowledge creation', 'human capital', 'self-expression values', 'economic diversity', 'melting pot' and 'social capital' on 'regional innovation'. All conditions reflect (parts of) explanations for regional innovation and capture different ways of creating knowledge (knowledge creation, human capital) and ideas (diversity, melting pot and social capital). A set-analysis connects the conditions into configurations, i.e. cross-case patterns that explain the occurrence of regional innovation. The way in which openness values combine, or not combine, with other conditions in configurations that are sufficient for the outcome, answers the how-question. Empirical results will be presented at the conference.

When both the state and market fail: Collaborations for social innovation among MNEs, NGOs and transnational social entrepreneurs in India

Yuko Aoyama - Clark University | **Balaji Parthasarathy** - International Institute of Information Technology Bangalore

We examine collaborative governance under circumstances of state inadequacy. Based on 115 interviews with social innovation stakeholders in India, we analyze various types of cross-domain collaborations that aim at producing innovative products and services with social impacts, in areas such as agriculture, public health, and renewable energy. Cross-domain collaborations are under-examined and under-researched area of study, and differ from privatization or service contracting/outsourcing by the state (aka conventional public-private partnerships). Our interviews of social innovation stakeholders suggest that cross-domain collaborations occur not in spite of competing interests, but because of bottlenecks each stakeholders face in inducing social innovation. The private sector, and particularly multinational enterprises (MNEs), face unfamiliar markets, infrastructural constraints, lack of understanding of user preferences, whereas social enterprises struggle to scale up their operations for larger social impacts. The NGO sector, by contrast, has intimate knowledge of the communities they serve, but lacks resources and technological capacity. The primary role of the state is to facilitate cross-domain collaborations through regulatory changes, with the private sector and civil society organizations playing a significant role in designing solutions.

These cross-domain collaborations also involves global transfer of technologies, social networks, as well as financial schemes. While various forms of transnational entrepreneurship has been examined, transnational social entrepreneurship is a relatively new phenomenon.

We conceptualize the rise of the hybrid domain, which serves as an experimental ground for these cross-domain actions. While we consider the hybrid domain significant for development in the Global South, it is deeply linked to the Global North through the growth of social finance schemes such as impact investment, venture philanthropy, and universities launching social innovation and social entrepreneurship programs.

The birthplace of business owners and regional economies

Ryo Fukuda - The University of Tokyo

From the viewpoint of both transaction cost with reasonable personal assumption and embeddedness in social relations, especially for SMEs, the background of the presidents is important to acquire knowledge or constitute the management networks. Geographically the place of birth is one of the critical factors. It has been often suggested that the introduction of resources outside including metropolitan areas is an important promoter for innovations in rural areas. In this paper, based on information of Japanese firms as examples, I extensively investigate the impact of management's hometown on corporate performance in order to reveal working of personal resources embedded former base not only for the firms in themselves but also for firms surrounding them. Unlike many ethnological studies with proven records, quantitative verification is done here using ample data obtained from Japan's largest credit research database. I have built the cross sectional dataset of several time points including information about the firms and the presidents. One can observe death, growth and change of firms by comparing multiple points in time. Analysis conducted here is as below: First, I describe relationships between firms' location and the birth place of their presidents. Second, I check the influence of origin of the presidents on survival, innovations, productivity growth and the other management networks both on each firm and the whole region. As a result, descriptively, while the most of the managers are from local origin, this trend is weakening year by year. Focusing on the relationship with the firms' performance, young and small firms tend to realize good management with the presidents from outside. In addition, it is confirmed that the region where many students tend to show high performance. Although there are some restrictions in my results, they imply the critical influence of the people's moving networks on the regional developments.

Session

Innovation in the global South

Päivi Oinas - University of Turku | **Lucía Gómez** - Turku School of Economics

The role of innovation has been central in debates on economic growth and development for decades. It used to be the case that innovation was generally associated with advanced economies, their firms, their dynamic cities, innovation systems, or innovative clusters. Those possess the resources, possibilities for creative interactions, supportive organisations, institutions, and infrastructures. We now begin to know increasingly about how emerging countries invest in education, learning and knowledge generation, and about the ability of emerging market multinationals (EMNEs) to tap into sources of knowledge elsewhere so as to advance knowledge processes at home. It is not yet as extensively studied how less developed countries and regions put effort into upgrading their products, processes, and services. "Emerging" and "developing" countries and regions in the global South are differently positioned in terms of access to resources and supporting environments but both are increasingly becoming integrated in processes of innovation.

Papers are called for that help us shed light on the diverse ways in which diverse countries, cities, and regions in the global South are involved in generating innovative products, processes, services, technologies, organizational solutions, social processes, and so forth, through mechanisms such as:

- local entrepreneurship;
- foreign direct investment bringing in new knowledge, and tapping into local creative processes;
- transnational and translocal networks of firms, organisations, individuals, public bodies and intercultural exchanges;
- cities adopting urban planning practices for the attraction of investment and talent, and for stimulating creative interactions;
- university engagement with local economies and communities;
- digital transfer and local adaptation of innovative solutions
- etc.

The evolution of local R&D capabilities in emerging markets: The case of Swiss food processing technology manufacturer Bühler innovating novel solutions for the mid-market in India

Sarah Franz - Gothenburg University

The fast-growing mid-market in emerging economies in Asia is increasingly shifting western multinational companies (MNCs) innovation activities towards the global south. Low-cost, ease-of-use and reduced functionality are just a few of the recurrently brought forward demand sided factors characterising the needs of the resource-constrained customers of the mid-market. This study highlights the importance of local context leading to a change in how western MNCs behave and organise their innovation efforts in emerging markets. Presented is an in-depth, longitudinal study of a leading Swiss manufacturer of food processing technologies for the rice and flour industry and its Indian subsidiary. The data retrieved through on-site visits and semi-structured interviews conducted with key personnel from research and development (R&D), manufacturing, marketing and sales, in Switzerland and India, propel three main findings. First, the evidence suggests that emerging market R&D units increasingly engage in the development of new products and solutions, given that the local subsidiary has gradually developed the necessary knowledge and backbone of functions to support the innovation of an entire new value system needed for the customers of the mid-market. Second, this study shows increased levels of internal and external collaboration to meet the specific needs of the price-sensitive customers and increase the speed to market. Third, the results suggest that autonomy granted to the local R&D unit co-evolves with increasing experience and knowledge at subsidiary level, as well as the ability to generate successful innovations over time. Hence, this study contributes to a more holistic picture on how western MNCs gradually build up a dispersed network of R&D activities to foster this type of mid-market innovation, paying significant attention to the local external environment and its relation to the internal dynamics of the firm.

MNEs in an emerging policy-led innovation ecosystem in Medellín, Colombia

Lucía Gómez - Turku School of Economics

In the quest to develop an innovation-driven urban economy in Medellín, Colombia, the city's policy-makers are trying to create conditions to attract technologically advanced MNEs. They are expected to provide highly-skilled, innovative ICT services and contribute to local knowledge creation and the onset of an innovation ecosystem in the city. A key policy element is a newly established innovation and business center. Based on interviews with local and foreign firms in the innovation center, this paper examines the local impact of these operations. Whereas most research on innovation ecosystems has emphasized the importance of multinational corporations and proven knowledge-intensive contexts, this paper focusses on MNEs' local relations from the point of view of their contribution to socio-economic renewal and innovation. The paper argues that although innovation policies and strategies implemented by cities may attract MNEs operations and activate high skill employment mobility, they do not play a direct role in enhancing local innovation, technological upgrading, or in a major shift of the city in the international value chain from low-skill to high-skill services. However, the presence of the MNEs endorses the innovation-led development in the city by contributing to its attractiveness internationally and the image of a city emerging as an innovation and investment hub in the global South. The presence of foreign firms in the innovation center reinforces the city's internationally recognized brand, which is an asset for the operations of innovative local firms and to the gradual creation of an innovation culture.

Internationalization of R&D Intensive Turkish MNEs, Developed Country MNEs and Local Turkish Firms

Timo Kleiner - Leibniz Universität Hannover | Ingo Liefner - Leibniz Universität Hannover | Ekrem Tatoğlu - İbn Haldun Üniversitesi

After times of sustained growth and increasing volume of foreign direct investments (FDI) from developed country multinational enterprises (DC MNEs), many successful emerging countries find themselves in a period of economic stagnation, often referred to as the middle-income trap. To overcome this situation, large investments in research and development (R&D) are essential to foster innovation and technological upgrading. Hence, various forms of political support are vital for emerging country multinational enterprises (EC MNEs) and indigenous firms to compete within their domestic market as well as the DC MNEs' home markets. However, attracting FDI remains a major aspect for the emerging countries' economic development. In this study, based on a comparative perspective, we focus on internationalization strategies and usage of political support of R&D intensive Turkish MNEs, DC MNEs and Local Turkish firms in a key emerging host market country of Turkey. Our results show that DC MNEs particularly benefit from investment and export incentives as well as institutional support to establish political connections. Local Turkish firms emphasize significant use of tax incentives as financial support option, whereas Turkish MNEs especially profit from investment and export incentives. In addition, both Turkish MNEs and local Turkish firms primarily target advanced markets as part of their internationalization strategies.

A Geographical Perspective on Frugal Innovation – Evidence from the Global South

Hans-Christian Busch - University of Cologne

Frugal innovations are new products or services optimized for their core functionalities, designed to best fulfil customers' needs, especially in the context of emerging economies. This focus on sufficiency allows for lower costs and the use of fewer resources, and it aligns with calls for a complexity-reduced and more resource-conscious economy. The concept of frugal innovation is thus being promoted by scholars and practitioners as a means of potentially achieving a desired sustainability transition.

Despite being a fairly novel stream of research, the academic literature on frugal innovation is growing constantly, both in emerging economies and in developed markets. Yet, there is no clear understanding concerning its spatial meaning and interdependencies with related forms of 'responsible innovation', such as sustainable innovation and social innovation.

The phenomenon of frugal innovation stems from a Global South context. Most cases of applications as well as the vast majority of involved scholars are located in Asia, and predominantly in India. Although previous research has already noted that contextual peculiarities of frugal innovation exist, there has not been a systematic approach to investigate local idiosyncratic environment from which frugal innovations emerge. Economic geographers should thus shed light on this specific environment and especially consider empirical evidence from the Global South.

This paper therefore analyses the extant literature of frugal innovation in order to synthesize their contextual meaning and studies the concept through the theoretical lens of economic geography of innovation. By systematically investigating the spatial aspects of frugal innovation, the paper builds the conceptual foundation for further empirical analyses with case studies from the Global South. Employing the vantage point of economic geography on the frugal innovation concept represents a novelty in this emergent field of research and thus this paper bridges a gap between two hitherto unrelated academic communities.

Session

Rural economies and globalization

Francesca Fois - Aberystwyth University | **Michael Woods** - Aberystwyth University

Literature on globalization tends to focus on urban areas, often dismissing how such phenomenon has an impact on the economies of the countryside. However, not only cities but also rural areas are diversely impacted by global flows. Equally, they can play a crucial role in shaping global processes (Woods 2007). Though there is an emerging interest on the relation between the rural and the global (Rignall and Atia 2017; Wilson and Whitehead 2012; Nelson and Nelson 2010), this session aims to further explore which economic geographies are generated in such global-rural entanglements. Agriculture, migration, manufacturing, mining, and tourism are some of the themes (yet not exclusive) that could be taken in consideration to explore the dynamic nature of rural economies and investigate how the local scale can interact with the global scale. What kinds of economic global-rural process are enacted? How global-rural connections shape rural economies? How rural development influences/is influenced by globalisation? How rural economic geographical knowledges can impact policy makers? How global flows do produce more (un)equal rural context? We would like to open the space to those investigations that look at how globalisation influences, shapes and impacts the economic geographies of rural areas and/or how rural economies are actively involved (or not) in the production of global spaces and networks. This session is interested in theoretical, empirical and/or methodological contributions that look at one or more (but not limited) of the following economic geography dimensions in unpacking the relation between the rural and the global: • Labour • Financialisation • Industries • Development • (In)equalities • Gender • Social economies • Production networks • Institutions • Logistic and transports • Technologies and communications

Thinking the everyday life spaces to community spatial planning of tourism: The case of Californios ranchers of Sierra de San Francisco, Mexico.

Daniel Rodríguez Ventura - National Autonomous University of Mexico (UNAM)

Tourism is recognized for its economic, cultural and environmental impacts and for linking isolated places with the world. For its part, the understanding of the "abstract space" (logical-mathematical) has preponderated in the implementation of spatial planning; such reading is not always compatible with the subjectivities and culture of the people who inhabit the spaces subject to this process. In this context, several rural spaces have been reorganized and incorporated into global tourism dynamics, as is the case of Sierra de San Francisco (SSF), Mexico. This shows a contradiction between proposals of territorial policies of spatial planning and local worldviews but also a conceptual gap in approaching the subjective face of space. This work proposes a re-conception through rethinking space—based on epistemology, ontology, and methodology of humanistic geography, and the general theory of systems— from the incorporation of the concepts "space of life", "lived space", and "everyday life subsystem" in the theory of spatial planning; In order to identify the relation between the inhabitants and their space to characterize and diagnose a territory in a more integral and participative way. The SFF is a rural space located in the desert where a cultural tourism is implemented around its

cave paintings (UNESCO World Heritage since 1993) and where the Californios ranchers live (heirs of the antique missionary culture of the peninsula of Baja California). Through a qualitative methodological design (participant observation, in-depth interviews, and social cartography), this study recognizes that such tourism has been planned by the archaeological Mexican authorities to protect and preserve cave art, as well as to generate a secure local economic income. However, they have not contemplated that the "everyday life spaces" of Californios ranchers have been marketed as tourist resources without benefits for the locals. This study gives inputs to improve this situation.

From sacred grain to commodity: the Bolivian quinoa production between peasant economy and agrarian capitalism.

Francesca Uleri - Università Cattolica del Sacro Cuore

During the last decades, the development of new consumption models focused on the higher purchase of quality products rich in natural properties, or the emergence of new consumption behaviors, often attentive to particular environmental and social issues, have addressed consumers choices towards new emerging products; agriculture as a dynamic system tries continuously to reinvent itself in order to respond to these requests. Today both the agro-industrial model and the peasant model organize and re-organize their production structure to face new socio-economic demands. My work has the aim to understand not only how the change in global consumption behaviors can affect local economies, but more precisely how the organization of the productive structure, which faces a changing demand, can socially and economically impact on the local development of rural areas. The research is framed in a specific case study which sees the analysis of the socio-economic effects of the international "quinoa boom" on three peasant communities in the Bolivian highland. The study was carried out through an empirical survey that included the use of open-ended interviews and the administration of a questionnaire; on the basis of the data collected, the paper describes how the growing demand for quinoa has temporarily reversed the rural-urban migration flows attracting new farmers in the plateau and creating a new quinoa economy oriented to global markets. The return to the land in the Altiplano, often presented as a further step of the Latin-American re-peasantization, is here interpreted as a process of re-agrarization based on the centrality of the capital-labor relations that through the organization of a capitalist productive structure has contributed to the dismantling of the Andean communalism and the erosion of the local peasant economy.

Worlding countrysides: Genetically engineered crop plants in the Indian political debate

Markus Keck - University of Goettingen | **Luisa Knobloch** - University of Goettingen

Cities are the principal sites for governments to show their global political and economic aspirations. Due to this fact it is not surprising that economic geographers focus primarily on urban areas when discussing globalization. Yet, global flows of products, finances and knowledge also have significant impacts on the countryside. Today, emerging nations circulate ever new rural dreams in widening spirals across the planet, which often stay unnoticed by the general public. Given the broad spectrum of imagined rural futures, we argue that the fate of globalized rural areas cannot be reduced to the workings of universal laws established by capitalism, but are to be read as outcome of particular spatial histories and trans-local assemblages. We take this argument from Aihwa Ong (2011), who developed it in the field of urban studies, and transfer it to the field of rural geography. Ong introduces the term "worlding" to dive below the high abstractions of a Marxist reading of capitalistic rural development to enable ethnographies that "stay close to heterogeneous practices of worlding [...] as situated everyday practices [...] that creatively imagine and shape alternative social visions and configurations – that is, "worlds" – than what already exists in a given context (Ong 2011: 12). Worlding projects remap relationships of power at different scales and localities, which makes not only cities, but also rural areas both critical sites in which to examine concrete worlding projects at work, as well as the ongoing result and target of specific worldings. Our presentation constitutes the starting point for several papers to come that all together deal with the dreams and realities of genetically engineered crop plants in India. It builds on expert interviews and serves to explicate the different worldings of agricultural biotechnology of top-ranking entrepreneurs, politicians and activists.

Finance, risk and the entry of small and medium farmers to global networks

Michael Woods - Aberystwyth University | **Francesca Fois** - Aberystwyth University

Recent research on financialization and agriculture has highlighted the significance of global capital flows to the neoliberal restructuring of transnational agricultural networks. In particular, this work has examined the expansion of corporate agriculture and international land investments. Less attention has been paid to the role of finance in facilitating the entry of small and medium sized 'family' farmers into transnational commodity chains, including the conversion of farms to new crops and products aimed at lucrative export markets. This paper focuses on this question, drawing on empirical research in Rio Grande do Sul, Brazil, and

in New Zealand, and informed conceptually by assemblage thinking. From this perspective, the paper examines how the attachment of small and medium sized farms to the global soy assemblage – in Brazil – and the dairy export assemblage – in New Zealand – has required a reconfiguration of farm assemblages (including land use, inputs, technologies, labour and infrastructure) that has been enabled by access to finance from a range of sources including banks, private investment funds and agribusiness corporations. The availability of such finance, especially through non-conventional routes, reflects the entry of new actors into agricultural finance and the recycling of profits from internationalized commodity and property markets. At the same time, financing can act as a disciplining mechanism on farmers that can promote standardization and homogenization in agricultural production and strengthen the position of larger agribusiness and finance corporations. Furthermore, finance packages are commonly based on projections of future performance that involve a high level of risk, such that downturns in market prices or weather-related falls in production can push farmers into defaulting on debt payments. This may also work in the long-term interests of agribusiness, by acting to squeeze smaller farmers out of business and freeing-up land for consolidation into larger, corporate farm assemblages.

Session

The (silent) triumph of the periphery: conceptualizing creativity from the margins

Oliver Ibert - Leibniz-Institute for Research on Society and Space | **Gernot Grabher** - HCU Hamburg

Centers have always been celebrated as places of creativity, innovation and progress. The historical record of centers in engendering all kinds of innovations from Renaissance Florence over Fin de Siècle Vienna to the present creative epicenters like New York or London is impressive. The periphery, in contrast, appears stuck in its role of sustaining conservatism. The genealogy of creativity attests nothing less than the irrefutable “triumph of the city” (Glaeser). This certainty, however, comes at a price. First, the fixation on the affordances of urban places has impoverished conceptualizations of periphery. The term is routinely used as a residual and deficient notion. This perception does neither do justice to the diversity of spaces of creativity that exist beyond metropolitan areas, nor does it provide any positive ideas of what peripheries are or could be. Second, the celebration of urban forms of innovation has unified our ways of thinking about creativity as relying on interaction between diverse actors co-located in thriving places. Modes of creativity beyond this predominant urban model, however, are widely neglected. Such modes can be found peripheries, but sometimes also dwell in niches right within the territories of creative cities. Third, the urban model regards innovation as a phenomenon bound to particular territories. A process-oriented perspective, however, reveals that creative projects usually tap into spatially distributed resources. Hence, the opposition of center and periphery should not be understood in terms of an exclusive dualism, but rather should be interpreted as a dynamic duality ripe with tensions and opportunities. We invite conceptual and empirical papers that • provide differentiated notions of peripheries that foreground their unique qualities and affordances; • advance novel approaches for the analysis of creativity with a particular focus on the affordances of peripheries; • employ a relational understanding of peripheries, which acknowledge the interaction between

The (silent) triumph of the periphery: conceptualizing creativity from the margins I

Center yet periphery - Toronto galleries and their relative positions in the art market

Melanie Fasche - University of Bayreuth

The paper takes a critical perspective on the prevailing urban model that celebrates cities as centers of creativity, innovation and progress and proposes a more nuanced center-periphery understanding from a market perspective.

It is argued that periphery and center are functionally interconnected, relationally constituted, relative positions in the market: Creativity, often generated in the periphery, needs to pass through institutions of the center for legitimation. This generation-legitimation dynamic creates a rank ordering of market positions. Depending on the rank market positions may be relatively more central or more peripheral. Thus, the pursuit of passing through central institutions for legitimation is in fact a pursuit of passing through relatively more centrally positioned institutions. In other words, every marketplace consists of a rank ordering of relative market positions, while themselves holding a relatively more central or more peripheral position in relation to other marketplaces. The paper builds on a case study of Toronto galleries and their activities of marketing and legitimating art. While Toronto is considered the national art market center, the city holds a peripheral position in the global art market. In the Toronto art market galleries can be distinguished according to their relative market position. The paper discusses opportunities and challenges of Toronto galleries to pass innovative artwork through central institutions for legitimation and reveals their strategies to realize the (silent) triumph of the periphery.

Urban resilience strategies as dedicated niche spaces for governance experimentation – insights from Melbourne

Lars Coenen - University of Melbourne | **Kathryn Davidson** - University of Melbourne | **Sebastian Fastenrath** - University of Melbourne | **Brendan Gleeson** - University of Melbourne

Given the unprecedented challenges of a new 'Urban Age' (Gleeson 2012), including climate change, hypertrophic urban growth and globalisation, cities are exploring new and radically different policies that address their increasing vulnerability to an array of shocks and stresses. Urban resilience strategies, and their associated actors, networks and institutions (e.g. the Rockefeller Foundation's 100 Resilient Cities program), actively embrace experimentation and collaborative creativity as a new mode of city governance to co-develop innovations to future-proof urban systems of provision and services in e.g. transport, energy, and housing (Bulkeley et al., 2016). Such governance experimentation implies that ideas, skills and knowledge that traditionally have been peripheral and at the 'margins' of urban policy now are trialled and tested as serious alternatives for traditional city planning and governance structures. A core question is whether these new city governance forms, which are by default tentative, emergent and 'in the making', can renew embedded and historical urban institutions and their policy correlates.

Drawing on selected 'Actions' – understood as innovation projects - of the Resilient Melbourne Strategy, the paper explores empirically how resilience strategies strive for destabilising and disrupting established structures and institutional logics of incumbent urban systems. Considering the innovation biographies of the Actions (Ibert, 2010), the paper aims to unpack the heterogeneity of private, public and civic actor interests, capabilities and relations that configure these urban resilience experiments. These investigations help to critically interrogates and to better understand how urban resilience strategies negotiate notions of core and periphery in urban policy making.

Disconnectedness. A tale about peripherality, outsiders and architectural creativity

Gernot, Grabher - HCU Hamburg

This is an account on disconnectedness, peripherality and outsiders. And yet, it is not a story about regional suffering imposed by a lack of centrality and Jacobs-externalities. Rather, it is a report about how disconnectedness has been leveraged as propulsive power of a creative movement. More specifically, it is an astounding success story about the emergence of a path-breaking architectural movement in the provincial Austrian region of Vorarlberg that later should acquire world-fame as Baukünstler. Disconnectedness, not as destiny but as deliberate choice, afforded the preconditions to perceive the role of the architect as well prime purpose of architecture afresh. Disconnectedness, moreover, was not only key for the generation but also for the valuation of newness. For one, the (quasi-)objectivity of the arbiters of value from the center was authenticated through their disconnectedness from the valued actors. For another, as authentic outsiders in a peripheral region, the Baukünstler were also highly valued precisely because they were disconnected from others.

Boundlessly Open – Openness as the double-edged sword of and for (silent) peripheries in the center

Suntje Schmidt - IRS and Humboldt-Universität zu Berlin

Open and openness have become buzz terms in geographical thinking today (Allen, 2005; Lundgren and Westlund, 2016). Both seem to be well fitting and coined terms to capture the consequences of relational thinking and the interplay of dynamic distances and proximities (Grabher and Ibert, 2014; Hautala, 2017) in time-spatial innovation and creativity processes. Openness thereby holds the promise for peripheries to participate in and take on an active role in these processes. However, only seldom the boundaries of openness are questioned. This presentation seeks to initiate a discussion on the dynamic drawing, re-drawing, contestations and maybe even darks sides of the interplay between openness and closure in creativity driven processes.

Openness seems to be embracing foreignness, strangeness, distances and disruptions. For instance, in open creative labs (Schmidt and Brinks, 2017), trans-disciplinary and serendipitous encounters are acknowledged for creative endeavors and projects. At the same time, we identify a curated openness (Merkel, 2015; Schmidt et al., 2016) in these place in the sense that "...Everybody is welcomed – who looks into the same directions as we do,..." (interview quote, translated by author). Thereby, openness is related to a new boundary drawing between those who are in (the center) and those who are left out.

This presentation wishes to contribute to a debate that questions the optimistic buzz on the openness of innovation and creativity processes. The contributions will be based on a conceptual discussion of new forms of closure and openness, enriched by empirical examples from field research in open creative labs.

The (silent) triumph of the periphery: conceptualizing creativity from the margins II

Scientific Knowledge Creation Rhythms in and beyond Remote Ny-Ålesund in the Arctic

Minna-Liina Ojala - University of Turku | **Johanna Hautala** - University of Turku

This article discusses how a temporal gathering of researchers to the remote and peripheral Ny-Ålesund research station (78°55'N 11°54'E) affects the rhythms of knowledge creation processes in an international research project. Periods of co-presence are crucial for creating knowledge in research projects whose members usually work in different geographical locations. However, not enough is known about the meaning of peripheral and remote place and environment of this co-presence, or how knowledge creation processes are continued after the co-presence. We use rhythm analysis to investigate the work of a research project group during and after a gathering in Ny-Ålesund. According to the key results, gathering in Ny-Ålesund supports intense and focused eurhythmic ensemble where rhythms were aligned, the environment became a participant of the knowledge creation process, and where a spurt in knowledge creation was achieved. As the rhythms of knowledge creation change, also the eurhythmia dissolves. Knowledge is created further through an arrhythmia that may also be necessary for achieving globally innovative scientific knowledge.

Performing (in)commensurability: How thought collectives encrust and de-lock innovation in a manufacturing region.

Anna Mateja Punstein - Heidelberg University | **Johannes Glückler** - Heidelberg University

This paper addresses the question of how people combine different kinds of knowledge to create innovations. While extant research has focused on the qualities and divides between knowledge types or bases, we seek the sources of incommensurability in the social processes of learning and knowledge production. Hence, we posit that learning across domains does not fail for logical or natural reasons, but for the social construction of incommensurability between thought styles. We elaborate on the concept of the thought collective (Fleck 1979) from a spatial perspective to analyze how (in)commensurability is actually practiced in the relation between engineering and industrial design in the manufacturing region of Heilbronn-Franconia. Based on over 30 in-depth interviews, we reconstruct conflicting social practices between the thought collectives of engineers and industrial designers. Empirically, we identify three ways in which design gets involved in technical innovation: shallow, aesthetic, and pervasive design. Moreover, we unpack those practices that enable innovation across thought collectives and, hence, the transformation of thought styles in a specific regional setting. This case study contributes to an alternative framing of lock-ins and encrusted development paths, which focuses on the ways in which social groups constitute and overcome thought solidarity rather than on knowledge divides as a natural given.

Development of non-core regions and redistribution of urban-rural relationship in Switzerland: the case of the region Gruyère

Delphine Rime (Guex) - University of Bern | **Heike Mayer** - University of Bern

Regions are considered non-core when located outside of core regions, that is, outside metropolitan and large urban areas (Legendijk & Lorentzen, 2007). Up to the 1980s, non-core regions of the Pre-alps in Switzerland used to be mostly concerned by agriculture and were declining. During the last 30 years, the trajectories of those regions have shifted to more successful economic development (an increase of the population and the employment), also in comparison with other parts of the country. How to explain this relative success? On the one hand, the agglomeration of specialized activities would explain such success (Porter, 2000; Boschma & Iammarino, 2009), even in peripheral regions (Andersson, 2000; Mayer, 2011). On the other hand, researchers recently highlighted the importance of the so-called “residential” and “presential” economic activities in the successful development of regions (Davezies, 2009; Talandier et al., 2016). In this paper, we explore both hypotheses for the region of Gruyère, in the Swiss Pre-alps. The description of quantitative growth indicators and the analysis of qualitative data (documents analysis and ten semi-directed interviews) show that both productive and residential activities developed in parallel during the last 30 years and partly interact the one with the other. Moreover, it shows that the past rural identity of the region serves the development of those activities differently. The rest of the Canton also nowadays mobilizes this symbolic resource proudly. Quantitatively and qualitatively, the relationships between urban and rural areas within the region and between the region and its neighbors evolved considerably in the last 30 years, far beyond the theoretical asymmetry between urban and rural areas.

Explaining long-term regional growth: Towards an integrated framework

Mikhail Martynovich - Department of Human Geography, Lund University | Karl-Johan Lundquist - Lund University

Through research efforts in economic geography much was learnt – both theoretically and empirically – about the process and causes of regional economic growth. Much is known today about the role of human capital, agglomeration, innovation, institutions, etc. What has been missing, however, is an “attempt to construct encompassing explanations for differences in growth and development between regions by placing them within the same system, on the way to explaining their characteristics as a function of their varying relationship to the system” (Martin 2015). This paper is an attempt in such a direction.

Our framework builds upon two pillars. First, long-term economic growth is as much about changing what is produced (qualitative change) as it is about increasing how much of it is produced (quantitative change). Second, regions face growth opportunities which they utilize to a different extent. We define four dimensions of growth opportunities: time – space – structural change – local efficiency.

Time is a functional phenomenon and frames what is technologically possible. The technological frontier represented by a dominating techno-economic paradigm acts as a meta-selection mechanism which penetrates all other dimensions of growth opportunities.

Space represents the continuous field of opportunities for all regions at every moment in time. On the one hand, regions have different capacities to catch-up to the technological frontier. On the other, space is relational in that there are systemic patterns of regional development where what happens in one region affects what happens in others.

Structural change at the regional level is a result of transformational pressures translated into the response of economic agents. Heterogeneity of economic agents and imbalances of their spatial distribution result in the lead-lag relationships in the regional system.

Finally, local efficiency relates to the opportunity of each region to improve employment, productivity, etc. within each structural setting.

Session

Journal Session / Review of Regional Research: Universities and their contribution to innovation, growth and development at the regional level

Thomas Brenner - Philipps-Universität Marburg | Daniel Schiller - University of Greifswald

In recent years universities have changed with regard to their character, organisation and tasks they are expected to fulfil, not only in continental Europe, but also in emerging economies. Organisation has become more centralised and more oriented towards efficiency and excellence. In the context of these changes, universities are nowadays expected to provide more than scientific publications and graduates. Their so-called “third mission” is based on widespread interaction with the economy, policy makers and the society. This also includes a stronger interaction within the region. As a consequence, an increasing contribution to innovation, economic growth, structural change, and societal development is expected at the regional level.

The session provides a platform to present and discuss theoretical and empirical studies of such regional contributions and impacts of universities. The session is run in connection with the journal Review of Regional Research and a special issue is organised consisting of the accepted papers, which will appear in October 2019.

Contributions to the following issues, among others, are welcome:

- Universities’ impact on regional growth
- Regional co-evolution of private and public research
- Regional collaboration between industry and science
- Interaction between regional policy and universities
- Regional impact of the transformation of the university education system in Europe
- Universities and regional development in the Global South
- New governance models for regional engagement of universities
- Interaction between universities and the regional society
- Universities and sustainable regional development

Journal Session / Review of Regional Research: Universities and their contribution to innovation, growth and development at the regional level I

Radical innovations and university-industry collaborations

William Arant - University of Bremen | **Dirk Fornahl** - University of Bremen | **Nils Grashof** - University of Bremen | **Kolja Hesse** - University of Bremen | **Cathrin Söllner** - University of Bremen

Radical innovations are an important factor for future economic growth. Universities provide basic research and knowledge that form the basis for future innovations. Previous research has investigated the effects of universities, university-industry partnerships and proximity on factors such as innovations, knowledge spillovers, entrepreneurial activities, as well as regional growth, wealth and competitiveness. However, the role that university-industry collaborations play in radical innovations, mediated by various measures of proximity such as cognitive or geographic distance, has not yet been explored. With this study, we make a first attempt to shed light on the specific conditions under which university-industry collaborations are the key to radical innovations in German biotech firms.

We utilize the Amadeus firm-level database to build a sample of 1,178 companies established up until the year 2012 in the biotech industry. Patents, retrieved from the European database PATSTAT for the year 2012, are used to measure the emergence of radical innovations. In particular, we provide an indicator taking into account both the degree of novelty on the input level as well as the impact on subsequent innovations. Also according to patent data, we then construct a measure for cognitive distance of firms and universities. Based on the location of the firms and universities, the geographic distance will be measured. Moreover, we make use of the data on publically supported R&D collaborations from the German subsidy catalogue ("Förderkatalog") to measure formal relationships between universities and firms.

Our research is vital for understanding the conditions under which university-industry collaborations contribute to the creation of radical innovations. While not only closing a research gap, this paper has practical ramifications for companies, universities as well as policy-makers by evaluating the concrete effects of university-industry collaborations on radical innovations.

Regional Innovation Impact Assessment of European Universities: design and development of an evidence-based model

Robert Tijssen - Leiden University | **Koen Jonkers** - European Commission | **Xabier Goenaga** - European Commission | **Athina Karvounaraki** - European Commission

One of the assumptions underlying most regional innovation policies in Europe is that local universities make valuable contributions to economic activity (European Commission, 2011). However, in the EC's renewed agenda for European higher education, an innovation gap is highlighted between universities and their regional economy (European Commission, 2017, p. 4): "Higher education institutions are often not contributing as much as they should to innovation in the wider economy, particularly in their regions. The performance of higher education in innovation varies strongly between EU regions". A recent report of the Independent High Level Group, on maximising the impact of EU Research & Innovation Programmes, argues for an additional performance based institutional funding stream, to support institutional modernisation in terms of flexibility, user engagement and openness (Lamy et al., 2017).

To address this gap, we developed a Regional Innovation Impact Assessment (RI2A) system (Jonkers et al., 2018) that could set a path for performance based funding to European universities which resonates with the Lamy report. The evidence-based RI2A framework may also be used by universities, national or regional governments to assess the contribution of universities to the performance of the local or regional innovation system in which they operate.

We present an outline of the RI2A system, which comprises of three main analytical components:

- quantitative, metrics-based indicators to measure innovation impact and monitor its dynamics ('numbers');
- qualitative contextualisation of these indicators potentially supplemented with qualitative evidence of specific impact incidences ('narrative');
- integrated analytical framework that focusses on the geographical dimension of outcomes and impacts produced by universities.

We will discuss methodological issues on the possible adoption and implementation of this 'narratives with numbers' model.

Graduate Migration in Germany – Regional Patterns and Determinants in a multilevel perspective

Björn Zucknik - Ruhr Universität Bochum

The endowment with human capital, as part of the regional knowledge base, requires a constant renewal and enlargement. Therefore, attracting graduates from universities is one of the most important tasks for the economy in order to sustain competitiveness. In recent years, a large number of studies has been conducted to explore individual and regional factors that determine the migration decision of graduates at the individual level. However, no study has so far answered the question if the graduates' migration decision is also influenced by the capacities of the respective regional innovation system. The monetary expenditures and the amount of labor force engaged in research and development activities, or the concentration rates of companies in the knowledge intensive economy sectors (Cluster structures) are for example some indicators for measuring the innovative capacity. As derived from the theoretical framework, it is assumed that regions with high innovative capacities tend to be highly attractive for graduates. Therefore, these regions are likely to prevent outmigration as well as to attract more graduates from outside. The used dataset is part of the graduate survey conducted by the German Centre for Higher Education Research and Science Studies (DZHW). It contains information on 10.000 university graduates over the years 2001, 2005 and 2009 in Germany. The survey data at individual level is combined with economic and non-economic characteristics at regional level. This enables a contextualization of the individual migration decision within the respective regional system. The overall aim of this thesis is two-fold: On the one hand, we explore migration patterns of graduates during their first years in employment. On the other hand, this work contributes to a better understanding of the hierarchical system of migration determinants. The Author applies multi-level regressions techniques to analyze factors at the individual and regional level on the graduates' migration decision.

Same region – different choices? Explaining variations in the impact of spatial context conditions on (field of) study choices of school graduates

Katarina Wessling - Maastricht University

The paper aims at investigating the influence of regional conditions on individuals' study choices. We integrate a geographic perspective within an educational-research approach by linking regional availability of universities with individual inequality. It is known that residential settings influence individual choices. However, less is known about the relative importance of regional contexts for different social groups. We systematically assesses to what extent patterns of study choices of different groups – focusing on ethnic and social groups – are unequally affected by regional conditions. We argue that variations in the evaluation of (financial, social and emotional) costs between social groups can result in a differing relevance of the same regional conditions – e.g., depending on the families' socio-economic status, moving out of the parental home for study purposes might not be affordable. Hence, the given local supply with study opportunities becomes essential for the study or training choice after school graduation. Data from the German National Educational Panel Study (NEPS) is enriched with macro information on residential contexts on the municipality level (Gemeinde). To obtain a flexible measure of regions macro data is aggregated in travel-time radii. The macro data contain information on supply with study and vocational training opportunities and fields of studies. We cover a timespan from 1996-2016 in order to observe changes. Event history models with three conditional dependent variables ((1)studying versus voc. training, (2)where to study, and (3)what to study) are carried out. In line with our expectations, findings indicate that youngsters from low social and immigrant origin depend in their study choices strongly on offerings in their residential context as they are – regardless of how unfavorable their region is – much less likely to relocate. In that respect we demonstrate that a favorable supply with study opportunities in the region can compensate for social inequalities.

Journal Session / Review of Regional Research: Universities and their contribution to innovation, growth and development at the regional level II

How do HEIs and local and regional actors 'learn' how to interact and collaborate effectively? Empirical evidence from the region of Kaiserslautern (Germany)

Verena Radinger-Peer - University of Natural Resources and Life Sciences Vienna (BOKU)

The present proposal aims to investigate the process of how regional engagement activities and collaborations between HEIs and local and regional stakeholders emerge. The underlying assumption is, that HEIs' regional engagement is not a self-evident activity, but rather a process which unfolds over time and which is influenced by various organisational-internal as well as influencing factors from the regional and institutional environment. HEIs and regions are each complex systems with their own

interests and modes of behaviour, which make it unlikely they will see the benefits of working together on a rational, linear regional development process. Policy-makers tend to overestimate the extent to which universities can be considered monolithic, rational actors pursuing a clear strategy with a single voice. Rather, HEIs are multi-dimensional, complex, independent and loosely structured communities of scholars who are active in wider knowledge production, transformation and transfer processes around teaching and research. Therefore engagement is just one of multiple agendas, activities and incentives influencing universities and university academics, and the regional level is merely one of multiple scales at which these agendas, activities and incentives act upon HEIs. The paper elaborates an analytical framework, which is based on institutional theory and organisational learning theory. The two analytical elements used to capture processes of institutional and organizational change are legitimacy and taken-for-grantedness. The framework leads the investigation of the emergence of regional engagement activities at two HEIs, the Technical University of Kaiserslautern and the University of Applied Sciences Kaiserslautern. By applying methods of historical inquiry, in-depth expert interviews and Q Methodology the paper aims to contribute to the understanding of how regional engagement activities emerged within the last 30 years from being unfamiliar to accepted to institutionalized.

University-Industry Collaborations: A question of luxury or Necessity?

Rhoda Ahoba-Sam - University of Lincoln

With the advent of globalization and the subsequent competitiveness of the world's economic terrain, regional development through University-Industry collaborations (UICs) has been accorded much importance. External academic engagement which lends well to the notion of collaborations of individual academics with non-academic partners, especially industry partners for the given study, is seen as one important way universities contribute to the development of their regions. Focusing on the networks of academics, evidence is collected through in-depth interviews with engaged academics fitting the profile of being externally engaged with industry. This study probes the question of how the personal networks of academics develop and how this influences the patterns of University-Industry links. While most interactions are facilitated out of an existing relationship, a good number of these networks are borne out of a necessity; a pressing need that urgently requires a particular competence. It appears that, while these modes of network initiation (i.e. out of an existing network or out of necessity) follow different mechanisms, they also result in different patterns of University-industry relationships and may affect the propensity of further collaboration in the future.

The integrated development strategy for the Koblenz region as a practical example of regional development. The diversity of actors and the associated target diversity from the perspective of the governance concept

Miriam Voigt - Universität Koblenz-Landau

Knowledge, education and innovation form an important basis for economic and social development processes in cities and regions. Current funding programmes at EU, federal and state level - such as the European framework programme Horizon 2020 or the nationwide funding initiative "Innovative Hochschule" - document the increasing relevance of a research-based idea, knowledge and technology transfer for economic and social development. Urban and regional development is therefore becoming increasingly knowledge-based in the competition between regions. For the first time, the Ministry of Science, Training and Culture (MWWK) has created a framework for the conception and realisation of an integrated, knowledge-based regional development by setting up four central units, which are responsible for the conception of four "Integrated Development Strategies" (IDS) in four Rhineland-Palatinate regions. The office for the northern Rhineland-Palatinate, located at the University Koblenz-Landau is responsible for the establishment of a cooperation network, which enables the development of common objectives - encompassing all social sub-areas. In this way, the scientific and economic capacity of the region is to be strengthened and made visible nationwide and internationally.

The long-term goal of the IDS is to organize and network the diverse actors of the region from science, business, politics and society in order to promote the development of common goals and the strengthening of the (economic) region. For this purpose, the governance concept represents a possible theoretical approach at the practical level in order to make the interdependencies of the various stakeholders in the complex multi-level system visible.

The planned presentation will first present the integrated development strategy developed for the region and the relevant actors. Accordingly, the theories of social network analysis and environmental neo-institutionalism are highlighted as a possible approach within the framework of the governance concept and initial conclusions are drawn for the empirical research field.

Session

Universities in the peripheries

Michela Lazzeroni - Pisa | **Andrea Piccaluga** - Scuola Sant' Anna

Universities have undertaken changes regarding their main functions and new missions linked to technological transfer and to their contribution to economic and social development. The current debate about their future swings between the need to invest in research and internationalization and a more intense orientation towards the so called third mission. Most studies in this field focus on advanced countries, for example analysing the impact of universities in global or middle cities. On the contrary, empirical analyses have overlooked universities' contribution to the development of peripheral areas. As a matter of fact, with regard to "global peripheries", universities can contribute to the reduction of the gap between advanced and emerging/poor countries (participation to international circuits of research, training of qualified people, etc.). At national level, they can become development actors in marginal areas and soften polarisation phenomena of creative and technological activities in metropolitan ones. Universities can also be drivers for urban regeneration projects and for the re-qualification of peripheral areas. This session therefore aims to contribute to the debate on the relationship between universities and peripheries, especially on the following issues: contribution of the university to economic growth and technological advancement in peripheral areas through knowledge transfer processes, relationships with firms and local institutions, creation of new technology clusters and start-ups, etc.; liaison role of universities with international actors and the link between the peripheral contexts and the central areas, concerning the circulation of knowledge, joint research projects, mobility of students and professors, etc.; civic engagement of universities in peripheral contexts, in terms of promotion of cultural initiatives, new partnerships with the local community, social inclusion projects, shared spaces for the local population, etc.; participation of universities in urban regeneration processes, renovation of degraded neighborhoods, local development projects in marginal contexts (incubators, new buildings..).

The contribution of universities to the reduction of inequalities and to the development of peripheries: insight from international case studies

Michela Lazzeroni - University of Pisa and Society for Geographical Studies | **Andrea Piccaluga** - Scuola Superiore Sant' Anna

Universities have been involved in profound changes that have led them to strengthen their international dimension, in terms of research and publications, and to reinforce the interaction with the regions where they are located. After the analysis of various forms of relationship between the university and the territorial context, this work aims to reflect on the role that the university can play in the world peripheries and on the potentialities and difficulties faced for the reduction of the gap between the advanced areas and the more marginal ones.

The analysis will focus on three fields in which universities can play a role: (i) in providing a "generative" contribution in terms of innovation, establishing collaborative relationships with existing firms, promoting new high-tech sectors, start-ups and creative spaces; (ii) in playing a "relational" role, through connections between codified global knowledge and more tacit, local one; (iii) in bringing a "social and cultural" contribution, through training, organising social and cultural events, involving local communities. After the theoretical background, four international case studies will be described. The first one is that of the new campus of the Universidad Politécnica Salesiana (UPS) in Guayaquil (Ecuador), where UPS revitalizes quality of life in a difficult neighborhood. The second is Ben Gurion University in Beer Sheva, in the peripheral region of Negev in Israel, where the university has been a pivotal element for the economic and social re-launch of the most depressed region of Israel. The third case is the University of Isfahan in Iran, with its attempt to insert new high-tech activities in a region characterised by traditional industries. The fourth case is the University of Calabria, in the Italian Southern city of Cosenza, where a relatively young university has been able to set up an incubator and generate new start-ups in a poorly industrialised area.

Polytechnic Institutes and Smart Specialization Strategies in peripheral regions

Mário Vale - University of Lisbon | **Luís Balula** - University of Lisbon | **Luís Carvalho** - Universidade do Porto | **José Simões** - University of Lisbon

High-road development strategies and policies focus technical change and innovation. Higher education institutions (IES) are a central player in the development of an innovation system. Traditionally, HEIs have a focus on teaching and training and research activities, evolving more recently into a triple-helix model (Etzkowitz and Leydesdorff, 2000).

As centers of new knowledge production, HEIs foster knowledge spillovers (Jaffe, 1989), a type of externality of knowledge that allows an increase in the pace of innovation of economic agents in the region. At the same time, university-led spin-offs generate significant local and regional economic benefits due to the reinforcement of clustering dynamics in innovative activities (Antonelli, 1999). These dynamics feed back institutional change in HEIs, progressively more focused on the creation of technology transfer

structures, support for academic entrepreneurship, and the creation of interdisciplinary training and research programs aligned with national and regional economic priorities. The weaknesses of many enterprises and institutions in less developed regions are a significant reason to highlight the relevance of HEIs to stimulate innovation, growth and job creation in these regions.

Although HEIs claim to be a prime actor in development process in peripheral region (Goddard et al, 2012), the benefits of investing in science and technology are felt slowly in these regions. In this communication, we discuss the contribution of polytechnic institutes to the achievement of Regional Innovation Smart Specialization Strategies (RIS3) in Portuguese less developed regions (EU convergence regions). The methodology focus the inter-relation of polytechnic institutions and the RIS3 in three central domains: training and education, research and development and technology transfer, based on the analysis of information from indirect sources (education degrees, publications, research projects) and direct ones (polytechnic institutes survey on technology transfer).

Finally, some suggestions are made for a more fruitful articulation between the polytechnics and the regional economy.

The Impact of Technology Transfer Office on Local Patenting Performance in Italy

Laura Ciucci - University of Corsica

The purpose of this research is to explore the role played by universities in explaining local innovation performance. This topic seems particularly relevant in the contemporary knowledge-based economy (Goldstein, 2009; Huggins and Kitagawa, 2009; Cowan and Zinovyeva, 2013). In fact, innovation policies, either at regional, national and European level, which have been at the top of decision-makers' agenda for many years now, emphasize increasingly the importance of the university-industry relationships and the valorization of academic research results (Lambert Review of University-Business Interaction, 2003; Law on innovation and research in France, 1999). As a direct consequence, in a large number of countries, beside the classical teaching and research activities, universities are now deputed to foster the so-called "Third Mission" (Perkmann et al., 2013; Etzkowitz, 2002).

With this framework in mind, this paper's aim is to investigate the extent to which universities can affect the local innovation ecosystem, especially through technological and knowledge transfer activities (patents, licenses, spinoffs, research and consulting contracts...) which have dramatically increased during the last decades (D'Este and Iammarino, 2010; Fisher et al. 2009).

In order to address this issue, an econometric analysis is proposed using a panel of Italian Provinces (NUTS 3) in the time span 2000-2014. Employing a set of covariates controlling for both university and province characteristics, we try to identify and gauge the positive impact of Technology Transfer Offices (TTOs) on local innovation performance. Italy represents an interesting case study since the spatial distribution of TTOs is quite homogeneous across the country. Moreover, we deal with a quasi-natural experiment, in which provinces with and without the presence of TTOs can be easily compared. The TTOs spillover effects are estimated by means of a panel difference-in-differences approach.

Higher education institutions and the flow of innovation: a comparative study on intellectual property between Japan and North America

Etsuko Tsutsumi - Hokkai School of Commerce | **Luis Edoard Pena-Gonzalez** - Nagaoka University of Technology

This topic explores the role of higher education institutions, namely upper secondary education institutions and universities, in the generation and flow of innovation into companies and joint-ventures. Specifically, the generation and flow of innovation is tracked and quantified through existing intellectual property data and database literature (e.g. number of patents, trademarks). The current topic explores the case of Japan and the North America region (i.e. United States and Mexico).

First, a focus on existing education upper secondary institutions and universities in Japan is explored in terms of their role in detonating innovation.

Second, the state of the art in current upper secondary education and their linkage to universities in the United States and Mexico is explored. Subsequently, an exploration of higher education institutions and their linkage to companies and joint-venture cooperation is explored in terms of their role in detonating innovation in Japan and the North America region. Finally, a comparison on the science and technology supporting agencies of the three countries is compared (i.e. Japan's MEXT, Ministry of Education, Culture, Sports, Science and Technology, Mexico's CONACYT and America's National Science Foundation) to summarize the overall findings.

Session

Effects of innovation for trade and regional development

Gideon Hartmann - University of Cologne

Diffusion of Innovation or Efficiency Hypothesis? Study on the influence factors of online shopping activities among residents in urban villages of Beijing

Wensheng Lin - Peking University

In recent decades, the "third wave" sweeping across the world, the Internet has become a new infrastructure in the information age. China has become the world's largest online retail market based on the huge user scale and relatively closed market environment, and online shopping has profoundly changed the consumption behavior of residents. From the perspective of space, geographers study the impact of spatial location on residents' online shopping activities, and put forward two theories: innovation diffusion and efficiency hypothesis. This study surveyed 5 typical urban villages with questionnaire and WeChat (the most popular social software in China), then used multivariate ordinal Logit regression model to verify that: in addition to the CD software which is highly standardized goods and sold through the internet, commercial accessibility of other goods did not significantly affect the online shopping frequency of residents in urban villages. This can be due to the developed informal economy and convenient shopping facilities in villages; the higher informatization level, educational level, income level and younger age will encourage residents in urban villages to shop online more frequently. The online shopping activities of the urban village residents support innovation diffusion hypothesis but not the efficiency hypothesis, at the same time demonstrate the existence of "price substitution" and "time substitution"; village residents can alleviate the social pressure through online shopping activities. The study will help us understand the role of spatial location in the online shopping activities of residents, enrich the related research of online shopping activities, and also be conducive to the commercial supporting planning in the process of urban village reconstruction.

Domestic and international buyer-supplier knowledge transfer and innovations in Southeast Asia

Yasushi Ueki - Institute of Developing Economies

This study empirically examines whether knowledge transfer through face-to-face interactions between buyers and suppliers promote innovations, using an original questionnaire survey data for 5 Southeast Asian countries (i.e., Indonesia, Lao PDR, Philippines, Thailand, and Vietnam) developed in 2014-2015.

The dataset contains variables for product and process innovations as the measurement of innovations. The variables for knowledge transfer include (1) training of the firms responded to the survey by their buyers, (2) training by the respondent firms of their suppliers, and (3) co-design of a new product with the buyers/suppliers. We regress a variable for innovation on the variable for knowledge transfer. The data can differentiate knowledge transfers (1) within and between countries, (2) from/to local firms and (3) from/to multinational corporations (MNCs). These differentiations enable to investigate whether knowledge are transferred domestically, internationally, from buyers, or from suppliers.

We hypothesize that production networks in developing countries tend to be buyer-driven and innovations in developing countries are more likely to be market-push, rather than technology push. Firms in developing countries, especially in Southeast Asia, introduce new technologies from abroad or from MNCs to upgrade their business activities. Thus it is expected that (1) technology transfer from buyers and (2) technology transfer from abroad or MNCs may have a positive relationship with innovation. If agglomerations have been developed in the surveyed countries, (3) domestic knowledge transfer from local firms or MNCs can have a positive relationship with innovation. Even so, (4) international knowledge transfer may be needed for achieving a higher level of innovations.

Based on these analyses, this study also explores factors promoting buyer-supplier knowledge transfer by examining whether Kaizen activities facilitate buyer-supplier knowledge transfer, on the assumption that firms can enter into interactive relationships with partner firms when they comply with buyers' quality requirement.

Knowledge flow, absorptive capacity and innovative activities: a micro-founded analysis

Martin Wrobel - Institute for Employment Research (IAB)

Innovations are crucial for the survival of firms and their growth which in turn influences the growth of regions. To be innovative, firms need a continuous inflow of knowledge with labour mobility as the single most important channel. Boschma et al. (2014) point out that the portfolio of competencies of newly hired employees as well as the geographical proximity of their former place of work to their current (new) one (in the sense of a cultural imprint) have a measurable effect on productivity growth of firms.

Miguelez and Moreno (2017) at the example of European regions show the type of knowledge that gets channelled into firms to be of utmost importance for the local innovation output (in terms of patents). In this study I analyse the effect of the in- and outflow of skills on the innovativeness of firms. I apply the concept of “skill-relatedness” (Neffke et al. 2017) to, first, determine the portfolio of skills within a firm as the result of labour mobility (inflows, outflows). Second, I examine the impact of changes in the skill balance of firms on their innovativeness. In particular I distinguish process and product innovation, and in the case of the latter between incremental and radical innovation. I use data that combine the Integrated Employment Biographies (IEB) of the IAB and the IAB Establishment Panel, containing information on 23,000 firms in Germany and their employees. Between 2007 and 2016, these firms report to have generated nearly 90,000 innovations. Literature: Boschma R., Eriksson R., Lindgren U. (2014): How does labour mobility affect the performance of plants? The importance of relatedness and geographical proximity. Miguelez E., Moreno R. (2017): Relatedness, external linkages and regional innovation in Europe. Neffke F., Otto A., Weyh A. (2017): Skill-relatedness matrices for Germany.

A comparative analysis to understand and explain public sector innovation and its association with economic development at the subnational level

Laura Sariego-Kluge - Newcastle University

In the academia and the policy world, innovation and technological change have a predominant role in competition; considered key mechanisms for increased economic growth rates leading to development in diverse a-spatial economic theories (e.g. Neoclassical, Endogenous growth theories, Schumpeterian and Neo-Schumpeterian models) and geography/context-aware theories (e.g. National Systems of Innovation, Territorial innovation models). Academic literature has focused on identifying the determinants for innovation rather than understanding its relationship with economic development (see Moulaert and Sekia (2003)). Although there have been attempts to include social innovation in territorial innovation models (F. Moulaert et al., 2005), in general the question about how innovation leads to economic development is assumed away, leaving largely unexplored possibilities for innovation by other sectors such as the public sector (defined as government and administration). Increasingly, after the 2009 global financial and economic crisis, governments around the world have aimed to introduce ‘innovation’ in their public administrations (OECD, 2010). Nevertheless, a closer inspection of the use of the term reveals that in the political world it is shaped as somewhat of an empty signifier (Perren and Sapsed, 2013) and is often considered a ‘magical’ concept (Pollitt and Hupe, 2011). This limitation can be overcome by adopting a ‘qualitative state’ approach (O’Neill, 1997) to inform an understanding of innovation as an instrument that is subject for contestation between diverse forces. The aim of this paper is to understand and explain public sector innovation in relation to subnational economic development via a comparative study between two opposing cases: South Australia and Western Australia. Analysing data collected from 56 interviewees from different scales and sectoral backgrounds, I studied the discourse and operation of PSI; the role of institutional arrangements (Davis and North, 1970); and of socio-economic factors and politics (Sorensen, 2017).

MIGRATION IN INTERNATIONAL NETWORKS

Session

Geographies of people flows: Places for migration, diaspora entrepreneurs, and transnational business

Maria Elo - Turku School of Economics | **Päivi Oinas** - University of Turku

Economic geography and international business have a long tradition of analysing location: environments with suitable conditions for the range of economic activities, such as investments, production, or market expansion. The dimension of people and migration flows has attracted less attention in these debates. Yet, people and their mobility are part of globalization and central in shaping economic landscapes, and very little is known on the selection of destinations of entrepreneurial investor- innovator migrants.

Ongoing debates on innovative ecosystems, entrepreneurial ecosystems, diasporic ecosystems, smart cities, mega cities, clusters, as well as research on the global competition for talent, investment and innovation capacity suggests an underlying people-dimension relevant for analysis. Further, in this complex era of de- and re-globalization there are numerous parallel – perhaps also intertwined – processes and flows taking place influenced by regimes, policies and economic centripetal forces. Understanding these flows more holistically, incorporating people, entrepreneurs, families, clans, diasporas, and other social formations is necessary for developing strategies and policies for promoting locations. The actors shaping a place are increasingly diverse. Their transnational networks may co-develop the location and various non-local agendas for business development start being involved in “local” economy. In addition, digital diasporas and their businesses together with the digitization processes emphasize the dynamism beyond brick and mortar layer of business.

In short, there is a need to discuss, analyze, and reflect the diversity of people flows and explanations of their location to enrich the current body of knowledge with new insights and dynamics explaining the complicated mechanisms. Migration theories do not examine these entrepreneurial dynamics, while sociology addresses other aspects and international entrepreneurship focuses more on the internationalization aspects, like most international business theories. Thus, we call for papers conceptualizing and contextualizing an attractive place for incoming flow of migrant talent and entrepreneurship.

Geographies of people flows: Places for migration, diaspora entrepreneurs, and transnational business I

High-skilled migration in peripheral regions

Manuela Lagrange - Friedrich-Schiller-Universität Jena | **Sebastian Henn** - University of Jena | **Susann Schäfer** - University of Jena

The current literature indicates that there is a strong relationship between high-skilled migration and regional development. Often, studies focus on migrants and their mobility pattern while the perspective of enterprises and of the impact of high-skilled migrants for the firm’s competitiveness and innovativeness are underrepresented. Especially the role of high-skilled migrants for companies in peripheral economic regions is not sufficiently examined. Previous research indicates that high-skilled migrants can enable knowledge transfers between geographically distant regions and offer transnational business networks that can be decisive for firm competitiveness and innovativeness. Given the lack of primary data on the relationship between high-skilled migration and companies, we have conducted a comprehensive survey among 850 companies in Thuringia and narrative interviews with 40 human resource departments in Thuringia, Germany, in order to examine the role of high-skilled migration and to identify barriers of high-skilled migrant employment in peripheral regions.

Female entrepreneurs and their family mobility sets the place?

Raushan Aman - University of International Business | **Maria Elo** - University of Turku

International migration is becoming more female as the proportion of women migrants increases, similarly, also expatriates who migrate for work assignments are nowadays often women. There is much extant research literature showing how women migrate for reasons other than career, e.g. studies, marriage or as expatriate spouses. Self-employment and entrepreneurship are central career-shaping decisions that involve identifying a suitable context. Despite the development of this new agency in women’s mobility and their higher participation in the global business and trade, there is yet very little research about female entrepreneurs and their decision making about the place where they venture and the related dynamics. What kind of determinants influence the decision making about starting a business and the selection of location for female entrepreneurial migrants, particularly, if they

have migrated, and what decision take place first, migration or venturing? This qualitative study examines and discusses the role of institutional environment, family, spouse and career as well as motivation, self-actualization and opportunity dynamics in setting the scene. It analyses 20 female entrepreneurs and their decision making determinants and process in different contexts. There is an interplay of the locus of the family and the business activities regardless of the type of business. The findings illustrate structural problems, location dependencies originating from the family context and an interesting a priori or post-establishment mobility that is not necessarily related to the location as the optimal place of doing business, contrary to expectations from economic geography.

Relevance of geographical psychology in location choice of recent graduates in the Netherlands

Inge Hooijen - ROA/Maastricht University & NEIMED | **Ineke Bijlsma** - ROA/Maastricht University | **Frank Cörvers** - ROA/Maastricht University, NEIMED, ReflecT/Tilburg University & CAOP | **Davey Poulissen** - ROA/Maastricht University

There is ample evidence from different research disciplines that locational factors such as employment opportunities or the availability of amenities and facilities are a powerful predictor of settlement behaviour. Recent research indicates that personality traits leave a geographical mark behind too. This study explores the spatial distribution of personality traits of recent graduates in the Netherlands and its correlates to a diverse set of regional characteristics. The results of the Getis-Ord G^* statistic reveal a distinct geographical clustering of personality traits between the North and South of the Netherlands. The results furthermore show robust associations between personality traits and several regional demographic, health, political and physical outcomes. Additionally, we run a discrete choice model to examine the role of personality traits and regional characteristics in choosing alternative residential locations. The findings indicate that economic factors predominate and the effect sizes of personality traits show to be rather small in explaining location choice.

Latin-American Cultural Pop-Ups: Placemaking in Seoul, South Korea

Cassandra Gutierrez - Seoul National University

This study looks at diverse manifestations of Latin American culture in the form of temporary pop-ups in the city of Seoul, South Korea. From the geographical perspective of placemaking, or the process of creating quality places that people care about and want to be in, this study analyses Latin-American cuisine, dance studios and clubs, Spanish language exchange gatherings, as well as Seoul based online community social media groups. Through direct observation and in depth interviews, this qualitative study aims to provide an answer to the two following questions: 1) How does the placemaking process, which involves an interrelation of actors (customers, organizers, social media platforms) function in these temporary Latino places set in South Korea? 2) Is there a correlation between the characteristics of the Latin pop-ups in Seoul and the Latino community? The results of this research show that the Latin American community in Seoul demonstrates that new forms of ethnic placemaking, as well as new placemaking actors, are coming into existence as residential proximity becomes less common and surroundings are constantly changed. Likewise, as ethnic placemaking literatures tend to focus on studying the larger sized minority groups within a given territory, making it seem as if the smaller minority groups are invisible in society and do not participate in placemaking activities throughout the city or have no sense of community, this study aims to argue the contrary. Ethnic and migrant minorities do actively take part in the placemaking process and are constantly seeking to be seen.

Keywords: Latin-American, Place-making, Pop-Up, Culture, South Korea, Seoul, Ethnic

Geographies of people flows: Places for migration, diaspora entrepreneurs, and transnational business II

Inter-regional inequality: The impact of labour mobility

Carolin Thol - London School of Economics

I examine the role of internal migration in regional inequality in the UK. I use a similar approach to the literature on international migration, where migrants are seen as either complements or substitutes for the native population. I propose a conceptual framework where high and low skilled workers are complements, and high skilled workers benefit from agglomeration economies. Therefore, high-skilled workers have incentives to agglomerate in one place, and low-skilled workers in the sending regions suffer negative shocks to their productivity if high-skilled are moving out, but see their incomes rise if other low-skilled are moving out. Further, I examine how international migration interacts with internal migration, and the impact this has on high- and low-skilled wages.

I estimate this model by studying flows of employees between travel-to-work areas in the UK, using data from the Annual Survey of Hours and Earnings (ASHE), which tracks a 1% sample of employees over their employed lives. The first step in the analysis is to mechanically decompose the contemporaneous effect migration has on average earnings in an area, i.e. whether and by how much migrants earnings are above or below the average of the sending and receiving areas. The next step brings in international migration, both as a factor that could affect location decision, as well as influencing earnings. New immigration or the fraction of foreign born has different effects on natives of different skills. While Borjas (2006) finds that immigrants displace natives, Peri (2007) finds that immigrants attract natives, especially the young and high-skilled. Lastly, I assess how migration, through its effect on the skill and occupational composition of local labour markets, affects medium-term prospects for productivity growth, innovation and entrepreneurship.

Should I stay or should I go? –Macau and Portuguese transnational diaspora

Maria Elo - Turku School of Economics | **Susana Costa e Silva** - Catholica Business School Porto | **Helena Martins** - Instituto Politécnico do Porto

Macau is a small territory located on the southeast coast of China that was leased to Portugal in 1557. In 1887, Macau became a Portuguese colony through a mutual agreement between the two countries. In 1999, the sovereignty of Macau was handed over from to the People's Republic of China (PRC). Since then, some local Portuguese living in the territory, along with Macanese, returned to Portugal and expectations were that Portuguese would keep returning, since from 2049 on, the “one country, two systems” will be over and the territory would be fully governed by Chinese authorities. However, the number of Portuguese in Macau increased again from 2006 on, especially during the 2008/2013 great financial crisis that had severe impact in Portugal. As a matter of fact, there is a notable transnational diaspora shifting between Macau and Portugal and spanning their businesses and lives across these locations. There are very few studies analysing diaspora mobility of historical tradition in such transition periods, and therefore, it is theoretically and practically interesting to examine which dynamics influence the life satisfaction of the transnational Portuguese diaspora that links them to a particular place. What makes them stay or leave Macau, and if they leave, do they repatriate in Portugal? There are historical pull factors in Macau due to family and heritage ties, but similar ties exist also in Portugal. While Macau is changing and as part of China it is experiencing an unforeseen economic development, Portugal has been suffering from the economic crises and troika measures. This uneven economic turn influences the job market and careers, but also business opportunities. This quantitative study funded by Institute of European Studies of Macau illustrate different types of dynamics worth to be unveiled. It contributes to global migration studies.

Reassessing New Immigrant Destinations in the U.S.

Flavia Maria Lake - University of California, Los Angeles

The geography of immigrant settlement within the United States has undergone a massive shift over the last 30 years. Research has focused on the geography of these new immigrant destinations, highlighting that an increasing number of migrants are locating in small-to-medium sized cities in particular. An array of qualitative case studies have documented both positive and negative reactions from incumbent residents in these locations, but that regardless, arriving immigrants seem to have little effect on native born workers' wages. Broad quantitative analysis of immigrants' economic outcomes across these regions has painted an optimistic view for the 1990s, and a cautionary view for the 2000s. However, a reassessment of the economic outcomes of immigrants across these decades, incorporating more recent data is needed. I review extant work and offer new evidence on economic outcomes in these new immigrant destinations, focusing on real wages. I also explore how changes in the composition of immigrants themselves are changing economic fortunes and the role of policy in mediating these.

Towards a politico-economic population geography: a Japanese intervention

Takashi Nakazawa - Meiji University

Since the 1980s, human geographies in general have faced postmodern and post-structuralist interventions that have urged comprehensive reflection on the ontological, epistemological, and methodological foundations of these fields. While population geography introduced qualitative methods in response to this, positivism and empiricism, which objectify populations through observation, whether qualitative or quantitative, still reside at the core of its rubric. It is a quite recent trend that a group of population geographers has initiated interrogations into the concept of population itself, and are on a quest for a politico-economic population geography that deal with how and what kinds of powers and ideologies underpin the concept. This paper aims to contribute to the trend by analyzing Japanese population policy, or geopolitics of population.

A series of population problems in Japan, such as low fertility rate and population aging, is tightly intertwined with the uneven distribution of populations. Tokyo has been receiving an excess of young migrants from non-metropolitan areas for the past two

decades. The outflow of young populations, especially female, has meant not only a net loss of population, but also a deficit of potential fertility and consequent future decline of population for local municipalities. Tokyo, the magnet for populations, suffers from extremely low fertility rate. Consequently, the concentration of young populations in Tokyo accelerates the total population decline of Japan. To tackle this problem, the government encourages young people to stay or migrate to non-metropolitan areas, where fertility rates are higher, and intends to reinvigorate local economies under the banner of “Regional Revitalization.” Notably, the government is prioritizing a geopolitical measure of population redistribution, rather than directly promoting childbirth, to raise the fertility rate. This paper problematizes that so-called “Regional Revitalization” does not aim at regional revitalization per se but utilizes regions as apparatuses for uplifting the national fertility rate.

Session

Labour, migration and brokers

Huey Shy Chau - University of Zurich/Yale-NUS College | **Jennifer Steiner** - University of Zurich

In many contexts around the world, the services of brokers play a decisive role in enabling labour migration. Even in spaces of relatively free movements, such as within Europe, labour brokers have been gaining importance. Our session examines this ‘middle space of labour migration’ (Lindquist, Xiang and Yeoh 2012).

The term broker here refers to a party that mediates between other parties, such as between employers and workers (ibid.). It encompasses various forms of brokers including temporary staffing agencies, agencies that hire migrant workers for specialised services (such as for live-in care), and informal brokers. Our session aims at exploring the role of labour brokering in relation to migration in a variety of contexts.

Papers may address (but are not limited to) the following questions:

How is labour migration brokered in different geographical and regulatory contexts?

In what ways do labour brokers shape working conditions of migrant workers?

How do labour brokers influence the organisation of migrant workers’ movements and migrant workers’ agency?

What is labour brokers’ role in shifting constellations of migration control?

In what ways do brokering services enable the emergence of specific transnational labour arrangements, migration channels and geographies?

What are the institutional and regulatory contexts in which labour migration brokers emerge?

In what ways do labour migration brokers shape (labour) markets?

How can a focus on labour migration brokers contribute to understanding current processes of social transformation?

Between Europeanization and Marketization: the role of brokering agencies for live-in migrant care work between Germany and Poland

Simone Leiber - University of Duisburg-Essen | **Verena Rossow** - University of Duisburg-Essen

The paper addresses the “middle space of labour migration” (Lindquist, Xiang and Yeoh 2012) by looking at live-in migrant care work in the European Single Market as a specific form of intra-EU labour mobility. In the collaborative research project EuroAgencyCare (carried out by the Universities of Duisburg-Essen and Warsaw), the two neighbouring countries Poland and Germany constitute ideal-typical cases of how an Eastern and a Western EU member state are intertwined in the course of ongoing processes of Europeanization as well as Marketization of care provision.

Since Polish EU accession, fostered by opportunity structures of the EU multilevel governance system (in particular the issue of posting of workers), Polish posting and German brokering companies have become important actors in the sector of live-in care work. Especially quantitative empirical evidence, is, however, still very rare in the field. In this paper, we will present first results of a quantitative online-survey among German brokering agencies, as well as from qualitative interviews with key stakeholders in the field. We seek to give a basic overview of the market structure for companies brokering live-in care work in Germany, and would like to discuss, how the German corporate landscape may be distinguished and classified. Some of these companies are also organised in political lobby organizations claiming to be frontrunners in quality improvement processes. We analyse their aims and political claims, showing first examples of a professionalization and standardisation process despite – and because of – a considerable degree of legal uncertainty.

Between human trafficking and labor migration: the role of pimps/brokers/traffickers in the European prostitution market

Noemi Katona - Humboldt University Berlin

Migration deeply structures the sex market in Europe. In addition to the migration routes from the Global South many Central-Eastern-European women work in Western European countries. The migration of these women is commonly facilitated by third parties; however, their activities are considered differently in the diverse law and policy making in Europe, and the boundaries between labor migration and trafficking are blurred (Kligman and Limoncelli 2005).

In my presentation I will look at the various roles of third parties in prostitution (Horning and Marcus 2017), and the impact of their activities in the European prostitution market. Based on an ethnographic research among Hungarian women in an outdoor prostitution area in Berlin, I will analyze the social network facilitating prostitution and the power dynamics in managing migration in the sex industry.

The third parties in my case study are often relatives, acquaintances, or partners of sex workers, but there are also more business-like relationships at the field site (Katona 2017). In my presentation I will critically engage with the conceptualization of trafficking and procurement (Molland 2011, 2012, Bernstein and Shih 2014). I will consider the role of these third parties as brokering in an informal and commonly illegal market. I will highlight how these informal relationships between women working in prostitution and brokers work, in which intimacy and economic transfers are constantly mingling (Zelizer 2005). I will especially focus on the limitation of women's agency due to highly unequal power relations with mainly male brokers. I will study the boundaries of illegality and the effects of different legislative models on the transnational prostitution market and the possibilities of state interventions.

The state as a broker in international labour migration: the case of Xinxian County, China

Francesca Fois - Aberystwyth University | Michael Woods

Rural areas in China have become a major source of migrant labour, both domestically with China and increasingly internationally. Recruitment as an international migrant worker is commonly facilitated by private brokers, either legally or illegally, however it is highly unusual for the State itself to perform the brokerage role. This paper examines one notable exception: the case of Xinxian county in Henan province, China. A historically poor region, Xinxian county has long experienced significant out-migration, with a detrimental impact on local development. In the 1990s, however, the local government decided to adopt a proactive stance towards labour migrant and established its own formal scheme to place local workers in fixed-term employment in Japan and South Korea. The rationale for the scheme is to regulate labour migration and to encourage migrants to return to the county and invest the savings and skills acquired working abroad in developing the local economy. Drawing on interviews with public officials, returned migrant workers and families of current migrants in Xinxian, this paper explores evidence of the scheme's success as a catalyst for local entrepreneurial activity, but also its unintended consequences, including accelerated urbanization in the county, and the onward migration of some returnee migrant workers to cities such as Guangzhou expressly in order to work for a Japanese company. Furthermore, it highlights a growing trend for migrants from Xinxian county to reject the official scheme in favour of working as illegal migrant labour in Europe or North America, with potentially higher earnings and no time restrictions, but also higher risks and higher initial outlays to brokers. This development, we suggest, indicates the limitations of state-brokered labour migration, yet we note that the local government has so far implicitly accepted the trend, so long as it also serves to support local investment and economic development.

The impacts of marriage migration on local society (based on the cases of Vietnamese women marrying Korean men in Dai Hop commune, Kien Thuy district, Hai Phong city)

Thi My Hang Bui - Department of Geography, Seoul National University

Vietnam – Korea transnational marriage via brokers has received increasing attention in recent years and their impacts have been showing significantly at the in-migration place - Korea. However “How is the change at the source of out-migration?”, the author doubts whether the influences are all positive which led to the massive migration for marriage. The paper will discuss the economic – social influences of international marriage on local society in Vietnam. The survey site is at Dai Hop commune, Kien Thuy district, Hai Phong, where is known as the most representative example for the wave of the international marriage in the North of Vietnam. The research was conducted in January 2016 with in-depth interviews with families whose daughters have got married to Korean men, also local people, commune leaders and the Vietnamese brides in Korea. International marriages have both positive and negative impacts. It improves people's lives back to the hometown, makes a change in the conception of the values of boys

and girls, also impacts on the domestic market, human resources and so on. From analyzing the international marriages and its impacts on the locality, the author proposes changes to improve the efficiency of the international marriage.

NEW APPROACHES IN ECONOMIC GEOGRAPHY, EXISTING APPROACHES REVISED I: INSTITUTIONS AND NETWORKS, PERCEPTIONS AND PRACTICES

Session

Economic geography, networks and institutional change

Johannes Glückler - Universität Heidelberg | **Emmanuel Lazega** - Institut d'Etudes Politiques de Paris

Ever since economic geographers proclaimed the 'institutional turn' (Amin, 1999; Jessop, 2001; Martin, 2000), institutions have been recognized as playing a pivotal role for the place-dependence of regional development and for the relative persistence of economic disparities across regions. As institutions, the stable patterns of social interaction, cannot simply be replicated to other places, a key challenge for institutional theory is to understand how institutions emerge, how they transform and how, potentially, they can be influenced to transform in ways that are conducive to inclusive and prosperous development. Despite recent advances in theories of institutionalization (e.g. institutional hysteresis, institutional entrepreneurship, institutional work, neo-structural theory of institutionalization), our knowledge is still limited about what makes institutions place-specific and about the mechanisms that drive institutional change. This session invites original contributions to the dynamics of institutional change and the relation between institutions, networks and organizations, as well as policies and regulations in affecting social and economic development. We welcome both theoretical and empirical papers. Exemplary issues, among many others, are: How do place-specific institutional contexts affect institutional transformation? What are the relational infrastructures and networks that affect processes of institutionalization? How can motivated actors purposively initiate and steer institutional change? How do existing regulations and policies interact with institutions?

Please send your abstracts to Johannes Glückler (glueckler@uni-heidelberg.de) and Emmanuel Lazega (emmanuel.lazega@sciencespo.fr)

Economic geography, networks and institutional change I

Institutional change and the development of lagging regions in Europe

Andrés Rodríguez-Pose - London School of Economics | **Tobias Ketterer** - European Commission

In this paper we assess whether both the levels and the degree of change in government quality influence regional economic performance in the whole of European Union and, in particular, in its lagging regions. The analysis relies Charron et al.'s (2011; 2014a) regional quality of government dataset in conjunction with indicators referring to endowments and investments in accessibility, education and training, and innovation for a total of 249 NUTS2 regions in the EU for the period between 1999 and 2013. The aim is to discriminate between the role played by traditional areas in development policy intervention, such as infrastructure, human capital and innovation, from that of different institutional aspects, such as corruption, the rule of law, government effectiveness, and government accountability. Particular attention is paid to changes in all these factors, as well as to the importance of quality of government for development of lagging regions of Europe. The results of the analysis can be summarised in five basic points: a) institutions matter; b) improvements in quality of government are a powerful driver of development; c) one-size-fits-all policies for lagging regions are not the solution; d) government quality improvements are essential for low growth regions; and e) in low income regions basic endowment shortages are still the main barrier to development. In particular, the low growth regions of Southern Europe stand to benefit the most from improvements in government quality, while in low income regions of central and eastern Europe, investments in the traditional drivers of growth are still the main factors behind successful economic trajectories. This does not mean, however, that government quality needs to be overlooked, as the problems affecting low growth regions may still emerge in a part of Europe still characterised by a subpar quality of government, once the basic endowment deficits are reduced.

The impact of institutional hysteresis on entrepreneurship in peripheral places: the role of perceptions of place and opportunity

Cristian Gherhes - University of Sheffield | **Chay Brooks** - University of Sheffield | **Tim Vorley** - University of Sheffield

Previous research has highlighted the importance of 'place' and institutional context in shaping economic development (Barca et al., 2012; Rodríguez-Pose, 2013; Williams and Vorley, 2015). At the same time, the role of entrepreneurship as an engine of economic development is widely acknowledged, yet there is significant heterogeneity in the nature and level of entrepreneurial activity across places (Fritsch and Mueller, 2007; Fotopoulos and Storey, 2017), with previous research emphasising the key role of institutions in shaping its outcomes (Acs et al., 2008; Huggins and Thompson, 2015; Obschonka et al., 2015). Moreover, recent institutional studies highlight the impact of institutional hysteresis on entrepreneurship (Martin, 2012; Bathelt and Glückler, 2014; Tubadji et al., 2016). However, the understanding of how institutions develop in relation to place remains limited.

This paper builds on Gherhes et al. (2017) who highlight perceptions of place and opportunity as influencing the impact of institutional hysteresis on entrepreneurship in peripheral post-industrial places (PIIPs). It examines more in-depth the role of perceptions of place and opportunity to address the question of how perceptions of place and opportunity impact on local institutions and entrepreneurship in peripheral post-industrial places. Focusing on a post-industrial town situated at the periphery of a core city region, the study draws on 50 in-depth interviews with key stakeholder and local entrepreneurs. The paper finds that perceptions of place and opportunity compound the impact of institutional hysteresis on entrepreneurship at the local level. A key contribution of the paper is in highlighting that the understanding of place and peripherality needs to transcend the spatial geographical dimension, in that peripherality can be self-imposed and culturally specific. The paper concludes with implications for entrepreneurship in PIIPs and with recommendations for policy.

Socio-economic regulation in Tunisia and Jordan: an institutional framework for economic reform

Maximilian Benner - Heidelberg University

Since 2010/2011, calls for political and economic reform in core Arab economies have attracted international attention. While the Tunisian revolution has created a democratic political system, the political framework in Jordan has evolved in a more incremental way. Despite the different political trajectories, both countries share several structural differences. Notably, both countries are resource-poor, small open economies on their way to becoming knowledge-based, export-driven industrializers but are marked by high (youth) unemployment, a severe skills mismatch on the labor market, and the legacy of a state-driven growth model. While calls for economic reform by external agents such as international donors tend to focus on piecemeal solutions, a deeper institutional perspective is needed to understand the consistency of previous arrangements of socio-economic regulation in both countries. As in other core Arab economies, the political upheavals in both countries imply a collapse of long-standing institutional consistencies and call for comprehensive, institution-sensitive reform agendas.

Structure-agency interactions and institutional changes: the role of institutional intermediaries

Huiwen Gong - Christian-Albrechts-Universität zu Kiel

Recently, some economic geographers have come up with the idea that one needs to take the structure-agency debate more seriously when researching institutions and institutional changes (Bathelt and Glückler, 2014; Grillitsch and Sotarauta, 2018). However, the issue of how agency actually changes the structure and what kind of platforms and tools that are needed in order to bring about certain structural changes have not become clear yet. Informed by the Regulator-Intermediary-Target (RIT) literature, in which institutional change is viewed as a three-party relationship among regulators (R), regulatory intermediaries (I) and the targets of its regulation (T) (Abbott et al., 2017), this paper aims to bring new insights into institutional studies in economic geography. Specifically, it does so by stressing the role of institutional intermediaries—industrial associations, lobby organizations, cluster support agencies, etc., for the development of a local creative industry—the gaming industry in Hamburg, Germany. Two issues make such institutional intermediaries particularly interesting and relevant for institutional studies: first, the multi-scalar nature of these institutional intermediaries links agency to structural change at different spatial levels. Secondly, the evolutionary and dynamic nature of these intermediaries shows that institutions at different levels, while in general coherent in supporting the development of the local gaming industry, differ concerning their interests and priorities in different periods. The paper also explores the way how such intermediaries enter the institutional systems (e.g., public initiative, private initiative, or public-private partnership), and the role they play throughout policy cycles (implementing, monitoring, creating dialogues, providing feedbacks, making changes, etc.).

Economic geography, networks and institutional change II

Institutional Change and City Economic Evolution: Comparing the Pathways of Five British Cities

Emil Evenhuis - University of Cambridge and University of Southampton | **David Bailey** - Aston University | **Ben Gardiner** - University of Cambridge | **Andy Pike** - Newcastle University | **Ron Martin** - University of Cambridge | **Peter Sunley** - University of Southampton | **Pete Tyler** - University of Cambridge

This paper aims to further advance an evolutionary approach to explaining the role of institutions in urban and regional economic development. It is based on a differentiated treatment of various types of institutions, and takes account of the structures and processes at various scales, and the role of the agency of public, private and civic actors. We draw on a comparative analysis of five case studies of cities in Britain (Birmingham, Bristol, Glasgow, Middlesbrough and Peterborough) undertaken as part of a collaborative project on “Structural Transformation, Adaptability and City Economic Evolutions” (see www.cityevolutions.org.uk). We detail our evolutionary approach by highlighting three analytical techniques utilised to examine the conjunction of the development of (formal) institutional arrangements and economic evolution over time. These techniques are: ‘periodisation’ to identify and characterise episodes and moments of stability and change; ‘process tracing’ to track the unfolding of chains of events and infer causal relations and mechanisms; and, ‘sequence analysis’ to capture and interpret strings of events in different processes within and across the cases. We then present the main findings from the case studies, outlining: (1) how the evolution and role of institutional arrangements for economic development in British cities can be characterised and understood; (2) how the particular economic challenges faced by different cities influenced the development of their governance institutions; and, (3) how the national policy context (and shifts therein) impacted on institutional change. We conclude with several lessons to take the approach forward.

Institutional change in critical situations: Family firm succession in the Basque Country

Johannes Glückler - Heidelberg University | **Regina Lenz** - Heidelberg University

A central question in institutional theory concerns the change processes of otherwise stable institutions. Extant research has relied on post-hoc explanations, which tend to focus on institutional effects rather than their actual change. Hence, we still know little about the very processes of institutional change as they happen on the micro-level and in real time. In an attempt to address this processuality, we turn to the analysis of critical situations, in which accelerated change is more likely than in stable situations. Succession in regionally embedded family firms offers one such situation. While extant succession studies have focused either on the time prior to succession or on intra-organizational change, we adopt an institutional perspective to analyze deviations, repairs and actual changes in institutions especially at the level of inter-organizational relations. Our case study of family firm succession in the Spanish Basque country uses a qualitative panel approach and is grounded on 78 interviews over three years with predecessors and successors of family firms as well as succession experts. We identify institutional contradictions on several inter-organizational levels, such as inter-firm cooperation, the use of external assistance, and the use of written or oral contracts, and find that successors employ different, and seemingly contradicting mechanisms, sometimes simultaneously, for aligning their practices with the varied expectations and perceptions of legitimacy of their individual partner firms

Institutional change in embedded activities: an endogenous development approach

Juan Carlos Rodríguez-Cohard - University of Jaen | **Antonio Vázquez-Barquero** - Autonomous University of Madrid

For years the rules in the mainstream economic analysis have been put aside. However, from recognition of North’s work formal and informal rules are playing an important role in the interpretation of growth and structural change processes. Endogenous Development is a useful approach in understanding how territories evolve within a dynamic process of change, where enterprise networks, knowledge and innovation mechanisms, infrastructure and localities systems, interact in a territorial institutional framework where agreements are achieved, and opportunities and threats emerge for different social groups and places. As a consequence, previous situations of status quo could be altered, to find new propositions of local dynamic equilibrium. Territorial development is not a determinist process, but it is shaped within local responses to strategic external changes and the territorial interpretation of opportunities, so as to take advantage of traditional knowledge accumulated in local society. The response to global challenge is associated with the importance of new actors, tools and agreements in the territorial governance dynamics.

On the one hand, we are witnessing the emergence of “territorial entrepreneurs” within multinational subsidiaries embedded in the endogenous process of international competition, where a place-based approach is used for companies to be strategic in a framework of internal competence within multinational corporations.

On the other hand, informal institutions play an important role in traditional activities, ruling local routines and offsetting standardization in global production and consumption activities. Territories are playing “reconnection” strategies to attract the interest of consumers to local culture and the behavior of specific institutions that were settled within the local context.

In this environment of evolution, what would make local actors change? What is the role of local actors in promoting strategic agreements? Are the local processes of territorial strategic planning useful?

Institutional Work of Key Persons in Chinese Mergers and Acquisitions in Germany - Intercultural Bridging and Networks

Miriam Richter-Tokar - University of Greifswald | **Daniel Schiller** - University of Greifswald

While early research on mergers and acquisitions from an institutional perspective has focused on static concepts of institutions such as the effects of institutional distances within multinational enterprises (MNEs), recent studies have highlighted the importance of institutional change. Economic geography has made a valuable contribution by drawing attention to strategic localization of multinationals and its effect on regional development. Institutions in this context play an important role, because they can influence the degree of embeddedness of an MNE within its host market. Chinese investments specifically have been an intriguing subject, because they encompass various striking elements such as their perceived lack of experience in internationalisation. Despite initial failings, recent mergers and acquisitions between Chinese and German firms have been largely successful, both in terms of corporate profits as well as regional economic development. This implies that Chinese-German ventures have been successful in overcoming initial institutional distances. While common in other research fields, the individualistic perspective of institutional work has received little regard concerning emerging multinationals. As such, this paper proposes key persons – people with Chinese-German experiences within the firms – as important actors, who engage in institutional work and are thereby influential in bridging institutional distances. Using qualitative interviews with key players and executives of Chinese-German subsidiaries as well as intermediaries, we first assess what distinguishes key persons from other personnel of the involved firms. Subsequently, the question is raised which characteristics like their cultural-historic background or involvement in social networks principally enable these persons to become engaged in institutional work. The findings of our paper contribute to a better understanding of the variables of successful institutional work in the context of international merges as well as interpersonal regional networks of transnational individuals.

Economic geography, networks and institutional change III

Regional Innovation Transitions: the case of Los Angeles and San Francisco

Michael Storper - London School of Economics

As an economy undergoes structural change, the focus of innovation changes to different technologies and different industries that are both the producers of the core technologies and the focus of their principal applications. The geography of such innovation is uneven over time and over places, leading to a tendency for incomes to diverge between innovative places and less innovative places, and to selectivity or turbulence in the pattern of employment and income change from one period to the next. This is the problem of the “innovation transitions” of regional economies. Theory and evidence has a hard time explaining why certain places succeed better than others in such transitions. This paper carries out a detailed comparative study of two regions – Greater Los Angeles and the San Francisco Bay Area – from 1970 forward, exploring why one region was so much more successful in its innovation transition than the other. It argues that the staples of urban and regional economics and economic geography offer only partial explanations, and that the divergent outcomes observed are better accounted for by different institutional factors that I collectively label the “relational infrastructure” of the two regions. This infrastructure is explored in considerable empirical and historical detail in the comparison. JEL: 018, 031, R23, R34, R12, R11.

A neo-structural approach to networks and institutionalization: The Case of the European Unified Patent Court

Emmanuel Lazega - Institut d'Etudes Politiques de Paris & IUF

Neo-structural sociology uses social and organizational network analyses, combined with other methodologies, to better understand how structure and culture shape collective agency. One of the main social processes examined by this approach has been institutional change. This presentation does so by focusing on the importance of relational infrastructures and legal cultures in accounting for the construction of a specific public/private transnational institution of joint regulation of markets: the emergence of the European Unified Patent Court. This public/private judicial institution was created to harmonize contemporary diverging national interpretations of the European patent into a single European IP regime. Specific structural and cultural characteristics of institutional entrepreneurs who punch above their weight in institutionalization processes are brought to light by this case. Notions of high status inconsistencies, collegial oligarchies, multi-status oligarchs, conflicts of interests, legal culture and rhetorics are used to discuss this process of institutionalization. In particular, this case suggests that improving understanding of dynamics of multilevel networks should be crucial to track contemporary intense transnational institutional changes in Europe.

Understanding the institutional dimension of new path development: Towards self-driving cars in West Sweden

Johan Mörner - Lund University | **Johan Mörner** - Lund University

This paper examines the institutional dimension of new regional industrial path development. It contributes to the path development debate in economic geography by conceptually and empirically addressing the influence of multi-scalar institutional conditions and the role institutional agency in new path development.

The paper draws on insights from institutional theory to develop a conceptual framework for analysing 1) the influence of pluralistic institutional environments, understood as a combination of reinforcing, complementary or contradicting institutions defined at different spatial scales and across industrial domains, and 2) activities targeting the creation, maintenance and disruption of institutions, but also activities through which actors navigate institutional frameworks and selectively couple elements of existing institutions.

Focusing on the development of self-driving cars in the traditional automotive region of West Sweden, the empirical case illustrates how actors in the new path are operating in a complex institutional environment consisting of regulations, visions and beliefs, and societal and industrial norms and conventions, defined at the regional, national and global levels. These are enabling some path development activities whilst constraining others. Actors are engaging in institutional work activities, such as advocacy, mimicry, valorising, and activities intended to undermine core assumptions of existing institutions, but also actively work to shape the boundaries of their institutional environment, by coupling with institutions that are in line with their broader strategies or adapting their strategies to institutions that are perceived as beneficial.

Consequently, the results point at a two-way relationship between structural preconditions and agency in terms of the institutional dimension of new path development: on the one hand the role institutional agency can play in shaping institutional configurations and arrangements to support emerging paths, and on the other hand the ways through which actors are influenced by, or identify and strategically align to rationales favoured by, existing institutions.

Organizational and institutional change in regional transition paths to sustainability

Simone Strambach - Philipps-University Marburg | **Gesa Pfitsch** - Philipps-University Marburg

Confronted with complex and pressing environmental and social problems such as climate change or increasing social fragmentation, regions are facing the challenge to develop in a more sustainable direction. This requires deep structural changes in multiple socio-technical regimes (e.g., energy supply, housing), to reach long-term transformations. Scholars from the 'geography of sustainability transitions' have pointed out the neglected influence of place-specific institutional settings on differences in transition dynamics.

By conceptualizing regional sustainability transitions as regional development paths, we intend to highlight their place-specific and path-dependent character. However, the usual understanding of regional development paths with a focus on changes in technological and industrial trajectories has to be broadened. Regional transitions to sustainability require multiple social and organizational innovations to drive institutional changes towards sustainable social practices.

There is little knowledge about the emergence, development and stabilization of regional transition paths to sustainability. It is largely an open question how actors on the micro-level impact on organizational and institutional change, leading towards sustainability on the macro-level of the regional path. The impacts of intended and unintended actions are only visible later in time. Making these complex institutional trajectories visible, is a major methodological challenge.

We develop the approach of a transition topology to capture the spatial shaping of a transition path across different institutional settings over time in a multi-scalar way. Theoretically our methodological approach is based on neo-institutional organization theory, evolutionary economic geography and sustainability transition research. The potential of the transition topology is illustrated using the example of the Augsburg region. The results underline that the emergence of new organizational forms help to overcome institutional inertia and foster the transversal combination of heterogeneous knowledge bases. They show that regional transitions are not the result of disruptive institutional change but instead of cumulated gradual changes within historically evolved structures

Economic geography, networks and institutional change IV

Fragile Governance and Local Economic Development: Theory and Evidence from Latin American Peripheral Regions

Sergio Montero - Universidad de los Andes | **Karen Chapple** - University of California

Much of our understanding of local economic development is based on large urban agglomerations as nodes of innovation and competitive advantage that connect territories to global value chains. This framework not only over-represents the urban and regional dynamics of cities of the global North, it also fails to characterize well the challenges of smaller cities and peripheral regions in both the North and the South, which are following different development trajectories and modes of insertion to the global economy while still subject to the forces of globalization, financialization and planetary urbanization that affect large urban agglomerations. Drawing from debates around governance and peripheries in the Anglophone and Spanish-speaking worlds, we propose an alternative way of looking at local economic development based on the idea of fragile governance and a set of three related variables: 1) associations and networks; 2) learning processes; and 3) leadership and conflict management. We explore these variables in six Latin American regions: three sparsely populated rural regions (Arauco, Chile; Lurín, Peru; and Isla de Mompo; Colombia) and three intermediate cities (Córdoba, Argentina; Linhares, Brazil; and Quetzaltenango, Guatemala). Together, they illustrate not only the challenges and fragility of governance in small and intermediate cities in Latin America, but also the variety of governance approaches these cities and regions are innovating and implementing to achieve a more resilient and territorial vision of local economic development.

Contrasting narratives behind the bulldozers. A network discourse analysis of environmental organizations, state actors and agribusiness in the context of deforestation

Elena Zepharovich - University of Bern, Centre for Development and Environment | **Graziano Ceddia** - University of Bern | **Dimitris Christopoulos** - University of Bern | **Carla Inguaggiato** - University of Bern

In Northern Argentina policy arena, there are contrasting visions on the issue of deforestation, which is occurring at an extremely high rate, six times faster than in the Amazon.

The main driver of deforestation is agricultural expansion for the production of commodities, traded on the international markets, which causes displacement of small-scale cattle rangers and aboriginal people.

On the one hand, there are provincial and federal laws that aim at protecting the forest, aboriginal rights over land and territory and support family farming. On the other hand, Argentina National Plan for Agriculture is pushing for agricultural expansion. The provincial government often finds itself in a conflictual position between environmental protection, small farmers and aboriginal people's rights versus economic growth.

We pursue two objectives. First, using network discourse analysis, we explore how policy actors differ in their stances over the provincial land zoning issues. We aim at identifying the possible points of intersection and frictions among the main players namely agri-businesses, government, civil society organisations, small-scale farmers and aborigines by analysing their narratives. Second, we discuss how central actors' agreement on key stances on land zoning relates to collective action and policy events.

We use two complementary data sources, semi-structured interviews to key informants and national and provincial level media analysis. We adopt a three-step approach to the analysis: first, we code the interviews transcripts and use a coding scheme to identify the key concepts connected to deforestation; second, we connect them to the stakeholders' groups; third, we explore the topology of the resulting two-mode network connecting concepts and. We then proceed in the same way with media analysis by building a two-mode news source-concept network. Finally, we reflect on how the different network topologies affect the emergence of collective action to slow down deforestation in the region.

Clusters' social dynamic and sustainability: Evidence from a Chilean copper district

Francisco Castaneda - Universidad de Santiago de Chile | **German Astorga** - Universidad de Santiago de Chile | **Jean Baptiste Carpentier** - Universidad de Santiago de Chile | **Alberto Mayol** - Universidad de Santiago de Chile

Literature regarding clusters and industrial district has grown in importance in the last decade. Scholars have pointed out the fact that clustering may occur by proximity of actors, which leads to a major social density and a culture of innovation that permits increasing returns to scale.

Against this background, we have conducted a research in Calama – the copper capital of Chile – to discuss the “collective efficiency” generally mentioned to explain clusters to emerge. We have done for it triangulation of primary and secondary information, along with a set of qualitative and quantitative methodology.

Firstly, we carried out an economic analysis through the input-output matrix, specifically with the Rasmussen aggregate indexes for copper mining. The preliminary results show a sector with very few production linkages with the rest of the economic sectors. In line with the above, the copper cluster of Calama is fragmented in both social and productive point of view. The productive matrix is dual with very few production linkages and is quasi entirely dependent to copper creation of value, and very vulnerable to international shocks.

In the same strand, we found that the social system of Calama is disintegrated. It presents low participation rates in social organizations and political institutions, high inequalities in income distribution between mining and non-mining sectors, spatial segregation that divides the city between mining and non-mining workers and a trivialization of deviant behavior (suicide, prostitution, drugs, etc.).

It has permitted us to question that clustering can occur by the simple fact that a territory counts with abundance of some resource valued as a commodity and in this case, in the international markets. Therefore, the agglomeration of people and firms could take place without a strong social density neither a culture of innovation.

Identifying shrinking cities in China from urban network perspective

Kang Wu - Capital University of Economics and Business

Similar with the western countries, China's urbanization is building upon a “growth-oriented model”. In this sense, scholars and policy makers are focusing more on urban growth and spatial expansion. Recently, China has entered into a period of “new normal” and faced the supply side reform. Urban shrinkage in terms of population has also emerged in some Chinese cities and regions. Especially, some mining industry cities in Northeast China have been losing their population and are also associating with a weak GDP/local fiscal growth rate. As one of the major challenges that China may confront in the new-type urbanization, urban shrinkage should be regarded as an important issue and concerned by urban economic geographers. In western contexts, a shrinking city is defined as a densely populated urban area with a minimum population of 10,000 residents that has faced population losses in large parts for more than two years and is undergoing economic transformations with some symptoms of a structural crisis. In this paper, we investigate the dynamics of China urban system from an alternative way. Based on the dimension of both city size and urban networks, we identify the China cities into four trajectories: primate city, Offline metropolis, wired town and losing cities. Furthermore, we explore the diversity of China shrinking cities from the network perspective.

Session

Perceptions, Prejudices and Partitions: Conceptual and Methodological Implications of Corporate Isolation and Exclusion

Martina Fuchs - University of Cologne | **Sebastian Henn** - Friedrich Schiller University Jena

Economic disparities that tend to characterize our ‘unequal world’ (the motto of this year's GCEG) are continuously being produced and reproduced by individual agents embedded in diverse social networks. Even though the globalized economy relies on intense exchanges across cultural boundaries, empirical evidence suggests that most economic agents, influenced by their cultural socializations, political indoctrinations and medial representations, intentionally or unintentionally delimit themselves, their networks resp. the firms they work with from (alleged) others (e. g. foreign investors) and act accordingly. As a result, economic nationalisms have evolved at different scales that affect national and regional economic development in a yet unprecedented way (e.g. by scaring away foreign investors). To go even further, current political developments in various countries foreshadow that xenophobia and related populist policies must be considered an increasing threat to firms, value chains and entire nation states.

Though economic geography and related disciplines have referred to individual and corporate practices of self-differentiation with different concepts, such as ‘othering’, the underlying conceptual debate has remained quite vague up to now. This session therefore

aims to contribute to a more nuanced understanding of the link between perceptions and related actions by reflecting upon trends of corporate isolation and exclusion as well as of discussing methodological challenges related to assessing such perceptions, prejudices and partitions.

We invite papers from economic geography and related disciplines like ethnology, political sciences, sociology that are related (but are not limited) to

- a. theoretical-conceptual problems related to othering etc. in international economic relations and/or between firms and their surrounding regions,
 - b. methodological implications of researching perceptions and related actions of economic agents,
 - c. patterns of perceptions, 'intercultural' learning, policy recommendations and implications for research about MNCs or M&As and
 - d. implications for research about local contexts, e.g. institutional contexts and actor networks.
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Media slant against foreign owners: Downsizing

Matthias Heinz - University of Cologne | **Guido Friebel** - Johann Wolfgang Goethe-Universität Frankfurt am Main

Using a unique data set from nationally distributed quality newspapers in Germany, we find evidence for both quantitative and qualitative media slant against foreign firms. A downsizing foreign firm receives almost twice as much attention as a domestic firm, and the tone of media reports is more negative. Media slant is a measure for economic xenophobia directed against foreign owners, which constitutes an obstacle to foreign direct investment.

In Wrong Anticipation - Miscalibrated Beliefs between Germans, Israelis, and Palestinians

Heike Hennig-Schmidt - Bonn University | **Sebastian J. Goerg** - Florida State University | **Gari Walkowitz** - Technical University of Munich | **Eyal Winter** - The Hebrew University of Jerusalem

The reconcilability of actions and beliefs in inter-country relationships, either in business or politics, is of vital importance as incorrect beliefs on foreigners' behavior can have serious implications. We study a typical inter-country interaction by means of a controlled laboratory investment game experiment in Germany, Israel and Palestine involving 400 student participants in total. An investor has to take a risky decision in a foreign country that involves transferring money to an investee/allocator. We found a notable constellation of calibrated and un-calibrated beliefs. Within each country, transfer standards exist, which investees correctly anticipate within their country. However, across countries these standards differ. By attributing the standard of their own environment to the other countries investees are remarkably bad in predicting foreign investors' behavior. The tendency to ignore this potential difference can be a source of misinterpreting motives in cross-country interaction. Foreigners might perceive behavior as unfavorable or favorable differentiation, even though—unknown to them—investors actually treat fellow-country people and foreigners alike.

Distance and Othering: Opportunities, Challenges and Steps towards a Research Agenda

Martina, Fuchs - University of Cologne | **Sebastian Henn** - University of Jena

Even though the global economy relies on intense exchanges that stretch across cultural boundaries, economic agents, influenced by individual socio-cultural socializations and political paradigms, on purpose or unintentionally typically delimit themselves from 'the other' and act accordingly. This often causes problems, e.g. in the decision-making process of (potential) foreign investors, during the early post-merger stage, or in case they face an increasingly unfriendly business environment. International business studies have addressed such socio-cultural frictions in international investments for many years. In addition, economic geographers have recently started to study how different actors within companies construe socio-cultural distances and, while doing so, practice othering. This paper aims to contribute to a more nuanced understanding of the relation between distance and othering. In particular, it critically discusses the performance of distance and othering as conceptual tools for a better analysis of spatial dynamics and local contexts, and, based upon this, suggests a research agenda for a better analyse of failures, rejections and withdrawals of international investments.

Session

Practice, Space and the Economy (Revisited)

Andrew Jones - City, University of London | **James Murphy** - Clark University

Since the emergence of debates about practice and economic geography in the 2000s, there has been a significant growth and diversification of interest in 'practice-oriented' approaches to economic geography. Earlier work on economic practices largely adopted a firm-oriented lens for both theorising and researching practice and its spatiality in the global economy. And whilst considerable parallels were drawn with the so-called 'relational turn' in economic geography, clear differences between relational and practice-oriented work have also become apparent. Recent economic geographical work on practice has thus overlapped with an increasingly broad set of schools of thought including for example, work within geographies of finance, geographical political economy, environmental economic geography and urban and regional development. It therefore seems timely to revisit the nature of practice-oriented research across the sub-discipline, and assess the nature and evolution of this broad approach. This sessions seeks therefore to attract a wide range of contributions in order to compare and contrast different contributions to work on economic practices within economic geography and, perhaps ambitiously, create a forum at this conference to both take stock of where such work has led the sub-discipline as well as engage with the challenges and limitations that have become evident. The organisers would welcome papers from any area of economic geography that might make a contribution to this debate about the practice-oriented shift and these might include around (but are not limited to) research that relates to practice:

- Firm management or operation
 - GPNs
 - Urban and regional development
 - Innovation
 - Institutions and governance
 - Financial geographies and financialization
 - Markets and marketization
 - Sustainability transitions
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Practice, Space and the Economy (Revisited) I

Practice, Space and the Economy (Revisited)

James Murphy - Clark University | **Andrew Jones** - University of London

Since the emergence of debates about practice and economic geography in the 2000s, there has been a significant growth and diversification of interest in 'practice-oriented' approaches to economic geography. Earlier work on economic practices largely adopted a firm-oriented lens for both theorising and researching practice and its spatiality in the global economy. And whilst considerable parallels were drawn with the so-called 'relational turn' in economic geography, clear differences between relational and practice-oriented work have also become apparent. Recent economic geographical work on practice has thus overlapped with an increasingly broad set of schools of thought including for example, work within geographies of finance, geographical political economy, environmental economic geography and urban and regional development. It therefore seems timely to revisit the nature of practice-oriented research across the sub-discipline, and assess the nature and evolution of this broad approach. This paper opens the sessions on the practice-shift in economic geography by taking stock of where such work has led the sub-discipline and engaging with the challenges and limitations that have become evident.

Unboxing routines with theories of practice

Fabian Faller - Kiel University

The key argument of this paper is that substituting the concept of organizational routines with social practices will bring a deeper understanding of the socio-spatial dimension of economic change.

Routines are a core category of various paradigms in economic geography, e.g. in evolutionary or relational approaches. It is surprising, though, that the understanding of routines' formation and change have neither been properly conceptualized nor empirically set in focus, even though processes of change are a key concern. So, what is a routine, what is it composed of, and how does it change? How can we capture actors' roles in routine-related processes of change?

In this paper, I discuss how particularly Theodore Schatzki's theory of practice can contribute to answering these questions. He conceptualises the social world as composed of practices (human activity) and arrangements (people, organisms, artefacts, and things). "Practices effect, use, give meaning to, and are inseparable from arrangements while arrangements channel, prefigure,

facilitate, and are essential to practices” (Schatzki 2015, 1). This hanging togetherness is what he calls ‘practice-arrangement-bundles’.

Unboxing routines as practice-arrangement-bundles appears to be fruitful for economic geography, as it enables us to deeper understand the changing interplay and relations of firm processes with their regional contexts and their global production networks, by zooming in and out of practices from single firms and local clusters to economic sectors and global industries, and by making full use of a flat ontology in multi-scalar processes.

Practices of harnessing uncertainty for creativity: Evidence from music and pharma development

Oliver Ibert - Leibniz Institute for Research on Society and Space | **Gregory Jackson** - Freie Universität Berlin | **Tobias Theel** - Freie Universität Berlin | **Lukas Vogelsang** - Leibniz Institute for Research on Society and Space

Uncertainty is usually seen as an undesirable side-effect of creative collaboration to be reduced or coped with. More recently, however, uncertainty has been understood not only as a liability, but also as an asset. Namely, creative collaboration needs to balance under- and over-organizing or setting constraints while leaving space for deviation. Conceptually, the analysis rests on the distinction between uncertainty and ambiguity. The theoretical contribution will be to better understand practices that systematically not only tolerate uncertainty but even stimulate it, in order to promote creative learning. Based on creative biographies in both music production and pharma development, the proposed paper will explore practices of creative collaboration that seek to deal with this ambivalent nature of uncertainty. First, in creative collaboration uncertainty has multiple dimensions, encompassing the participants (who), the outcome (what), the process (how), underlying causalities (why) and involved places (where). Collaborative practices embrace focal uncertainties sequentially rather than simultaneously during creative collaboration. Space for novelty depends upon tolerating and exploring a focal uncertainty, but equally behaving with confidence or ignoring other uncertain aspects. Later the setting of uncertainties may shift—actors may reduce uncertainty in one parameter through collaborative learning, but exploit its ambiguity in relation to other dimensions to reopen uncertainties about other parameters. This shifting between uncertainty and ambiguity supports a cumulative and extended creative process.

Toward a Critical Pragmatist Approach to an (Environmental) Economic Geography

C. Patrick Heidkamp - Southern Connecticut State University

This paper starts with the premise that a transition towards more sustainable and resilient socio-ecological systems requires a fundamental transformation of prevalent socio-technical systems. Such transformations have been analyzed in a now substantial body of literature. I read this literature as having strong pragmatist tendencies; and, while I believe that this literature holds much promise, it remains quite undertheorized in terms of addressing the multi-scalar complexities of socio-technical systems and in terms of its implications for uneven development and social justice. Only very recently has research focused on sustainability transitions started to overcome its spatial naiveté—largely, I would argue, due to a growing interest of economic geographers in the sustainability transitions narrative. As is well documented, economic geography is sometimes described/criticized as too heterogeneous—as a donut with a circle of fried dough of various ontologies and epistemologies and a notably absent focus and center (I am paraphrasing Jamie Peck and Kris Olds here). And while some may argue that the paradigm wars are largely at bay, they seem to be alive and well in Economic Geography—as I have been witness to during a panel session, which I co-organized at the 2015 AAG meeting. I find much of this a waste of energy given the pressing concerns of our time: the increasing threat of climate change, the increasing inequality in terms of livelihood opportunities and the increasingly polarizing discourse in the political arena. Thus, this paper argues that if economic geography is to make a significant contribution not only to the discussion of but also to the implementation of sustainability transitions, it needs to embrace a focus that is distinctly environmental while maintaining a rootedness in not only analyzing but also redressing uneven development. I believe that this is best accomplished by subscribing to a critical pragmatist ontology.

Practice, Space and the Economy (Revisited) II

Global market performances: Dis/articulating diverse economic practices

Johanna Herrigel - University of Zurich

In recent years, scholars working with a marketization approach have turned to studying how global markets – so-called global commodity chains, global value chains or global production networks – are practically constituted and performed. This approach

also informs the dis/articulation perspective on global commodity chains, which marketization scholars have elaborated jointly with peers in critical commodity chain studies. The dis/articulation perspective draws attention inter alia to the mundane practical performance of these chains by dis/entangling places, people and goods, and thus their ongoing and dynamic dis/articulation processes.

Overall, the marketization and dis/articulation approaches have been primarily concerned with how market practices constitute global chains. In this paper, I expand the analytical scope beyond the market form to diverse economic practices. Moreover, I use the notion of dis/articulation to conceptualize the particular and dynamic structuring of these diverse economic practices.

Based on my research on the making of global fresh vegetable market linkages in Northern Tanzania, I advance a re-conceptualization of global chains as the dis/articulation of diverse economic practices. Key for this, I suggest, is an analytical distinction between economic practices of production and exchange, and for each of these the identification of diverse ideal-types. Combined with the concept of dis/articulation, these ideal-types of diverse economic practices enable us to advance towards the goal of apprehending and studying global commodity chains (and other economic phenomena) in their full complexity.

Food price changes, smallholders' food and nutrition security and market-making practices in Rajshahi, Bangladesh

Katharina Molitor - University of Cologne

Smallholder farmers in the Global South did not benefit from rising food prices during the global food crisis in 2007/08. Instead, a majority was affected by food and nutrition insecurity and increased poverty. This apparent paradox had been attributed to mainly two causes: Smallholders diversifying their income with activities outside agriculture, and substantial differences between consumer and producer prices of food often meaning rising food prices on the world market were not being "passed on" to producers. Contrasting with the copious macroeconomic literature this paper presents a micro level approach. The paper aims to go beyond structuralism and individualism as ontology, adopting a practice-based approach to analyze the phenomenon of food price changes and food and nutrition security in the Global South. With a practice-based approach looking at the performativity of markets, I attempt to describe "real markets". This paper looks at practice theories and geographies of marketization literature. It is based on empirical field work of a multi-site case study in northwestern Bangladesh. I used qualitative methods such as the Go-Along and auto-photography to identify market-making practices. These observations and interviews with smallholder farmers and traders were conducted in March and April 2017, examining the role of food price changes within the nexus of smallholders' food and nutrition security, their agricultural production and market-making practices.

Internationalization of training practices from German MNEs to Mexico, India, and China

Judith Wiemann - Universität zu Köln

Organizations – in this case MNEs – are in an essential way the results of work activities, this opens up the view of organizations as bundles of practices. Practices often contain company specific tacit knowledge which MNEs want to transfer to their subsidiaries in order to internationalize their core capabilities. Practice transfer and diffusion through MNEs has been researched in economic geography especially with regard to (regional, cluster, network) learning effects as well as global convergence due to the internationalization of best practices. Management literature focusses on the efficiency of practice transfer within MNEs with a strong focus on firm performance. From institutional perspectives we know that practices are strongly influenced by institutions as well as influence institutionalization processes themselves. However, there has not been paid enough attention in practice transfer research to the institutional context of practices at their origin and especially how that origin affects the transfer and enactment of a practice at its destination. This paper develops a concept of the degree of embeddedness of practices to better understand this link.

Findings from a study on transferred training practices in German MNEs to three emerging economies, i.e. Mexico, India, and China, are presented. More than 170 interviews were conducted with subsidiaries and local experts in the three emerging economies and 10 interviews with representatives from selected MNE headquarters in Germany. The results show that practices differ in their degree of embeddedness in their origin context which has significant effects on their enactment in their destination locations. Especially important is the practices' dependence on three types of collective inputs their origin institutional context provides: legitimacy, (financial, technological) resources and practice specific knowledge.

The Evolving Geographies and Practices of International Online Retail Business Model Expansion

Steve Wood - Surrey Business School, University of Surrey | **Neil Coe** - National University of Singapore | **Christoph Teller** - University of Surrey | **Iain Watson** - University of Surrey

The globalization of retailing is an established interest of economic geographers, not least given the dynamic relationships between retail firms and the variegated institutional, competitive and consumer-based characteristics and demands of countries, regions and continents. Yet, this research has disproportionately focused on food and general merchandise retailers with markedly less interrogation of international fashion retailing – a sub-sector which is arguably more globalized and exhibits markedly different features. Furthermore, little is known regarding the evolving global geographies of online retail business models which, it is suggested, might present a cost efficient and low risk way of entering foreign markets. We undertake extensive case study research within five leading international online fashion retailers, involving over fifty-five semi-structured interviews, generating >1,000 pages of transcription, with chief executives, managing directors, operations-, buying- and merchandising- directors and so on, to explore the embryonic geography of online fashion retailing. We adopt a necessarily practice-based perspective within the retail firms as this allows us to conceptualize the relational nature of decision-making within work communities and across the spaces within the MNCs. Our findings uncover limited investment in physical infrastructure and personnel within overseas host countries as the management of product ranges and pricing along with merchandise fulfilment typically reside in the home market. Given the general recognition of the limitations of decision-making remote from international markets, there is some limited evolution toward the realization of embeddedness through local (limited function) subsidiary head offices and the re-organization of fulfilment within some key host markets and regions. Nevertheless, there is widespread reluctance to meaningfully re-orientate the locus of control and decision-making to the region as localization is regarded as a risk rather than an opportunity.

Practice, Space and the Economy (Revisited) III

Embedding innovations in oscillating domestic spaces: analysing sanitation practices in Nairobi's informal settlements

Bernhard Truffer - Utrecht University | **Helene Ahlborg** - Chalmers | **Pauline Cherunya** - Eawag

The provision of basic services is a core challenge for sustainability transitions in rapidly growing cities of the Global South. A persistent conundrum for development and transitions scholars is that most new offers are not taken up and maintained by users, despite seemingly superior functionality and user convenience. We posit that a major reason for these failures stems from an inappropriate understanding of the contexts in which users have to manage their daily lives. To remedy this, we propose a conceptual framework to assess the sets of practices slum dwellers build up to fulfil their daily needs. Conceptually, the focus on practices provides a middle-ground perspective between under-socialized accounts that see users as isolated rational actors and over-socialized accounts, which expect highly routinized behaviour prescribed by cultural and economic structures. The key to a better understanding of how users build up and reconfigure everyday practices lies in the disentanglement of the space-time characteristics of these practices. We posit that slum dwellers have to cope with “oscillating domestic spaces”, which force people to constantly accommodate to quickly changing context conditions and individual abilities. We illustrate the framework by a case study of the failed introduction of a container based sanitation service option in informal settlements of Nairobi, Kenya. This analysis illustrates how slum dwellers are indeed conscious, entrepreneurial and reflexive actors that struggle to provide themselves with the basic necessities. The innovation offered did only fit in to a very small part of the oscillating domestic space and was in disarray with the actual needs most of the time. The framework furthermore provides guidance to policy makers and technology designers for developing new basic services in informal settlements. We conclude by arguing that this conceptual framework can also be applied to a wide variety of transition cases in OECD countries.

Mortmouse and a practice-centred view of globalising dairy relations

Nicolas Lewis - University of Auckland

In this paper, I present the case of the death of a mouse in a bioassay that almost brought the world's largest trader in dairy ingredients to its knees. I use the case to demonstrate the conceptual and methodological advances available to economic geography from the turn to practice. The paper makes visible the messiness of globalising economies and the stabilisation practices required to tame that messiness, features normally obscured in political economy approaches. It deploys a focus on practice to build a post-structuralist political economy of a globalising configuration of relations that offers new insights into how such assemblages are constituted and held together. The paper assembles approaches from STS, established political economy,

assemblage theory, and the turn to market making in economic geography. It points to a politics that inheres in practice. At a moment when economy is being increasingly technocratised, and technologised, and agency suffocated and scale reshaped by the instantaneity and viscosity of the valuation fields that emerge, rethinking relationality and highlighting practice are crucial to reimagining the possibilities, redirecting the potentiality, reasserting the value, and renarrating the relevance of economic geography. The paper argues that refocusing the turn to practice has much to offer.

The Materialisation of Post-Capitalist Possibility: Synthesising Practice Theory and Diverse Economies

Benedikt Schmid - University of Luxembourg | **Thomas Smith** - University of St Andrews

Practice theory and diverse economy approaches have grown increasingly influential in economic geography and beyond. In particular, both areas of scholarship have come to the fore in recent examinations of how societal trajectories can be shifted away from their current patterns of radical social and environmental unsustainability. However, while existing as allies in such studies, these approaches rarely speak to each other. The paper claims that a theoretical synthesis holds potential, yet to be tapped, especially regarding scalar issues of community activism. The post-capitalist geographical research agenda relating to so-called 'diverse' and 'community' economies, for instance, seeks to expose the processes of ethical and political decision making underlying economic reproduction. In this vein, it provides an antidote to the apolitical focus on micro-level performance that has characterised some of the recent work on social practice theory. In turn, diverse economies scholarship has been criticised for its focus on possibility, overemphasising the idea that to change our understanding is to change the world – a tendency practice theorists counteract through notions of routinisation, the institutionalisation of practice, and non-hierarchical scale. By grounding post-capitalist sensitivities in praxeological conceptions of power, politics, and scale, this paper proposes a materialisation of post-capitalist possibility, tracing the barriers and facilitators of transformative geographies. Against this background, the paper explores how post-capitalist politics transpire through sites of community activism. Supported by empirical insights into practices of 'making' and the organisations they constitute, it outlines how paths towards diverse economic futures emerge through webs of practice.

Practicing Alternative Economies: Applying Social Practice Theory to the Study of Community Currency Activism

Phedeas Stephanides - University of East Anglia | **Tom Hargreaves** - University of East Anglia | **Gill Seyfang** - University of East Anglia

A budding community of economic geographers focuses on bringing non-capitalist economic spaces and their practices to light – contributing towards an emancipatory understanding of social life. Unfortunately, the tendency to uncritically celebrate such 'alternatives' leaves scholarship open to criticism.

However, a new prospect for advancing research has arisen. In Greece, the ongoing financial crisis has led to the proliferation of an array of non-capitalist systems such as community currencies. Alongside challenging stultifying claims that there can be no alternatives to austerity and neoliberalism, these emerging 'alternative' spaces provide a unique opportunity to test novel conceptual frameworks and cross-fertilise insights from multiple disciplines in order to ameliorate our understanding of the practices that constitute diverse economies.

We present new empirical evidence from the first ethnography of a purposely selected sample of crisis community currencies developed in Greece. We move beyond merely descriptive empirical accounts and uncritical insights to provide an in depth account of the performative, contextual, path-dependent and contingent nature of 'alternatives' to the mainstream economy. By pioneering the application of Bourdieu's practice theory to the study of diverse economies, we seek to provide a holistic and grounded perspective on the "whens" and "wheres" of 'alternative' economic practices – paying particular attention to the affinities, possibilities and challenges that arise through the interplay of 'conventional' and 'alternative' economic practices. This informs critical insights regarding community currencies, with wider lessons for the study of diverse economies, 'alternative' economic spaces and practices within economic geography in general.

Panel Session: Practice, Space and the Economy (Revisited)

Andrew Jones - City, University of London | **James Murphy** - Clark University

Panel speakers:

Jana Kleibert - Leibniz Institute for Research on Society and Space

Christian Schulz - University of Luxembourg

Johannes Glückler - Heidelberg University

Andrew Jones - University of London

James Murphy - Clark University

Sarah Hall - University of Nottingham

Session

Spatial Development Initiatives in the context of global and regional integration

Gilbert M. Nduru - Karatina University | **Peter Dannenberg** – University of Cologne

Spatial development Initiatives like growth corridors, cluster development, university spatial development or special economic zones are associated with often long-running plans to modernise, transform and develop certain parts of a country to foster socio-economic development. While these initiatives have been a classic instrument of economic development for decades, they have reached new attention in regional economic development policies in recent years, e.g. in Sub-Saharan Africa or Southeast Asia and developed new instrument sets. Modern corridors for example go beyond the pure provision of public physical infrastructure. Based on complex multi-stakeholder initiatives they are strategically designed as catalysts of regional economic integration by policy makers and private businesses, and pointedly pushing traditional businesses into increasingly complex international value chains. Special economic zones in the Global South are increasingly marked by mixed approaches including economic and residential estate development. However, the outcomes of such development initiatives are still barely understood. Critics argue that development policies are based on simplified models, which are not able to address sufficiently the complexity of regional development and the risks derived from them. Policies on value chain based corridor development can for example lead to conflicts, external dependencies, land rush, and environmental damages. Special Economic zones are often associated with enclave development, exclusion and a polarization of wealth. Against this background, the question arises: In how far do spatial development initiatives lead to desired and undesired effects and in how far do they contribute to an integrative development? This session invites conceptual and empirical studies in the broader range of this topic.

The landings of ‘innovation districts’ around the world: Travels, translations, legitimizations, and incremental implementations

Päivi Oinas - University of Turku | **Lucía Gómez** - University of Turku | **Helka Kalliomäki** - University of Turku | **Erja Kettunen** - University of Turku

This paper traces the origin of the currently emerging innovation district (ID) concept (e.g., Katz and Wagner 2014) in core cities in the global North and observes their emergence in a range of cities around the world. Due to the ability of this concept to capture the needs of innovative firms and the urban lifestyles of their talented employees, the ID has become one of the many planning and policy concepts that seem to have the capacity to “travel” internationally (Healey 2013; McCann & Ward 2010; Peck & Theodore 2010). What is new about the ID concept is its emphasis on the quality of inner-city life, and its focus on re-engineering the mixed use of urban space (work, housing, services, recreation) to prompt innovative encounters and interactions in different spheres of urban life. We explore the international travels of this upcoming urban planning concept as a multi-dimensional process of “landing” in a number of cities in the global North and South. Based on stakeholder interviews in chosen cities, the aim is to understand the processes through which the concept is currently being introduced, translated, legitimized – and gradually (potentially) implemented. The place-based adaptations are influenced by the variety of agents involved in different stages of landing: international professional networks, stakeholders in urban coalitions, the national government, local and foreign firms, local and international consultants, etc., and the different policy goals and interests they represent. Stakeholder interviews carried out during time-constrained research visits offer only a limited access to such interests and local power games but they nevertheless offer an understanding of the complexity and variety of the ID landing processes unfolding in cities with repercussions on local institutions and their change.

International transportation corridors in Eurasia: challenges to connectivity and multilateral development efforts

Varvara Krechetova - Moscow State University

The idea of transcontinental land transportation corridors in Eurasia inspires numerous cooperation initiatives from widely discussed Belt and Road Initiative of China or much older TRACECA initiative, Central Asia Regional Economic Cooperation to less known International Trans-Caspian East West Middle Corridor, International North-South Transport Corridor, etc. The corridor initiatives aim at capitalizing on existing trade flow between Asia and Europe and try to overcome existing challenges: insufficient transport infrastructure (hard infrastructure issues), institutional and procedural impediments (soft infrastructure challenges), economic challenges, such as imbalance in the trade flow and empty back runs.

In 2016-2017, United Nations Economic and Social Commission for Asia and Pacific performed a study of the selected Eurasian transport corridors titled “Comprehensive Planning of Eurasian Transport Corridors to Strengthen the Intra- and Inter-Regional Transport Connectivity”. This paper is based on the author’s work on that project. The study mapped the status of hard road and railway infrastructure and revealed existing challenges to connectivity such as lack of exchange of road traffic rights at some borders (for example, no through road transport is possible at 8 road border crossings of 37 analyzed), gaps in railways interoperability, border crossings under capacity and others.

Despite the existing impediments, the corridors are a competitive alternative to sea shipping: quick and, in some aspects, more flexible. Development of these routes is understood to provide more opportunities for the countries and regions along them. Those challenges and potential benefits are not unnoticed by the countries involved and the study places the findings on the state of the corridors in the context of currently existing corridor initiatives and multilateral agreements concerned with transport and trade facilitation along the corridors. The study also elaborates on aspects of infrastructure financing and suggests an institutional management structures to facilitate the development of the corridors.

Urban Transformation and Regional Planning challenges in Megaregions.

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Urban geographies are in a process of extensive transformation. Last decades of the 20th Century saw the emergence of a burgeoning number and sizes of megacities and urban corridors, mostly in developing countries. Relationships of secondary cities with various higher order metropolitan cities has sustained population growth in new patterns and configurations. This new urban form is a rapidly growing urban cluster surrounded by low-density hinterland, formed as a result of convergence of more than one metropolitan area and other agglomerations known as Mega-regions. Mega-region development has been identified as one of the top national agendas in the emerging economies. Unlike agglomerations in the US and Europe, which largely evolved naturally through sprawl, nations in Asia, specifically, China and India are consciously creating their mega-regions. Policies to guide and expedite the formation and development of mega-regions as an institutional response to global and regional economic transformation has been put in place. These countries are pursuing a top-down approach to enforce political and economic objectives of creating mega-regions by identifying clusters of cities and designating a central hub as well as their positions in Global Value Chains. However, empirical evidence shows that the capacity of these “engines” to generate positive change is critically hampered by poor infrastructure and services, weak financial bases, and inefficient governance and urban management mechanisms in these countries. Despite the significance, a very limited amount of research has been conducted to understand this phenomenon and its implications on the sustainability of the region.

From Savanna to Modern Tourism Space : Safari Tourism as Industry in Masai Mara National Reserve, Kenya

Jurak Kim - Seoul National University

The African savanna, ‘a rich repository of natural wildlife’, is considered an antipode of modern society where rationality is the dominant characteristic. The savanna is filled with uncertainty and coincidence, making it seem difficult for human beings to expect or control these natural features. For people who want to escape from mundane urban life and experience an untouched nature, savanna appears to be a haven. However this study identifies that savanna is not purely natural grassland, but strategic modern tourism space, by examining how safari is operated in Masai Mara National Reserve, Kenya. Safari tourism agencies in Masai Mara purposefully shape savanna into ‘a space of predictable uncertainty’ by minimizing coincidence. To do so, they apply knowledge about behavior of wildlife, local know-how and artificial modern technologies. In addition, Guides from different agencies build cooperative relation with each other to communicate real-time throughout the safari tour. All these efforts by the tour agencies make it possible to offer a standardized tour experience for their guests. On the other hands, in the case of Masai Mara, a designated ‘national reserve’, the park is managed systematically by Mara Conservancy, a not-for-profit organization

which is established on behalf of Trans-Mara County Council. In this manner, tourists from all over the world easily and simply purchase and consume safari experience as 'leisure product' in this well managed savanna. From a tourism industry perspective, safari is constructed more so by the rationality of human beings as tour operators, rather than on the novelty of nature as the object of tourism.

Session **Social Networks in Space**

Robert Panitz - Heidelberg University | **Johannes Glückler** - Heidelberg University

Social and economic settings have both a relational and a spatial component. Consequently, the economic development of regions depends on the structure and dynamics of social networks, and conversely, the evolution of networks often takes particular spatial form and depends on geographical context. While research in geography has started using networks to explain spatial phenomena, network researchers have recently identified space as an important aspect of the formation of social relations. These points of cross-fertilization have led to special issues in both fields, such as in *Social Networks* (Doreian and Conti 2012) or the *Journal of Economic Geography* (Glückler and Doreian 2016). Moreover, recent contributions in evolutionary economic geography (e.g. Boschma et al., 2015) have indicated ways in which interaction between the two research streams can lead to a better understanding of the spatiality of networks and the network foundations of regional development. This session aims to enforce the mutual engagement between theory-led economic geography and the growing portfolio of methods and techniques in network science. Within a broad range of possible topics at the intersection of relational geography and network studies, we invite contributions that may address the following issues: the spatial evolution of networks, the role of spatial context for social networks, the impact of organizational networks on regional economic development, concepts and methods for the relational analysis of regions and the spatiality of organizations, the dynamics of intra- and inter-organizational networks in and across space, the relational structure of markets at regional and global scale.

Social Networks in Space I

The evolution of knowledge networks in times of socio-economic transition: The case of the Berlin biotechnology industry

Tom Broekel - Utrecht University | **Milad Abbasiharofteh** - Leibniz University of Hannover

The development of East and West Germany after the reunification has been studied from a wide range of perspectives. Amongst others, studies highlighting still existing substantial variation between East and West German regions in terms of knowledge networking and collaboration activities. In parts, this seems to be related to differences in pre-reunification collaboration behavior. However, we know little about how exactly organisations in East Germany managed to embed themselves into the (West)German innovation system and its knowledge networks after the reunification. Limited insights also exist with respect to the development of their collaboration behavior after the reunification and potential adaptation to the "standard" (West) German knowledge sourcing and sharing behavior.

The paper provides some answers to these questions by focusing on the post re-unification phase of knowledge networks in Berlin. The study does not only contribute to a better understanding of the historical process, it also applies rigor dynamic social network analysis (Separable Temporal Exponential Random Graph Models (STERGM)) to study the evolution a knowledge network in the city during times of socio-economic turmoil and reconfiguration. We model the knowledge network by combining multiple sources of relational information, e.g. patents, scientific publications, and R&D projects in the Berlin Biotechnology industry. Our findings indicate organisations in East and West Berlin following distinct knowledge sourcing and sharing behaviours after the reunification. As can be expected, the East Berlin innovation system quickly disintegrated. While actors from East Berlin were successful in reaching out to their West Berlin counterparts and establishing collaborations, they faced severe difficulties in preserving these. Over time, however, organisations from East and West Berlin converged in terms of knowledge networking patterns, as they increasingly linked to organisations outside Berlin.

Facing Brexit: The role of social networks in corporate relocations

Robert Panitz - Heidelberg University | **Johannes Glückler** - Heidelberg University

Brexit, the decision of Britain to leave the European Union, is expected to have major consequences for the locational geography of the financial industry in Europe. Many notifications in the media document either announcements or actual decisions by financial services organizations to relocate from London to other European financial centers. In the case of Germany, experts estimate the relocation of up to 10,000 jobs in banking from London to Frankfurt. The trade with “futures” and the expansion of digital capacities in local data centers or office spaces indicate the high costs of such insecure and risky decisions. While traditional conceptualizations in financial and regulatory perspectives on relocation processes often address hard locational factors, we use a relational perspective to understand the process of relocation. Based on expert interviews in several financial centers and on a social network analysis of interlocking directorships within the financial sector, our study integrates insights from the interlocking directorship literature into theories of relocation and internationalization. Specifically, we analyze how the composition of boards of directors is related to ongoing preparations for Brexit, (ii) whether the network of interlocking directorships affects the relocation processes, and (iii) how these processes are associated with broader organizational strategies and characteristics.

Mapping the boundaries of sustainable food systems through social network analysis and GIS

Laura Prota - The American University of Rome | **Vito Cistulli** - FAO | **Ivan Cucco** - The American University of Rome | **Robert Mbeche** - Jomo Kenyatta University | **Josiah Mwangi** - Jomo Kenyatta University

Starting from a stratified sample of 450 urban consumers, this study trace urban-rural linkages with snowball sampling to locate more than 1300 consumers, traders and producers involved in the Nairobi's food system. Blockmodelling is used to cluster actors according to their observed patterns of ties and to identify structural differences among sub-food systems. Ties among actors are defined by the exchange of different food categories and analyzed against a food insecurity index. Geo-localized data are then used to map the articulation of each food sub-system across space, thus redefining the boundaries between the urban and the countryside. Finally, the organizational and geographical dimensions of food security are addressed with the aim of providing a new tool to better target and design policy interventions.

Production Network Topology, Co-location and Value Chain Governance

Yihan Wang - HEC Montréal | **Ekaterina Turkina** - HEC Montréal | **Ari Van Assche** - HEC Montréal

The interconnectivity and interdependence between organizations channelled through cross-border production activities lead to the formation of the global production networks. Previous studies have attributed the nexus dynamics of global production as a synergy of the co-location of spatially proximate organizations that absorb knowledge-spillover in industrial clusters together with the intersecting governance mechanism of the global value chains. Nonetheless, empirical studies in economic geography on how these two mechanisms interact to affect the structural features of production networks are limited. Based on the panel data of multiplex production network in the Chinese aerospace industry, we figure out that there is an evident tendency of community formation based on relational closeness in the scale-free “small-world” network configuration. Applying Markov Cluster Algorithm and Clauset Fast Greedy Algorithm, we discover that the distribution of these densely connected communities, namely topological clusters, does not overlap the geographic boundaries of industrial clusters. By conducting Probit regression on the probability of intra- and inter-topological-cluster linkage formation over both geographic and value chain related variables, we find that horizontal linkages within the same economic sector and ties directed to R&D-oriented organizations are more likely to bundle organizations within the same topological clusters. In contrast, the cross-sectorial vertical linkages are more likely to bridge sparsely connected topological clusters based on the hierarchical distribution of added value across different regions and value chain stages. However, we do not find sufficient evidence to support the contribution of co-location in either process. The empirical results imply that the structural locus of production networks is shifting toward a relational-based governance mechanism coordinated by the value chain hierarchy. Incubation of specialized knowledge tends to be associated with horizontal integration, while there is high propensity that knowledge transfer across different communities takes place through vertical integration.

Social Networks in Space II

Combining governance aspects and social network analysis for the understanding and fostering of transitions within urban industrial areas

David Heimann - Osnabrück University

Older industrial areas are often neglected in planning and research. Hence, they are a blind spot in terms of climate protection and climate change adaptation. This is often not even regarded as a problem due to the perception of industrial areas as places of production. In the federally funded project “Grey goes Green – Transforming Industrial Areas” we are aiming to foster a transition process in three industrial areas while using social network analysis.

Adapting a relational research design, I am taking into account “contextuality, path dependence, and contingency of economic action and interaction, [...]” (BATHELT und GLÜCKLER 2017, 180). I am doing so by looking at sustainability biographies through qualitative interviews and relational aspects by examining local actor networks among companies within the industrial areas and among the city administration. Network dynamics are analysed in the course of measures implementation during the project duration. Above that, the aim is to research processes of inter-connectedness of entrepreneurial networks and the networks within public planning bodies. Thus, the research is also looking at the interrelatedness of network structures and their formation as well as their ability to create institutional change, in order to understand their role for dynamic processes of change within space. The project aims to analyse existing structures in three different geographical locations at the same time, documenting undertaken measures and barriers among the different actors, therefore aiming at addressing the role of spatial context for social networks and vice versa, rather than creating idiographic or idiosyncratic case studies. The mixed-methods approach will make it possible to explore mechanisms and foster theoretical understanding by integrating different aspects of spatiality, relational views, and governance for further developing the understanding of sustainability transition processes.

Social capital in emerging clusters: the case of the Life Science Nord Cluster

Adriana Petre - Christian-Albrechts University of Kiel; The Bucharest University of Economic Studies

Since building trust, reciprocity and commitment between network ties is a key long-term process, social capital is important in the cluster evolution. Still, little is known about its impact on “the performance of cluster firms, the cluster or the region in which the cluster is located” (Staber, 2008, p.505). The performance of cluster firms is negatively affected if they do not align their social capital configuration with their changing resource needs (Maurer and Ebers, 2006). Staber and Sautter (2010, p. 10) argue “the performance of the clusters varies over time with the evolving knowledge base in the cluster”. Also, although the life cycle topic is “still in its infancy” (Staber, 2007a, p. 343), it is “an attempt to counter the charge that much research on clusters is ahistorical and acontextual in character” (Staber, 2008, p.10).

Social capital is cluster stage- (Menzel and Fornahl, 2010) and context-sensitive (Staber, 2007b). When there is an unequal development in parts of the cluster, the cluster is in transition and difficult to categorize (Menzel and Fornahl, 2010). Most empirical models (i.e. Fosse and Normann, 2017) have therefore limitations because they do not include the transitions between cluster stages.

After participatory observations at events of Life Science Nord (LSN), a leading cluster in life science emerging industry, and preliminary interviews with project managers, I presume LSN is in the emerging-growing phase, according to Menzel and Fornahl’s (2010) criteria for cluster dimensions. The aim of this paper is to address the following topics and then exemplify on LSN case: (1) social capital evolution over stages, including in transitions, (2) how this evolution influences cluster performance, and (3) the evolution of LSN’s social capital configuration.

The structure and significance of knowledge networks in low-tech clusters

Wojciech Dyba - Adam Mickiewicz University, Institute of Socio-Economic Geography and Spatial Management | **Milad Abbasihorofteh** - Academy for Spatial Research and Planning (ARL), Leibniz University Hanover

The colocation of firms and institutions, also known as clusters, positively influences informal interactions, learning, and cooperative local networks. There is a large body of literature ranging from management to geography that identifies innovation as the engine of growth and structural change. In the cluster research, social networks and their impacts have gained a considerable amount of attention as the driving forces of knowledge sourcing and innovation. Yet, the main building blocks of the cluster literature are fragmented, given several dominant lines of literature from various disciplines. Moreover, the cluster literature provides a single-sided understanding of how clusters function due to an over-emphasis on clusters in high-tech and developed economies at the expense of clusters in low-tech industries in less-developed regions.

Firstly, this study develops a framework and harmonizes dominant approaches in the cluster literature: place-dependent approach and network approach. Secondly, building on the conceptual framework and applying Social Network Analysis (SNA), this paper studies two furniture clusters in the Wielkopolska region in Poland. Our findings demonstrate that: 1) the critical is the impact of institutionalisation on the mechanisms of knowledge flows, Marshall's externalities and – as a consequence – innovativeness of firms; 2) the more active the firms were in the process of knowledge sourcing (and the more central position in the knowledge networks they managed to get), the more innovative they became. This suggests that it is worth participating actively in knowledge networks, as the novel knowledge helps to introduce positive changes in firms. The findings pave the way for initiatives aiming at creating and developing knowledge networks in lagging and catching-up regions in Europe, particularly those specialised in low-tech sectors.

The network structure and Regional film industry development in China

Hu Wen - Hunan University | **Qiangguo Zhang** - Hunan University

Based on the relational data of firms participated in the Chinese films which box office records are top 25 in every year from 2003 to 2015 in China, a total of 1784 samples, this paper uses the social network research method to explore the whole network structure characteristics of Chinese film industry. The result shows that the special and strong political atmosphere in China effect the industrial network structure deeply: 1. From the regional level of network power distribution, the index of degree distribution of China film industry reach up to 0.84. It means that the shape of film industrial network is core-periphery structure which Beijing and Hong Kong are the two core. 2. From the firm level of network power distribution, the core-periphery structure still obviously. China Film Group Corporation and Huaxia Film Distribution Company, which are two state-owned enterprises occupy the core location in the network. Specially, as the highest centrality node, China Film Group Corporation has a significant influence on the film industrial development. 3. From the regional level of network ties, most of the ties between nodes within the network are centering on Beijing. Especially, Hong Kong, Shanghai and Seoul have the tight connection with Beijing. those connection are based on vertical and horizontal industrial division. 4. From the firm level of network ties, cohesive subgroups which are composed by China Film Group Corporation and several post production companies, located in Hong Kong and Thailand, have the characteristic of geographic openness. On the basis of network analysis, this paper tests the influence of network structure on the performance of firm with the method of econometric. At last, this paper discusses how to boost the development of regional film industry in China.

Social Networks in Space III

Capturing 'buzz': an exploration of the impact of informal localised communication flows on entrepreneurship through twitter data

Carlo Corradini - University of Birmingham | **Emma Folmer** - Aston University | **Anna Rebmann** - Aston University

In this paper, we explore how to expand our empirical knowledge of spatially bounded social interactions and how they influence entrepreneurship by analysing big data to capture 'buzz' – the vibrancy and nature of localised informal communication flows. We propose a novel approach to capture such intangible element, reminiscent of the 'industrial atmosphere' discussed by Marshall, which has been proposed as a fundamental aspect of learning regions and the creative class but has yet proved difficult to observe or measure.

An exploratory econometric model is proposed where different measures of regional entrepreneurship are regressed on traditional determinants such as R&D expenditure, population density, education and industry structure across 170 NUTS3 regions in the UK. Using the information within all geo-located tweets in 2014, with around 1 million tweets per day, an additional variable defined by the relative intensity in the use of words related to innovation and start-up activity – such as "innovation", "future", "entrepreneurship", – is added to proxy buzz.

We find a strong association, robust to different model specifications, between the intensity of Twitter discussions on innovation and entrepreneurship and 'on the ground' new venture creation. Our results therefore provide evidence, that regions characterised by a higher intensity of Twitter discussions on topics of innovation and new firm creation provide a more effective set of informal relational resources that underpin sharing and recombination of ideas defining regional capabilities to support and facilitate entrepreneurial processes.

From the Network to the Ground: A spatial analysis of a Networked Social Movement

Filipe Mello Rose - HafenCity Universität Hamburg

This contribution investigates the relationship between social mobilization and spatial configurations in the context of new communication technologies. Four vectors of spatial analysis of the TPSN-Framework - Territory, Place, Scale and Networks - (Jessop et al. 2008; Leitner et al. 2008) are used to approach the linkages between a movement's main spatiality, its internal structure and the preferred action-repertoire.

For this, the case around the online movements *Direitos Urbanos* and *Movimento Ocupe Estelita*, in Recife, Brazil is used to analyze how the spatiality of mobilization, from virtual (the Facebook group) to physical space (the occupied plot) had different effects on the movements' compositions and strategies.

The interactions on social media are regarded as a networked space, with distinctive contextual characteristics in which social interactions take place. A classification of users by postings, comments and likes allows to understand hierarchies in online communications. These patterns- established on the basis of 110 000 data-entries during four analytical periods –were contrasted with qualitative data from 19 semi-constructive interviews.

The analyzed movement was formed online in 2012 to protest the construction of 12 high-rises on a centrally located abandoned plot. It transforms itself when members occupy the contested land in 2014 and try to organize the movement around a makeshift camp. The new relationship with the place of contention and the adjacent territory alters the movement's network of places and members. This leads to a division along socio-economic lines which is reinforced when the members present in the place of contention break away from the preexisting movement which relied on a city-wide network of places and supporters. The new sub-movement contrasts the existing structure through place-based and horizontal decisions-making. While it thrives within the "space of autonomy" (Castells 2012), it is constrained by the lack of technical-political linkages that the preexisting networked movement possesses.

Dependency Global South Countries to Global North countries on Knowledge Flows through collaborative Research Networks

Bahtiar Rifai - University of Birmingham

Since knowledge is powerful to make a change and includes in production function, having sufficient knowledge has been crucially needed to grow innovation and development. Having limited capacity on internal knowledge stimulates to obtain external knowledge using several transmissions like trade (export-import), investment, migration and research collaboration. Due to the advantages of collaboration, collaborative research is preferred by many institutions for knowledge acquirement. Global knowledge factually has been dominated by Global North (GN) countries since they have excellency in education, research and development. Previous studies have revealed how research collaboration undertakes intensively among GN countries, meanwhile this study contributes on analysis how knowledge flow occurs within GS countries and GN to GS countries.

Using network analysis approach, this study employed secondary data from 2006 to 2016 with sample of ten countries in South East Asia (ASEAN) region plus China as representation from GS countries. Collaborative research measured through co-authorship publication which obtained from Scopus website. Qualitative analysis was used to explained result on network structure analysis.

The result shows that China has the highest degree centrality in Asia, while Singapore and Malaysia are the central knowledge in ASEAN region. Low income countries (like Myanmar, Laos, Cambodia, Vietnam) are the periphery in regional knowledge networks. These findings show size of country doesn't always linear with propensity to undertake international research collaboration, for example Singapore. Countries with greater economy performance seems dominating in knowledge network structure. In addition, collaboration tends to conduct externally from region than between members within region in GS countries. Distinguished in research and education quality have attracted Global South (GS) countries to collaborate with GN countries and create dependency on knowledge flows

The Knowledge dynamics of inventors' performance: A multilevel analysis of knowledge externalities

Ernest Miguez - Université de Bordeaux | **Rosina Moreno** - University of Barcelona | **Matteo Tubiana** - University of Turin and BRICK

The present paper exploits patent and inventor data to explore the impact of knowledge externalities on individuals' performance. While setting our interest at the micro-level taking into consideration inventors' performance, we keep in mind the achievement of a systemic approach to knowledge creation. The first main objective of this research consists on bridging two traditions, namely the economics of knowledge externalities and the literature exploiting the theoretical background of labour economics to explain knowledge flows, currently developing on parallel strands. Second, we also aim at highlighting the importance of taking into

account simultaneously the different socio-economic levels every individual is embedded in. In particular, we make use of a multi-level analysis of the influence of various sources of knowledge (the collaboration network, the firm and the metropolitan region of the inventor) on inventors' performance. Indeed, our understanding of the factors driving and influencing inventors' productivity is still modest (Giuri et al. 2007). However, the topic deserves paramount attention because it is within individuals that knowledge is created and among individuals that it is exchanged (Grant 1996, Fleming 2001, Fleming and Szegedy 2006). In the last decade, indeed, attention towards individual inventors and their activities grew, bringing to the light a series of studies investigating the individual-level determinants of inventive activity (notable examples are Zwick et al. 2017, Hussinger 2012, Hoisl 2007). However, apart from a few studies by Fleming and Sorenson (2001 and 2004) there are not attempts to account for individual inventors' performance with the toolkit of the economics of knowledge literature. Results suggest that inventors take advantage of the knowledge pools at each layer they are embedded in. Territorial knowledge externalities are much stronger than network externalities. Interestingly, there is a strong complementarity between network and firm knowledge pools, whereas firm and territorial knowledge pools appear as substitute.

Social Networks in Space IV

Spatial Relations or Relational Space: What Drives Knowledge Sourcing in the Norwegian Innovation System?

Milad Abbasiharofteh - Academy for Spatial Research and Planning (ARL) | **Erlend Osland Simensen**

The importance of knowledge sourcing on innovation and economic performance has been widely discussed. Firstly, the relevance of spatial proximity and Marshallian (1920) and Jacobian (1969) externalities has been emphasized (place-dependent approach). Secondly, some scholars (e.g., Boschma & Lambooy, 1999) address knowledge sourcing by underpinning historical and path-dependent trajectories (evolutionary approach). Finally, it is empirically shown that the position of actors in a given knowledge network and its structure determine how the process of knowledge sourcing functions (network approach). Although there have recently been attempts to bring these approaches together under one conceptual tent (see, Glückler & Doreian, 2016), empirical research can advance our understanding of how the impact of space and network on knowledge sourcing coevolves. We used the database on R&D projects subsidized by the research council of Norway, where actors are defined as nodes; and joint projects as edges. We retrieved data on the geographic location, the duration and size of projects. Applying text mining techniques, we assigned the field of research to each joint project. Then, we defined variables at the local (e.g., agglomeration externalities), node (e.g., size), dyad (e.g., proximity dimensions), and structural levels (e.g., preferential attachment). Using the gravity model, we investigate how the impact of spatial and relational variables changes over time (2005-2017) in various research fields. Our preliminary result is consistent with the industry life-cycle literature (Klepper, 1997), where spatial and social embeddedness are the main drivers of knowledge sourcing in the research fields related to mature sectors (e.g., oil and gas cluster). Yet, the impact of tie formation mechanisms (variables at the structural level) seems to be stronger in the research fields underpinning high-tech sectors (e.g., biotechnology). Lastly, the significantly positive impact of spatial dimensions is reported in most cases; however, its magnitude is larger in more complex knowledge bases.

From Interregional Knowledge Networks to Systems

Adi Weidenfeld - Coventry University | **Nick Clifton** - Cardiff Metropolitan University | **Teemu Makkonen** - University of Tampere

Whereas the role of regionalized knowledge (or innovation) networks within Regional Innovation Systems (RIS) has been thoroughly explored, the scientific inquiry on the mechanisms and regional impacts of global knowledge flows (e.g., spillovers facilitated by informal relations, learning in research collaborations or knowledge transfers mediated by market transactions) including interregional knowledge transfers remain understudied, particularly in relation to localized knowledge. Although interregional knowledge transfer has been a major concern in the EU and more recently in Asia, particularly in the cross-border regional context, little is known about policy mechanisms such as interregional innovation systems, which are aimed to enhance knowledge transfer between regions. This paper aims to address this gap by exploring the multiple rationales and dimensions underpinning interregional collaboration within the framework of five distinct types of, both national and international, knowledge networks. Particularly, the paper discusses the role and importance of varying types of proximities and similarities for knowledge transfer in these distinct knowledge networks. Based on these conceptual and empirical debates the paper examines whether and how interregional knowledge networks can develop into innovation systems. It attempts to develop a new concept of interregional knowledge networks and suggest new direction for further studies.

Session

Economic Geography - Contemporary Topics, Relevant Discussions, and Essential Insights

Michael Leuchner - Springer Dordrecht | **Dieter F. Kogler** - University College Dublin

This session will address cutting-edge topics and discuss new perspectives and developments in the field of contemporary economic geography. The session is dedicated to Springer's new Economic Geography book series, which serves as a broad platform for scientific contributions in the field of Economic Geography and its sub-disciplines and covers topics such as the geography of economic systems and spaces, geographies of transnational investments and trade, globalization, geographies of innovation and knowledge, evolutionary economic geography, urban economic geography, development geography and other forms of spatial organization and distribution of economic activities or assets. It features research monographs, edited volumes, advanced and undergraduate level textbooks, as well as conference proceedings.

Economic Geography - Contemporary Topics, Relevant Discussions, and Essential Insights I

Publishing Economic Geography - A New Book Series

Michael Leuchner - Springer Nature

A brief overview of Springer's new book series Economic Geography is presented and an overview of the session dedicated to the book series is given.

The book series serves as a broad platform for scientific contributions and wants to explore new perspectives and developments in the field of contemporary economic geography and its sub-disciplines. The series publishes a broad portfolio of peer-reviewed scientific research monographs, edited volumes, textbooks, and conference proceedings ranging from theoretical approaches to empirical studies and can contain interdisciplinary approaches, case studies and best-practice assessments.

MNE Strategies and Emerging Power Balances in the Global Economy

Päivi Oinas - University of Turku

Analyses in this volume explore contemporary trends driving strategic activities in multinational enterprises (MNEs), and the associated societal and spatial change processes around the world. The global economy maintains a rough division between the dominant core, emerging economies, and dependent peripheries but these divisions are not static. While the MNE may be habitually associated with the core economies, the global North is rethinking its relations to a new pulse in an increasing number of countries and regions in the South. No longer are previous divisions in the global economy challenged by EMNEs from the well-known emerging economies alone. The appearance of MNEs from an increasing number of more peripheral economies is gradually drawing attention to their investment behaviour and strategic activities, too. Globalization is ever more multifaceted.

To build up the capacity to tackle competition in the global marketplace, MNEs put effort in creating technologies, products and services, in developing managerial talent, upgrading strategy processes, coordinating and streamlining relevant ecosystems in different parts of the world. They tap into societal trends to meet the needs of volatile customers. They contribute to cultural change by creating platforms for individual and collective action and identity creation. There are regions where they seize local endogenous growth processes and boost them. In others, they hoard resources and leave little, if not destruction, behind. A contemporary strategic orientation concerns conformity to institutional pressures towards economic, social and environmental responsibility bearing consequences, when harnessed, on local operations, potentially empowering local managers, labour, networks, and communities. Novel strategies are associated with renegotiating relations with private and public sector agents in a range of countries, cities and regions, as well as with international organisations. All this activity contributes to gradually shifting power balances in the global economy deserving meticulous examination.

Role of social fabric on regional resilience - an evolutionary study of the Glass City

Tiffany Tsui - Wageningen University

In September 2017, National Geographic issued an extensive article about developing sustainable food production and the unique position of Westland, also known as the 'Glass City', as the 'capital of horticulture' of the Netherlands. The Westland region is proud of its long agri-production history dating back to 1300 A.D. Unlike the Ruhr region in Germany, Detroit in the US, or the ship-building cluster around Rotterdam, the Westland cluster has proven to be robust and resilient towards major shocks in the last century and has grown to be the world leader in horticulture production, logistics and trade.

The concept of community is often neglected in the definition of clusters which focus on the interaction between firms (Porter 2000), however it is closely associated with rural/agricultural system, which represents characteristics such as shared culture, strong social norms, and common interest and values. In this light, the 'Glass City' is conceptualized as not only a cluster of spatial and functional concentration, but also a cluster of social relations and interactions. The inclusion of community in the definition of the Westland horticulture cluster adds additional social and environmental performance challenges including: increasing societal well-being while sustaining ecological services and enabling a transition to a more sustainable future. Through an analytical lens of evolutionary adaptive systems (Blay-Palmer et al., 2016, 2016; Boschma & ter Wal, 2007; Grekova et al., 2016), this study sheds light the importance of the historical and social dimension, or social fabric, to innovation and long term transformative resilience of the region.

Tourism for sustainable local development? Socio-spatial dynamics in unequal tourism development in Finnish Lapland

Jarkko Saarinen - University of Oulu

The United Nations General Assembly declared 2017 as the International Year of Sustainable Tourism for Development. The UN is recalling the potential of tourism to advance the high aims of universal 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals (SDGs). More specifically the International Year aims to promote tourism industry's role in five key areas: (1) Inclusive and sustainable economic growth; (2) Social inclusiveness, employment and poverty reduction; (3) Resource efficiency, environmental protection and climate change; (4) Cultural values, diversity and heritage; and (5) Mutual understanding, peace and security. Due to these kinds of potential benefits of tourism the industry has become an important policy tool dedicated to regional and local development. Especially in peripheries, such as northern Finland, tourism is looked on as having many favourable developmental impacts. In order to contribute to development, however, the regions and localities as whole should benefit from tourism which refers to aforementioned inclusive and sustainable economic growth and social inclusiveness and employment. This presentation focuses on the development of tourism industry in the northern Finland and how it is expected to contribute to local development in various regional policies and strategies. The aim is to focus on the issues related to inclusive growth and employment, especially, by analysing spatial scales of the socio-economic impacts of tourism growth in selected destination and municipalities in the northern Finland.

Economic Geography - Contemporary Topics, Relevant Discussions, and Essential Insights II

From knowledge-based catching-up to leading the development of new socio-technical systems: China's changing positions in the global solar photovoltaic industry

Xiao-Shan Yap - Utrecht University | **Bernhard Truffer** - Eawag, Swiss Federal Institute of Aquatic Science and Technology | **Deyu Li** - Utrecht University | **Gaston Heimeriks** - Utrecht University

Recent debate argues for the emergence of new windows of opportunity for latecomer leapfrogging that derive from a newly emerging techno-economic paradigm that combines Information Communication Technology (ICT) with green energy technologies. One of the most pressing topics concerning developing countries is whether these latecomers would be able to endogenize path creation or diversification processes in the newly emerging cleantech sectors by building on their pre-existing capabilities accumulated from previous industrializations. While South Korea and Taiwan are reckoned as the successful leapfrogging cases in the semiconductor industry from the last industrial wave, China and Malaysia have been labeled as unsuccessful cases that are still struggling to catch up in semiconductor technologies. All the above-mentioned countries however have recently diversified into the solar PV industry. Since recent theorizing in economic geography suggests that knowledge relatedness is a primary precondition for successful path creation in regions, one would expect that South Korea and Taiwan would

sustain leaderships in the solar PV industry as both industries share key elements in their knowledge base. Paradoxically, the reality says otherwise as China and Malaysia had become the largest and the third largest (behind Europe) producers of solar PV in the world. This paper examines the above paradox by revisiting the role of relatedness in latecomer industrial leapfrogging context. It combines patent analysis (to analyze the degree of relatedness) with interview insights on diversification strategies deployed by the domestic institutional policies for China and Malaysia solar PV industry. Our hypothesis is that high degree of knowledge relatedness is not sufficient for successful path creation that leads to a strong global industrial position. Drawing from the functional perspective on innovation systems, we argue for a broader understanding on how latecomers (i.e. China and Malaysia) could embark on unrelated diversification paths (Boschma et al., 2017; Binz and Truffer, 2017).

Does Successful Innovation Require Large Cities? The Case of Germany

Michael Fritsch - Friedrich Schiller University Jena | **Michael Wyrwich** - Friedrich Schiller University Jena

Large cities may have many advantages commonly known as positive agglomeration economies. Recent literature has particularly stressed the role of large cities for creativity, entrepreneurship and innovation (Florida, Adler & Mellander 2017; Glaeser 2011). It seems to be a widespread conviction that large cities are 'innovation machines' and that entrepreneurship and innovation requires cities (Florida, Adler & Mellander 2017).

The case of Germany can be regarded as a counterexample to this popular belief. We analyze the spatial distribution of R&D activity and entrepreneurship across German regions with a particular focus on large cities, smaller cities and relatively remote rural regions. Our analysis shows that although some larger cities in Germany are innovation centers, there are also many smaller cities and particularly some remote rural areas that are home of world market leaders and generate many economically successful innovations.

We discuss several reasons for this German 'anomaly'. In particular, we discuss historical roots of regional entrepreneurship and innovation activities that have produced certain regional cultures. We argue that the pronounced Federal tradition of Germany may have shaped regional structures today. There are, however, quite numerous cases suggesting that there must be more than the political history that put the popular belief that rural areas are unsuited for successful innovation and entrepreneurship into question.

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Internationalization of industries from the Southern Region of Brazil: a way of facing the Brazilian economic difficulties

Isa de Oliveira Rocha - Universidade do Estado de Santa Catarina | **Cássio Donadel Guterres** - Universidade do Estado de Santa Catarina | **Augusto Cesar Mendes** - Universidade do Estado de Santa Catarina

Parallel to the significant exports, large industries in the Southern Region of Brazil have manufacturing units abroad, mainly in Latin America, the United States, Europe and China. The objective of this study is to analyze the data and information obtained in business reports and the answers of questionnaires applied in ten major export industries in the south states of Paraná, Santa Catarina and Rio Grande do Sul. Methodology: The questionnaires were applied to 10 major export industries in the southern region of Brazil, which were selected according to the following criteria: 1) gross annual operating revenue of more than 94 million dollars (BNDS); 2) be among the 50 largest Brazilian exporters (MDIC); 3) founded by the local capital of the southern region of Brazil; and 4) have manufacturing units abroad. Thus, we reached a group of 10 companies: Cvale, Weg, Tigre, Tupy and Duas Rodas Industrial, Gerdau, Randon, Marcopolo, Fras-le and Taurus.

The large exporters adopt internationalization as a way of expanding their consumer market when the domestic market is saturated or with production absorption problems. As a consequence, the companies that follow this path tend to be more resilient to the localized economic variations and crises, as, for example, the one that crosses Brazil in the present moment - coup d'etat.

The most recurrent countries to which these large South American companies are seeking integration through the installation of factories are the United States, Argentina and Mexico.

Another point that stimulates the displacement of the productive activities of these companies to different countries of the world is the notorious cost-Brazil. The interviewees of these multinationals frequently complain about the exacerbated bureaucracy that afflicted their operations.

Transforming Bangladesh

Raajib Ahmed - University of Cologne | **Boris Braun** - University of Cologne | **Gregor Falk** - Freiburg University of Education

Bangladesh is transforming fast, from a rural subsistence agrarian based economic system to a new mixed complimentary contributing economic partner to global processes. This is an example for the changes in global south where a mismatch is often observed in linking resource – activities – environment – sustainability, perhaps due to insufficient base-line knowledge. The proposed book attempts to use academic approach to understand real-time problems. Bangladesh is approaching to a vulnerable situation of environmental degradation and raising a question of sustainability of resource exploitation as faster growth is marginalizing resources for increasing GDP, where threats are imminent from possible sea-level rise, soil degradation, biodiversity loss, threat of climate extremities, urbanization and population displacement. Despite population growth Bangladesh attained food self-sufficiency, at the same time agricultural land is decreasing - indicate increasing intensity of land use resulting transformation process more competitive. The concept of chapterization is replaced by “Part” as the issues inside are not really sequential, rather interlinked horizontally. There are tentatively 18 Parts covering altogether 75 issues to be contributed by individual authors. Setting of Parts and selection of issues is expected to represent wide range of physical issues, issues related to transformation process, climate change aspects and policy issues, where possibilities are shown in informative way, but obviously based on research based understanding of authors. The target of the book is to help academics and activists engaged in environmental studies/science, development activities, social scientists, NGO activists, and foreign agencies who are engaged in development issues but readily need comprehensive knowledge about Bangladesh. The goal of the proposed book is to open up windows for readers and help further investigate the issues and widen knowledge frontier, where the proposed book may work as a step.

Economic Geography - Contemporary Topics, Relevant Discussions, and Essential Insights III

Innovation, job creation and inequality: theoretical and normative implications for the study of less developed European regions

Pedro Marques - INGENIO (CSIC-UPV) | **Kevin Morgan** - Cardiff University

Innovation is now at the core of theories and policies that seek to understand and address the plight of less developed regions (LDRs). Though it is true that at the national and international scales innovation and technological progress have been key to raising productivity and living standards, there is mounting evidence that innovation activities by themselves cannot solve territorial inequalities. In fact, they can contribute to exacerbate these inequalities, both due to the pull effect of the most advanced regions on resources (knowledge, labour or capital) and the push effect that investing in innovation in LDRs can have. This pull effect can be seen for example in the out-migration of skilled labour, or in the relocation of promising firms from LDRs to core regions. This paper will address these issues while also engaging with emerging literatures on the impact of ICTs and robotisation on jobs and inequality. It will argue that these debates lack a spatial dimension, which would help to understand their full impact on development and inequality. Finally, this paper will also draw out some normative implications for local and regional development approaches. It will argue that the competitive and hierarchical view of regional development, where LDRs are encouraged to both compete with each other and to measure themselves against top performers, is misguided and self-defeating. The paper will review emerging alternative approaches to local and regional development, that rather than deny the value of innovation, understand it as one dimension of development policies which seek to reduce inequalities and improve the well-being of citizens.

Economic demography in Spain: regional differences and international inequalities

Ana Gutiérrez Sanchis - Pontifical University of Comillas

Spain is positioned between developed and developing countries within a globalized and unequal world, connecting Europe with Africa and Latin America. This position is attractive for the demographic dynamic of migrations: one of the biggest challenges for Europe. Economic crisis has strongly affected the most of Southern European countries, being Spain one of them. Although there are many similarities between European countries, Spain is a country in which regionalisms are strong and there are important differences between regions for demographic and economic dynamics. This research shows these differences through economic geography that takes an essential role for the analysis of inequalities. For example, the proportion of foreigners in 2017 is positioned from 2.94% in Extremadura to 19.27% in the Balearic Islands. The fertility rate during 2016 was from 1 child per woman in Asturias to 2.5 in Melilla and the gross mortality rate fluctuated from 5.74 in Melilla to 12.73 in Asturias. Looking at the

unemployment rate, as relevant economic indicator, varied from 9.63 in Navarra to 25.12 in Extremadura according to the data from 2017. Some of these regional differences and inequalities will be analysed in terms of demographic dynamics and economic growth considering the geographical differences of each area and its influence on economic sectors.

Competitive versus generative approaches of regional economic development: forecasting regional growth paths in Hungary

Zsuzsanna Zsibók - Hungarian Academy of Sciences Centre for Economic and Regional Studies

This research studies regional inequalities as a persistent feature of the Hungarian economy through investigating the methodologies of long-run regional economic forecasting. The preferable territorial scale for the long-term forecast is the NUTS 2 level, although, regional data are also available at NUTS 3 level. Regional economic modelling is well established in a few Hungarian scientific institutions, however, these practices primarily focus on impact assessment. At the same time, economic forecasts are available only at the macro level for Hungary, therefore, I intend to fill this gap by proposing a method to produce regional level forecasts.

There is no clear consensus in the literature about the question whether a theory-driven, structural model or a data-driven, econometric model performs better in economic forecasts. There are two basic approaches to producing regional-level economic forecasts. Bottom-up or generative models are full-fledged regional models with well-established interregional feedback mechanisms. Their major drawback is the great data requirement and the size of the model. Top-down, distributive or “satellite” models forecast regional growth given the forecast of the national variables obtained from macro models. These methods allocate regional growth across the regions in a competitive manner according to a certain, e.g. statistical, rule.

The aim of my research is to select a suitable methodology mix to forecast regional level growth, employment and population on Hungarian data at a longer horizon according to the distributive (top-down) approach. I intend to present that there is a trade-off between the resource requirement and the reliability of the model results, and top-down modelling approaches are filling a niche in this respect. This exercise suggests that a combination of different forecasting techniques, both structural and econometric, may be useful to arrive at a plausible model based on the Hungarian regional data.

Correlation between the economic cycle and the emergence of derelict areas: the case of Slovenia

Simon Kušar - University of Ljubljana

In Slovenia, the identification of derelict areas conducted in 2016 and 2017 showed that there were 1081 locations of abandoned or partly abandoned areas covering almost 3500 ha of land, previously occupied by various economic activities. The spatial and environmental characteristics of these functionally derelict areas were addressed by the model, which defined the priority areas for their reactivation. However, the economic mechanisms that influenced the emergence of these areas have not been studied so far, neither in general nor for the individual regions of the country. Studying the economic impact would enable to reveal a complex process of the emergence of functionally derelict areas.

In the presentation, the connections between the time of emergence of functionally derelict areas and the phase of economic cycle in Slovenia will be shown for the period after the year 2000, when the new economic cycle started. Since each phase of the economic cycle is characterized by a specific combination of various economic indicators, which describe the structural changes in the national economy, the present study will indicate a specific set of economic factors influencing the emergence of functionally derelict areas in Slovenia. Additionally, the location and structural analyses will be conducted. First, the differences in the development trajectory of the individual regions will be considered. Second, the types of functionally derelict areas which have emerged in the specific stages of the economic cycle will be studied.

Panel session

Economic geography: from fragmented pluralism to an integrative paradigm?

Robert Hassink - Kiel University | **Huiwen Gong** - Christian-Albrechts-Universität zu Kiel

Over the last twenty years, modern economic geography has been increasingly fragmented concerning its themes, on the one hand, and its schools of thought, perspectives and paradigms, on the other. Concerning the latter, we have currently no fewer than four paradigms in the relatively small sub-discipline: Evolutionary Economic Geography, Relational Economic Geography, Institutional Economic Geography and Geographical Political Economy. Most of these paradigms are highly influenced by economics, in particular by heterodox economics, a fuzzy and heterogeneous group of approaches that mainly shares a critical stance to mainstream economics. Although there have been arguments in favor of engaged pluralism, what we see in reality is mainly fragmented pluralism. In this sense, Rigby's call for papers for the last Global Conference on Economic Geography in

Oxford in 2015 speaks volumes: “There are no central questions, canonical methods or privileged ways of knowing. This is economic geography!” Fragmented pluralism can be problematic for the identification with the sub-discipline and the exchange with neighboring social disciplines. The panel session aims at discussing, first the reasons of fragmented pluralism, and secondly, potential solutions to solve this problem. These potential solutions include engaged pluralism (Barnes and Sheppard, 2010), the domination of one of the existing paradigms, such as geographical political economy (Peck, 2015) or the launching of an integrative paradigm of economic geography (Hassink and Gong, 2017). By approaching both representatives of the different paradigms as well as some observers of the overall sub-discipline, we expect a lively, relevant and badly needed debate about economic geography’s state of the art, core and identity.

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Economic geography: from fragmented pluralism to an integrative paradigm?

Kendra Strauss - Simon Fraser University

Panel speaker

Unity in diversity: what kind of economic geography for what kind of global economy?

Henry Yeung - National University of Singapore and GPN@NUS Centre

In this panel presentation, I will discuss briefly how economic geographers can unite in our purpose of analyzing and informing global economic change and its multifaceted impact at different geographical scales. This unity can be achieved if a sharper focus of economic-geographical analysis can be ascertained, even though a unified theoretical perspective is not necessary and preferred. In this sense, I am advocating unity in diversity in the kind of economic geography better attuned to tomorrow’s changing global economy.

Contribution to panel session: Economic geography: from fragmented pluralism to an integrative paradigm?

Michael, Storper - London School of Economics

Panel speaker

Rethinking Economic Geography: The Case for and Against Conceptual Pluralism

Ron Martin - University of Cambridge

In this brief panel contribution I first make a case for why we need a rethinking of economic geography for the 21st century, and then, second, suggest that as part of this rethinking we need to give careful thought to the role, scope and the limits of conceptual and methodological pluralism. While certainly not advocating any singular theoretical monism or ‘grand theory’, what is needed, I suggest, is a ‘grounded pluralism’, that is an encompassing approach in which different conceptual and theoretical ideas should be ‘grounded’ in some agreed set of basic organising principles (‘big structures and large processes’), to which those different concepts and narratives can contribute explanatory content, while simultaneously deriving their own meaning and the role they play in understanding the whole.

NEW APPROACHES IN ECONOMIC GEOGRAPHY, EXISTING APPROACHES REVISED II: MATERIALITY AND ECONOMICS OF THE BODY

Session

Materiality in Economic Geography

Fabian Faller - Kiel University | **Susann Schäfer** - University of Jena

The debate on conceptualizations and methodologies of the ‘material’ in human geographical research is one of the current ontological and epistemological issues in the field (Bakker und Bridge 2016; Gibson 2015). Economic geography experienced an import of social theories which consider materiality as an important element in the constitution of the social and economic world (e.g., practice theories, Actor-Network-Theory, assemblage theory). For example, practice theorists refer to practice-arrangement bundles (Schatzki 1996), Actor-Network-Theory uses the notion of the non-human actor (Latour 2005), and assemblage theory considers objects (Landa 2006). Consequently, it is an important question how materiality can be translated into economic geographical research, and whether and how paradigms and theories in economic geography (e.g. Evolutionary Economic Geography, Relational Economic Geography, Institutional Economic Geography, Global Production Networks, cluster research, regional development) can benefit from this extended perspective. In order to discuss conceptualizations of materiality in the context of economic geography and their implementations, the organizers invite both theoretical and empirical paper.

The material agency of technologies: How technology shapes the spatial evolution of multi-branch firms.

Karl Häfner - Universität Tübingen

This Paper examines how new technologies influence the stability and change of organizational routines within a large multi-branch firm and consequentially the latter’s spatial evolution. The aim is to foreground how the materiality of technologies affects evolutionary processes, an issue which is usually hardly accounted for in economic geography. Commonly, the impact of technology on economic relations is either implicitly taken to be deterministic or solely treated as (embodied) knowledge and thereby examined as a matter of social interaction (a notable exception are various kinds of transition studies, which are usually not interested in the wider organizational changes within firms however). This paper tries to explore a different approach, based on recent developments in organizational studies, which emphasize the importance of material artefacts for the development of organizational routines. It employs the concept of sociomateriality and the notion of material agency (the capacity of non-human entities to frame action through their performativity and affordance) to investigate the interplay of technology and organizational routines.

To show how the material agency of technology is expressed in practice, the paper investigates the introduction of punch card machines and (mainframe) computers in the Allianz insurance corporation from the mid-1950s to the early 1970s. Based upon a rich body of documents from the Allianz’s archive and complementary sources, it is shown how these new technologies had a fundamental, unforeseen and emergent impact on the organizational routines, power relations, and employment structures within and between the various Allianz branches, which can only be understood if we account for the material agencies of the technologies. Finally, the paper tries to generalize the effects of technological shifts on the spatial organization of multi-branch firms and calls for a stronger focus on the role of materiality in evolutionary processes.

Public libraries in the face of digitization

Katja Thiele - Universität Bonn

Digital technologies are not only relevant in business and entrepreneurship, but are also changing the provision of public services. Public libraries are an especially interesting example, as they are affected by digitization both through new forms of services and with regard to their organization and service provision.

As part of social infrastructures, they contribute to educational justice and therefore are an essential subject of communal and national educational politics and discourses, which are guided by values and norms regarding the provision of public service and welfare. As voluntary communal service and in view of scarce financial resources and austerity policies, however, they increasingly have to justify their services and structures and organize them more economically. It is in this situation that digitization provides both a challenge and an opportunity. As a result, public libraries have for many years been in a process of restructuring, in which digitization plays a key role and which changes service provision with respect to central versus decentralized structures.

For economic geography, public libraries provide a new research topic, which can help to develop the so-far neglected research on social infrastructures and digitization both empirically and conceptually. By looking at the example of Bonn in Germany, the paper will address the ways in which digital technology shapes public libraries, their services and organization and explore the implications that these changes have on service provision and educational justice. Based on this empirical case study, I will draw tentative conclusions regarding the manifestations and implications of digitization in the field of public services in general.

How large are road traffic externalities in the city? The highway tunneling in Maastricht, the Netherlands

Joep, Tijm - CPB Netherlands Bureau for Economic Policy Analysis | **Thomas Michielsen** - CPB Netherlands Bureau for Economic Policy Analysis | **Raoul van Maarseveen** - Uppsala University

Infrastructure projects are increasingly aiming to improve liveability, in particular in urban areas. We analyse a specific case in which an existing highway in the centre of an urban area was moved underground in order to improve intercity traffic flows and to reduce the traffic externalities. As travel times within the city hardly changed, this allows for a clean identification of the value of traffic externalities. We find that the liveability benefits of such integrated infrastructure are substantial relative to the construction costs. Each halving of distance to the tunneled segment is associated with 3.5% more appreciation in house prices since the start of the project.

Bridging Innovation

Basheer Kalash - University of Luxembourg | **Olof Ejermo** - Lund University | **Katrin Hussinger** - University of Luxembourg; KU Leuven | **Torben Schubert** - Lund University ; Fraunhofer Institute for Systems and Innovation Research ISI

This paper analyses the impact of Öresund bridge, a combined railway and motorway bridge between the Swedish city of Malmö and the Danish capital Copenhagen, on the knowledge production of Malmö region. Using a difference in difference approach, we find that inaugurating the bridge has led to an increase in Malmö's patents compared to Goteborg and Stockholm, the other two main regions in Sweden. The preeminent mechanism behind this increase in knowledge production, is the matching force of agglomeration. Our preliminary results, show that the increase in patent productivity is coming substantially from workers who changes employer within the region after the opening of the bridge. We do not find evidence for a positive effect of newcomers to the region.

Session

New Economies of Health and Body

Iris Dzudzek - Goethe-University Frankfurt | **Peter Lindner** - Goethe-University Frankfurt

In recent years health and the body have been subject to new modes of economization to an unprecedented degree. Broadly speaking, four closely interrelated drivers of this development can be identified:

- 1) Technoscientific advances in the fields of microbiology, genetics, epigenetics and transplantation medicine which increasingly allow for modification of what Nikolas Rose has called "life itself";
- 2) New mobile sensor-software technologies and 'wearables' which foster the optimization and economization of bodily behaviour;
- 3) Increased mobility in the fields of medicine and healthcare comprising e.g. the circulation of patients, health professionals, body parts, pharmaceuticals, reproductive technologies and healthcare services, often taking advantage of differing national or international regulations.
- 4) Preparedness and risk-reduction programs with regard to global health threats such as Ebola and malaria, involving state agencies, private companies and non-governmental organizations.

These processes have led to the emergence of new relational, transnational and unequal frontiers of economization and efficiency-oriented modifications of the self involving the renegotiation of ethical standards and biopolitical regulations. We invite the submission of abstracts that address these developments, critically question their implications, and think beyond the established spatial approaches of medical geography.

The urban poor and the economisation of health

Emma Laurie - University of Glasgow

Biopolitics has always consisted of two sides; making live and letting die (Foucault 1978). While the work of Nikolas Rose (2007) has brought Foucault's thinking into the 21st century, attention has been focused on how life is fostered within this biopolitical regime, proclaiming that 'the very borders between life and death ... have become so open to negotiation and dispute ... biology is no longer destiny' (p. 253). Just as Foucault's writing maintained a Eurocentric focus, the work of Rose similarly concentrates on the management of life within advanced economies and it is from this geographical context that Rose can afford to make his optimistic proclamation. He, does, however, make a fleeting concession to the inequality inherent in the world and the lives 'curtailed by factors that have little need for fancy genomic medicine and neurogenic ... There is a politics of life here too' (Rose 2007, 254-255). Of course, this politics is not separate from techno-scientific advancements. The fostering of life for some, comes with it the disavowal of life for others. For the world's poor are embedded in the same systems: they are at the mercy of the same pharmaceutical system that provides technological breakthroughs for some, but at the expense of developing drugs for diseases of poverty that offer little profit, or places vital medicines out of financial reach. This paper aims to consider the economizing of health and the body from the perspective of the urban poor in Tanzania. Utilizing malaria as a disease specific entry point, it aims to situate experiences accessing health care and drugs in this global system. I will disclose how their experiences of (ill)health is coloured by the economization of health and the body, and even their attempts to 'cope' and finance treatments are subject to economic review to determine their successes.

Reading for Greater Difference in the Diverse Economies Debate – Diffractions of Traditional Herbal Medicines in Thailand

Iris Dzudzek - Department of Human Geography

The paper introduces diffractive reading to economic geographic thinking and suggests to add a further understanding of what diversity can mean in the debate about diverse economic practices and their geographies. Drawing on field work in Thailand the paper shows how free trade policies and protection of traditional knowledge and biological diversity acts have reconfigured traditional herbal medicine heavily in recent years. These regimes do not simply work differently – one as opposed to the other – but diffractively. That means both regimes coevolve in interaction. Diffractive reading helps to understand how capitalistic and non-capitalistic practices co-constitute in transnational and relational geographies and allows to read for greater difference in the diverse economies debate.

“The system remembers everything!” Self-Tracking as medialized but intimate perception of health

Anke Strüver - University of Hamburg

This paper focuses on the users of information and communication technologies, i.e. on those people who actively use digital technologies and smart connectivities (wearables such as smartwatches or fitness trackers) in their everyday life, especially to track, 'normalize' and compare bodily activities and health parameters. These users are addressed as "smart producers" and "smart selves".

Next to a brief discussion of the interrelations between digital environments (the home, public spaces) and smart selves, the contribution concentrates on the questions to which extent these spatial environments (1) are produced by smart technologies in interaction with people's practices and (2) influence smart producers' health and fitness perceptions.

Empirical indications drawn from a case study among fitness communities in Hamburg, Germany stress the various forms of self-digitization and self-management with the objective of health optimization. Special emphasis in its analysis is put on the effects of technologies on human bodies using smart devices and moving in various everyday spaces on the one hand and on the interactions between smart environments and smart selves on the other.

The digital genetic counsellor – forms of subjectivity and government in automedial practices

Tilman Treier - Goethe-Universität

Genetic discourses in today's individualised bioeconomy invoke a common claim: „know yourself“. An example for this is the company 23andme, which sells direct to consumer genetic tests for 200\$ literally with this slogan. My research project focuses on the forms of subjectivity that are implied by this invocation. In the course of my work, I analyse the visual representations of

23andme, as well as those of their customers, many of which share their test results on YouTube. Not only do they want to know more about their genetic predispositions, but they do also feel the urge to speak about their life in the light of their findings through a public medium. As an automedial practice this phenomenon leaves – although structured by the media dispositiv YouTube – a contingent space for self-representation beyond determination. The open questions are how the customers subject themselves and which forms of government of and care for their genetic self they apply to the knowledge they obtain. My presentation specifically addresses the question which transformations the regime of subjectification undergoes in the rearticulation by the customers compared to the one mediated by 23andMe.

Session

Methodological Approaches in Economic Geography

Martina Fuchs - University of Cologne

Measurement of time-distance accessibility: Theoretical basis and application to the Seoul bus system

Keumsook Lee - Sungshin Women's University | **MooYoung Choi** - Seoul National University | **Segun Goh** - Heinrich-Heine University Düsseldorf | **Ji-Hye Lee** - Seoul National University

The concept of accessibility plays a significant role in urban geography, providing a framework to quantify the opportunities for interaction. So far, various measures of accessibility have been suggested, depending on the specific data available or application purpose. Meanwhile, due to the advancement in smart media which can collect accomplished travel data, it is now possible to consider precisely time-distances between locations in urban areas. In this study, we investigate the meaning and relevance of different accessibility measures and apply them to the Seoul bus system, which consists of more than 10,000 bus stops. Accessibility of each bus stop is computed through the use of an algorithm to extract the actual time-distances from smart card data, taking into account various possible trajectories via transfers between transportation modes. In particular, the introduction of a cut-off distance unveils effective connections between locations and consequently, global and local structures of the urban system. A theoretical basis of the accessibility is discussed also in connection with the strengths of bus stops, which quantify corresponding passenger flows. It is concluded that the time-distance accessibility based on the empirical data captures successfully the urban land use pattern and is thus expected to be useful in urban planning.

Web mining and Geography: Big Data Analysis of the German Interurban Coach Market

Sascha Jackisch - LMU Munich | **Marion Karl** - LMU Munich

In 2013 the interurban coach market, which was highly regulated before, has been liberalised. Within one year after the liberalisation, not only the amount of competitors and the quantity of offered routes multiplied and the network coverage expanded, but also the number of passengers transported increased significantly (Evangelinos et al., 2015). The resulting new and expanding market segment is highly digitalised and therefore an ideal research object for big data analysis. While spatial and temporal price discrimination are comparatively well researched (e.g. for low-cost carrier airlines), there are only a few supply-side considerations on interurban coach market in general and even less for Germany in particular. Moreover, these supply-side considerations have been mainly theoretical and empirical approaches are rare (Dür and Hüsichelrath, 2015). For this reason, this article illustrates the methodical and technical steps that are necessary to obtain a unique dataset on variables such as price, frequency and number of providers for each route offered – using the German interurban coach market as a case study. Based on Kosala and Blockeel's (2000) subtasks for web mining, each task from resource finding, information selection, data collection via web mining, data plausibility to data evaluation and data presentation is introduced. To collect data, an automatic web scraper is developed which continuously requests and processes data for 587 selected routes in Germany from an online search engine for interurban bus travel. Using this market intermediary as a source, a dataset is produced consisting more than two million observed trips over a year, that can be further used for quantitative analysis of the market segment. Different opportunities for the application of this methodical and technical approach in tourism and mobility research are outlined. Furthermore, the legal and ethical aspects of the methodological approach considering big data acquisition through web mining are discussed.

Using Geospatial Technologies to Measure the Spatial Proliferation of Variety Stores in Rural North Carolina, United States

Timothy Mulrooney - North Carolina Central University

Negative health-related outcomes related to obesity and poor diet are quickly approaching epidemic proportions in the United States. These outcomes can be tied directly to the quality and quantity of the food Americans consume. One facet in the study of food deserts and food swamps is a measure of food availability. Geospatial technologies such as GIS (Geographic Information Systems) are used to derive increasingly complex measures between sources and store locations. While most literature on the subject is centered on urban regions, burgeoning research is focusing on rural regions since the dynamics that shape rural food insecurity differ from urban counterparts.

Large supermarkets are relatively scarce in rural regions. In Guilford and Alamance Counties in Central North Carolina, 66 of 69 large supermarkets are located in urban regions. Variety stores such as Dollar General have begun to fill this spatial void as a potential source of fresh food since they provide staples such as eggs, milk and bread. In the same study area, the number of Dollar Generals has increased from 26 to 43. Of these 17 new stores, over half have appeared in rural areas.

In this study, GIS technologies are used to explore the spatial proliferation of variety stores such as Dollar General throughout rural regions of the North Central Piedmont Region of North Carolina. Using high-scale geospatial data, rural areas in this study area can be mapped across space in concert with these variety stores and other explanatory factors. GIS networking and overlay techniques are used to explore to what extent variety stores address the spatial problem of food deserts in rural regions, which take into account both proximity (to healthy food) and poverty components. This can have a profound effect on how and why some of the region's most marginalized rural residents value and procure food.

Interpretation accuracy test in the framework of producing the detail topographic map in Indonesia (case: topographic map of Puncu, Kediri, East Java, Indonesia)

Theresia Wulan - Geospatial Information Agency | **Wiwin Ambarwulan** - Geospatial Information Agency | **Sri Munajati** - Geospatial Information Agency

Topographic maps are maps used as a basis for thematic mapping in Indonesia. A step to do a good land use planning is to produce of spatial data with high accuracy. The purpose of this study is to test the accuracy of the interpretation of earth's element on a scale of 1: 5,000. The basic data used are High Resolution Satellite Imagery (CSRT) with a value of 0.5 meter per pixel. Land use on a scale of 1: 5,000 is classified into 27 classes. The basic data used are High Resolution Satellite Imagery (CSRT) with a value of 0.5 meter per pixel. Land use on a scale of 1: 5,000 is classified into 27 classes. The interpretation of CSRT is carried out by 17 interpreters with equal ability and equipped with technical interpretation instructions for obtaining uniform results. Interpretation results are printed per map sheet number for field test. The test method using confusion matrix method. Field testing was conducted for a full month and was done by population method. Based on the results of field testing obtained the value of omission 98.2% and commission value 1.7%.

Common mistakes in interpretation are caused by biased colours and confusing associations. This is often the case in Indonesia because some locations in Indonesia are unique in land use associations. Overall accuracy value reached 98.8%. The value has met the exactness of the map set by USGS (> 85%).

SUSTAINABLE DEVELOPMENT I: CIRCULATION AND INITIATIVES

Session

Nexus thinking and metabolism in economic geography

Alexander Follmann - University of Cologne | Kim Philip Schumacher - University of Vechta

Relatively little attention has been paid to conceptualize environmental aspects within economic geography's debates on chains and networks (cf. Bridge 2008, Bush et al. 2015, Schmitt & Schulz 2016). However, economic geographers have much to contribute to questions of sustainability. The study of resource flows and their economic geographies is important to understand society-nature relations. In this context, nexus thinking has attracted increasing interest and debate within geography (e.g. RGS 2016 Nexus Thinking Conference) and the notion of metabolism has also seen a revival in geography and neighbouring disciplines (Newell & Cousins 2014), but also among policy-makers. Nexus thinking and recent metabolism approaches call for an interdisciplinary and transdisciplinary approach to link often separately understood resource systems and flows to socio-ecological challenges and questions of unequal development. This session invites papers addressing resource flows, nexus thinking and metabolism in (environmental) economic geography within a broad range of topics including urban and regional development, land use conflicts, conservation, agriculture, (renewable) energies, among others. We aim to foster a conceptual debate but case-study-based papers are also very much welcomed. Bridge, G. (2008) 'Global production networks and the extractive sector: governing resource-based development'. *Journal of Economic Geography*, 8(3), pp. 389-419. Bush, S. R., Oosterveer, P., Bailey, M., & Mol, A. P. J. (2015) 'Sustainability governance of chains and networks: a review and future outlook'. *Journal of Cleaner Production*, 107, pp. 8-19. Newell, Joshua P.; Cousins, Joshua J. (2014) 'The boundaries of urban metabolism: Towards a political-industrial ecology'. *Progress in Human Geography*: pp. 702-728. Villarroel Walker, R.; Beck, M. B.; Hall, J. W.; Dawson, R. J.; Heidrich, O. (2014) 'The energy-water-food nexus: Strategic analysis of technologies for transforming the urban metabolism'. *Journal of Environmental Management* 141: pp. 104-115. Schmitt, T., & Schulz, C. (2016) 'Sustainable resource governance in global production networks. Challenges for human geography'. *Erdkunde*, 70(4), pp.297-312

The Energy, Land and Society Nexus: Socioecological Fix of Wind Energy Project in India

Siddhartha Dabhi - University of Exeter

The literature on nexus thinking has largely focussed on the water-energy and water-energy- food nexus and the technocratic solutions to achieve sustainable development (Walker et al, 2014; Ringer et al, 2013; Biggs et al, 2015). This paper analyses the energy, land and society nexus in the context of renewable energy projects which are considered to have an extensive land footprint. Within the scholarship on renewable energies, little attention has been paid to spatialities required to produce energy (Huber and McCarthy 2017; McCarthy, 2015; Dabhi and Böhm, 2015). This is more so important, because large scale renewable energy projects will invariably be located in rural areas, more so in developing countries where land rights are problematic and people's livelihoods are more dependent on land.

This paper studies Oil and Natural Gas Corporation's (ONGC) wind energy project in the state of Gujarat in India and analyses it in the context of its environmental and social impacts, its contribution to sustainable development and its place in broader discussions around energy security, energy transition and climate change. For an analysis of the ONGC's project, the study draws upon the field data collected through ethnographic and Participatory Rural Appraisal (PRA) tools, and supplements this with technical reports, project documents and other secondary literature.

Socioecological fix, as an emerging concept in the critical geography literature (Ekers and Prudham, 2017; McCarthy, 2015), informs us that capital, in order to overcome its political, economic, ecological and legitimacy crises, invests in new production of spaces through so-called green investments.

This paper aims at contributing towards the emerging literature on socio-ecological fix and nexus thinking by throwing light on the 'metabolic rift' (Foster, 1999), which causes negative socio-economic and ecological impacts in rural areas, when large scale renewable energy projects are implemented in uneven geographies (Harvey, 2006).

Rural versus Urban: Collapsing the Discrete Waterscape of Udaipur

Neha Singh - IIT Bombay

In studying urban and rural spaces, there is a known and familiar narrative which dominates the development discourse where the binaries are created by juxtaposing one against the other, the core versus the periphery. But the question arises that are these binaries

the only way to examine the rural and urban and the flows as well linkages between them? Can we problematize this dichotomous understanding and re-examine the underlying assumptions?

This paper attempts to answer these questions by examining the case of Udaipur in western India where water transfer schemes are operating to quench the thirst of expanding urban space. The tentacles to fetch water have stretched beyond the city boundaries to explore and meet the urban demands. This paper illustrates that these diversion schemes present a complex relationship between the rural and urban where these spaces are not discrete but have overlapping boundaries, not merely geographical but also in terms of equity and access. Instead of looking at these two spaces as distinct we focus on the interlinkages, connections, and relationships between them. In doing so, the question arises - what is gained? Yes, it does gain when we adjust the lens to examine such terrains. The ever-evolving interactions, and linkages between the urban and rural becomes crucial as they open the possibilities where instead of seeing them as discrete spaces they can be seen as a continuum of flows and transformations. Usually most of the studies explore either of them, overlooking the potential in such implicit and explicit relationships as well as ruptures connecting the two spaces. Using the register of water transfer we encounter this spatial/ socio configuration where the urban and rural boundaries collapse as the area witnesses transformed relationships which evolve due to such dependence, exchange and flows in a newly configured -waterscape-socio natural assemblage.

Meat and manure from the Oldenburger Münsterland – the Potential of the Global Production Networks Approach for Analysis of the Water-Energy-Food Nexus

Martin, Franz - Universität Osnabrück | **Nicolas Schlitz** - Universität Osnabrück | **Kim Philip Schumacher** - Universität Vechta

The interrelation of the water-energy-food (WEF) nexus and processes of globalization have to be understood thoroughly, in order to address social inequalities and the depletion of natural resources. However, unravelling the complexities of the WEF nexus in the context of globalization poses conceptual and empirical difficulties. Economic globalization, e.g. through transnational trade and foreign direct investment, results in a global conjunction of actors, interests and impacts, strongly affecting patterns of resource extraction and local capabilities for its governance. In environmental economic geography the value chain approaches have proved useful for the analysis of interrelations between governance structures, value, institutional contexts and the consumption of resources. In this paper we discuss the potential of the global production networks (GPN) approach for the analysis of society-environment interrelations in the context of the WEF nexus and processes of globalization. To illustrate our argument we use the case of liquid and solid manure and digestate as a result of meat production in the northwest of Lower Saxony in Germany. The region is the center of livestock farming in Germany. This is connected to the growth of an agribusiness cluster which is integrated into a transnational network of animal producers, feedstuff producers, meat processors and other actors. The subsidies for renewable energies added a successful development of biogas production. Both developments result in a high production of manure and digestate. In several districts the amount of manure exceeds the available agrarian land for an ecologically justifiable deployment, endangering the groundwater quality. This has led to the establishment of an energy-intensive intra-regional export system. The case is an example of the three-way-mutual interactions among food, energy and water. The analysis will combine the perspective of the WEF nexus with the GPN approach to provide nuanced understanding of global interrelations of a regional agri-food production cluster.

Inventories and reduction scenarios of urban waste-related greenhouse gas emissions for management potential

Lingxing Xu - Chinese Academy of Sciences | **Dewei Yang** - Chinese Academy of Sciences

Waste-related greenhouse gas (GHG) emissions have been recognized as one of the prominent contributors to global warming. Current urban waste regulations, however, face increasing challenges from stakeholders' trade-offs and hierarchic management. A complementary method, i.e., life cycle inventories and scenario analysis, was employed to investigate waste-related GHG emissions during 1995–2015 and to project future scenarios of waste-driven carbon emissions by 2050 in a pilot low carbon city, Xiamen, China. The process-based carbon analysis of waste generation (prevention and separation), transportation (collection and transfer) and disposal (treatment and recycling) shows that the main contributors of carbon emissions are associated with waste disposal processes, solid waste, the municipal sector and Xiamen Mainland. Significant spatial differences of waste-related CO₂e emissions were observed between the Xiamen Island and Xiamen Mainland using the carbon intensity and density indexes. An uptrend of waste-related CO₂e emissions from 2015–2050 is identified in the business as usual, waste reduction, waste disposal optimization and the integrated scenario, with mean annual growth rates of 8.86%, 8.42%, 6.90% and 6.61%, respectively. The scenario and sensitivity analysis imply that effective waste-related carbon reduction requires trade-offs among alternative strategies, actions and stakeholders in a feasible plan, and emphasize a priority of waste prevention and collection in Xiamen. Our results could benefit to the future modeling of urban multiple wastes and life-cycle carbon control in similar cities within and beyond China.

Session

Natural hazards, adaptation and regional development

Simone Sandholz - United Nations University | **Javier Revilla Diez** – University of Cologne | **Thomas Neise** - University of Cologne

Many parts of the world are characterized by an increasing risk of disasters, e.g. from floods or droughts, driven by the overlapping effects of environmental degradation, climate change, rapid urban expansion and agricultural intensification. These developments can affect the economic competitiveness of local businesses and entire regions. Particularly in emerging economies, disasters have the potential to jeopardize hard-won development progress. However, the question arises whether the increasing intensity and frequency of natural hazards can also trigger new and more sustainable regional development trajectories as they initiate adaptation and transformation processes.

The session, therefore, contributes to the conference by discussing how natural hazards and the adaptation to them might influence regional development. So far, the conceptual and empirical interest on adaptation and resilience within economic geography mostly applies to studies on economic crises. Research on the question how regions respond to natural hazards and environmental change is far less prominent. This is striking given that issues of private sector engagement to disaster risk reduction, climate-friendly innovations or hazard-affected supply chain disruptions – to only name a few relevant topics – show the explicit links between economic geography and geographical disaster risk research.

Therefore, this session integrates theoretical and empirical contributions in order to open an innovative and promising avenue for economic geography: the links between adaptation to natural hazards and regional development. Contributions addressing this link with a perspective on path dependency, innovation systems and adaptation governance are particularly welcome.

Natural hazards, adaptation and regional development I

Firms' adaptation to floods and consequences for regional development trajectories – Insights from Jakarta and Semarang

Thomas Neise - University of Cologne | **Javier Revilla Diez** - University of Cologne

Coastal cities in the Global South, for example in Indonesia, are severely exposed to environmental hazards (e.g. to floods, coastal erosion and typhoons) that also affect the competitiveness of firms. However, state authorities are oftentimes overstrained to provide adequate flood risk reduction measures to ensure a sustainable regional development. Firms, therefore, are forced to adapt individually in order to enhance their competitiveness and support the provision of large-scale adaptation measures through collaborative adaptation together with other firms, the community, NGOs and state authorities. It is argued that the outcome of firms' individual and collective adaptation can shift the trajectories of regional development into different directions.

This presentation shows empirical results whether and how manufacturing firms adapt to floods in the Indonesian coastal cities Jakarta and Semarang. Through in-depth interviews, it is reviewed how firms adapt individually to floods and examine the willingness to engage in collective adaptation. The interviews show that firms face difficulties in modifying their long-established organizational routines in order to respond effectively to the increasing exposure to floods. Moreover, it is revealed that particularly the engagement of micro, small and medium-sized enterprises (MSMEs) in collective adaptation is very limited. Therefore, scenario-based experiments with 120 decision-makers of MSMEs were applied as a second empirical research approach. The scenario-based experiments examine which individual and contextual factors facilitate the willingness to engage in providing collective large-scale flood risk reduction measures. The results of both empirical analyses are used to detect how trajectories of regional development in the context of the exposure to floods might change in Jakarta and Semarang.

Overall, this study presents conceptual and empirical approaches how economic geography can contribute more strongly to the interaction between regional development and the adaptation to environmental hazards.

Firms' exposure to flood hazards in Ho Chi Minh City, Vietnam

Roxana Leitold - University of Cologne | **Javier Revilla Diez** - University of Cologne

As the latest IPCC report (2014) postulates, the risk of flooding in coastal megacities is rapidly rising. Ho Chi Minh City (HCMC), the largest city and economic powerhouse of Vietnam, provides an appropriate example for a location facing manifold challenges due to its multi-hazard risk and notably high levels in current and future flood exposure. On top of the already existing and recurring flood events, the city faces an increase in the frequency and intensity of pluvial and fluvial flooding as well as already occurring sea level rise. Additionally, the city is confronted with an ongoing process of rapid industrialization. Hence, multiple local effects

are induced, e.g. the emerge of private businesses within the (peri-)urban area. Particularly manufacturing firms are at the frontline in terms of loss and damages caused by flooding. Even if individual economic losses are often not precisely quantified, the negative impact of flooding on manufacturing firms is identifiable. Recently, there has been extensive research on flood risk governance, risk adapted land use planning and the impact of flooding events on community and household welfare. However, the state of the art widely neglects firms' exposure to flood events, although political frameworks are highlighting firms as important actors for implementing an integrative flood risk governance. Thus, we suggest to map manufacturing firms in HCMC using geo-referencing on the basis of the Vietnam Enterprise Census Survey (2015) and assess whether they are exposed to flood events and sea level rise. We argue that the intensified economic development results in stronger urbanization processes and therefore forcing the settlement of firms towards highly flood-prone areas.

Co-Creation of Urban Hazard, Vulnerability and Risk Information System Towards Sustainable Regional Development Trajectories in Sulawesi, Indonesia

Dyah Rahmawati, Hizbaron - Universitas Gadjah Mada | **Muhammad Dimiyati** - University of Indonesia | **Pramono Hadi** - Universitas Gadjah Mada | **Nurul Khakim** - Universitas Gadjah Mada | **Utia Suarna** - Universitas Gadjah Mada

Indonesia endowed with various natural hazards, especially flooding, which has been on top of frequency list – 155 occurrences at 2018 – and potentially impacted in many ways especially in urban area – 145.338 displaced lives. This research envisages the importance use of urban hazard information system towards pursuing sustainable regional development in Sulawesi, Indonesia. There are four urban area subjected as observation area, namely Makasar, Kendari, Gorontalo and Palu. These urbanized area located at the downstream area of a specified watershed system, therefore it likely exposed to flooding from 4 – 14 occurrence per 2018. The preliminary finding indicated 1) Flood hazard information system has been established in Sulawesi, Indonesia; 2) the aforementioned information system has incorporated macro observation 1:250.000 however yet incorporated micro level observation i.e. 1:5.000; 3) Makasar, Kendari, Gorontalo dan Palu already embellished Flood hazard risk information into its spatial planning product; 4) There are several fundamental planning documents for each urban areas, such as long term development plan, medium term development plan, spatial plan and disaster management plan. These planning documents make use the input information only from macro scale flood hazard information system, and not yet make use the input from micro scale flood hazard information system. Given to such finding, the sustainable development program in Sulawesi had not yet gained potential flood risk in each of the urbanized area

Role of economic geography in natural hazards research: how concept of proximity helps us to understand inter-local co-operations in flood risk management

Thomas Thaler - University of Natural Resources and Life Sciences

Floodplain areas across the world have always played an attractive role for residential and non-residential developments. The Alpine regions have a strong pressure to develop new residential and non-residential buildings in hazard areas due to lack of other areas suitable for development. Consequently, the number of elements at risk and vulnerability to flood hazards increased. In order to reduce the vulnerability, the focus of mitigation flood hazards was for decades on structural engineering measures with the problem of spatial misfits between the threat and management strategy. Since the late 1990s/early 2000s, flood risk management and policy in Europe are changing, so the role of local and catchment-wide flood risk management plans are now key contemporary issues in flood policy. This paper analyse the new role of those local authorities and organisations in flood risk management as well as how the nature of the partnerships are established and operate, focusing especially on the main barriers and challenges. The use of proximity opens a new discussion to analyse the engagement and interaction of actors and stakeholders in the politics of flood risk management. In particular, the concept of proximity has permitted an analysis of the interaction between the different actors and stakeholders involved in partnership arrangements. The aim of this paper is to address this gap by using multiple case studies to describe and discuss how different types of co-operation interact and influence the policy-decision practices in flood risk management. The results show that the inter-local co-operation process is in no cases fully achieved. Some of the case studies show a higher integration in one field than others. However, the level of co-operation especially in spatial and land use management is very low. Nevertheless, the regional authorities have to enforce the members of the inter-local co-operation to increase the co-operation.

Natural hazards, adaptation and regional development II

Resilient Cities and Disaster Recovery

Sahar Zavareh - University of Munich

Recovery after disasters is becoming more prominently a focal area as disaster management research embraces a resiliency approach. It is especially important to consider the relationship between the built environment (housing), and the sociopolitical processes (insurance and disaster recovery planning) of urban communities in developing comprehensive long-term disaster recovery theory. Therefore, there is a need for a better understanding of what constitutes a successful recovery process, what happens with this process, what long-term recovery is, and how to use the process to mitigate future disasters. The purpose of this research is to compare and contrast long-term recovery planning and management and housing recovery following Hurricane Katrina in New Orleans and the 2010/11 Christchurch earthquake disasters. These cities represent rather different contexts for disaster recovery, not only because they faced different kinds of natural disasters but because the institutions and resources for recovery, planning and development slightly differ, and because insurance played distinctive roles in the aftermath of each disaster. In each case, answers to the following research questions are sought: what is the state of long-term recovery from natural disasters in housing and infrastructure; and what role has insurance played in the recovery process? The answers are discussed so that the project addresses gaps in knowledge and understanding of urban recovery and contributes understanding of best practice in long-term disaster recovery by identifying common lessons, challenges, and ways to mitigate future losses and damages.

Development by cumulative adaptation: Exploring the linkages between coping, adaptation and development in riverside slums in Phnom Penh, Cambodia.

Jeasurk Yang - Seoul National University | **Edo Andriesse** - Seoul National University

The concept of adaptation in climate change issues is receiving attention in development studies and policies. This is because considering the concept plays an important role in improving our understanding of sustainable development in complex systems. There have been numerous attempts to examine how adaptation is linked to sustainable development through structural changes and transformative features theoretically. However, the empirical process of development by adaptation has not been relatively discussed. This paper attempts to explore the process of sustainable development by coping and adaptation through the concept of 'development by cumulative adaptation' in Cambodia. The first part of the frame explains how coping, referring to short-term and direct responses to emergent events, could be connected to adaptation which usually refers to long-term processes including structural changes. The second part illustrates the processes of coping and adaptation utilizing a pathway approach to show the relationships with development. Our empirical case is slum households among the Mekong River in Phnom Penh, Cambodia. This is because Cambodia is considered as one of the most vulnerable countries to climate change. Moreover, urban slums or informal settlements in Cambodia face challenges of climate disasters as well as poverty and potential forceful eviction. Quantitative and qualitative methods are applied to observe how they cope and adapt to flood events. The quantitative analysis is based on questionnaire surveys among 100 households. The qualitative analysis is based on 30 semi-structured interviews. This paper presents the results of the empirical inquiry and provides implications for regional development in slum communities in Cambodia and other urban areas along the Mekong River.

Adaptive neighbourhoods in Jakarta: Spatial form, Social Capital and Coping with Coastal Hazards

Lisa-Michèle Bott - University of Cologne | **Leda Ankel** - University of Cologne

The megacity Jakarta is highly vulnerable to coastal hazards such as subsidence and flooding. Low-income populations residing in marginalized coastal zones and along riverbanks are disproportionately exposed. In dealing with multi-risk environments, social capital is crucial for coping capacities and self-organisation, especially in the Global South. This study applies the social capital concept from a spatial perspective. The specific urban environment is decisive for the probability of social interaction and learning and thus directly impacts the formation of social capital. Public spaces such as cafes, parks and streets affect the likelihood of encounters and dwell time.

Using a standardized household survey (N = 300), mapping and observation, we analyse this mutual and complex socio-spatial interaction in coastal neighbourhoods of Jakarta and investigate the impact of the resulting social capital on adaptive capacities of local households. Our findings support the assumptions on the spatial basis of social capital on a local level. Different meeting places enhance different forms of social networks due to a high distinction of location, purpose of use and user groups. We found social relations in the study areas to be highly in-ward looking and favouring the formation of bonding ties between community

members. Trust and social control are high. Social capital enables local people to cope with coastal hazards and to self-organise e.g. by creating informal insurance systems. However, long-term adaptation is constrained by lacking bridging and linking ties to the outside world. Resulting advises for urban developers are: to maintain neighbourhood cohesions in relocation programs; to consider spatial settings, e. g. meeting places, that are crucial for the formation of social capital, and to provide spatial opportunities that enhance social interaction between different neighbourhoods for developing bridging ties. This way existing coping capacities are maintained and long-term adaptation can be improved.

Explaining development in social-ecological multiple exposure context: Adaptive behaviours and households' livelihood changes in coastal areas of Vietnamese deltas

Thi Thanh Hoai Pham - United Nations University - Institute for Environment and Human Security | **Matthias Garschagen** - United Nations University

In regions that are simultaneously exposed to climatic risks and divergent socioeconomic transitions like coastal areas of Vietnamese deltas, the observable inherent-change phenomena could not be explained with one research discipline alone. However, literatures as yet either endures stressing the links between climate change and agricultural practices as in adaptation studies or overlooks environmental elements as in socio-economics researches. Therefore, this study, basing on quantitative and qualitative analyses of the empirical data from our household survey in five provinces of the Mekong Delta and the Red-river Delta (N=850), looks at these both components of the social-ecological system to explain livelihood changes of deltaic rural households. Findings show households' adaptive behaviours and the interaction process in which they immanently adjust their farm and non-farm income sources at different levels actually shapes contemporary phenomena, which thus explains the overall development of these regions. Household's extent of livelihood-relating change ranges from their proactive responses to market drivers to passive reactions such as adapting to the modification of local irrigation systems or imitating their neighbours to shift towards shrimp farming and/or sending their labors to urban and industrial areas. In other words, rather than narrowing to studying household's direct responses to a specific hazard or a societal driver, this study focuses on both climatic and non-climatic factors triggering households' proactive or passive changes of their both on-farm and non-farm livelihoods either as challenges or opportunities. Given the large geographical coverage of our research, results show that this process varies across households spatially and temporally. We, therefore, promote further the transdisciplinary approach between societal and environmental research components to better understand the dynamic development in multiple exposure areas for future intervention directions.

Session

Territories of the global crisis: Capitalism, Democracy and Sustainability in question in Latin America

Pablo Ciccolella - University of Buenos Aires | **Carlos Mario Yory** - Universidad Católica de Colombia

The objective of the Session is to review and discuss the contemporary territorial transformations in Latin America within the framework of the global crisis of capitalism, either from theoretical approaches or from case studies.

The analytical axes of work will focus on issues such as: the territorial impact of the growing instability of the economic system and traditional political structures; the deterioration of the quality of democracy and the questions in the relationship between production, environment and territory; between technological progress and increase in social and territorial concentration; between public policies and social, territorial and environmental justice; between right and left populisms, nationalisms, social movements and territorial identities threatened or made invisible.

From the theoretical and contextual approach of these problems, the idea is to expose and discuss some cases of specific territorial problems, either from academic production or from technical assistance or extension activities

Territories of the global crisis: Capitalism, Democracy and Sustainability in question in Latin America I

"Novum orbis nova descriptio: The geo-economic role on the metropolitan áreas and construction of a sustainabled territorial site. The case of Metropolitan Area of 'Valle de Aburrá in Colombia'".

Carlos Mario Yory - Universidad Católica Der Colombia

The objective of this work is to establish a role at the metropolitan system and their own areas to generate an equitable territorial idea based on acknowledge of reasonings of power emerging from the new context of geographical economics. Here the relationship between sustainable metropolitan development and the integrated territorial development is examined from a logic systemic and planning board that addresses the role of those urban systems considered as cross-sectional and that are crucial at the Aburrá Valley case, in the Colombian western andean teritory: safety, mobility and environmental quality.

Derived from the above reflection, the concept of "archipelagos of sustainability" is proposed as a strategy, with intermunicipal articulation and territorial reorganization at the same time, where the so-called "edge projects" play a structural role on an idea of the metropolitan integration that decides to give the shift from participatory planning to co-administration of the territory through the co-government way, an action that in this way supposes overcoming the old disjunction between centralization and decentralism that confronts the challenge of articulating models of the planning board with the government models.

This way establishes a beginning of consideration around the concept of territorial development sustainability with the context of challenges and commitments in a world that materializes relations between the local and the global. As a result this document offers, as greatest contribution, integrating methodological systems for construction indicators and sustainability indices for planning and comprehensive monitoring of the development of metropolitan areas.

Global crisis and urban metamorphosis: toward new territorial tipologies

Pablo Ciccolella - Universidad De Buenos Aires

Changes and crises in the capitalist system, recorded in the last 30 years, have had a significant impact on social and territorial transformations, generating tensions, questions and conflicts. Among them, we can mention: the difficulties of local governments to understand and metabolize recent metropolitan transformations and develop effective forms of intervention on the territory; the advance of a hegemonic city project commanded by national and global financial and real estate capital; and the aggravation of a historically unequal socio-economic and territorial structure

While the political power seems perplexed and disoriented by these transformations, the economic power tends to dismantle the metropolis in urban fragments, with a logic increasingly selective and accelerated, destroying old orders and building others, while, the academic discourse seems to have stagnated around the stories of globalization. The result of this situation seems to be a growing loss of governability due to the atomization of power and political-jurisdictional competences and the frequent absence of metropolitan governments, highlighting the need for stronger actions and levels of government and greater scale (National State, Interjurisdictional Authorities, for example) on the metropolitan problem.

Perhaps the formal aspects of urban metamorphosis (structure, morphology, centralities, suburbs, edges, etc.) and their causality have been the most studied and discussed aspects. It would be convenient now to concentrate the effort on the discussion about the complexities and singularities in the relationship between economy and territory, but above all in the social problematic and in the ideological-political and institutional engineering to face the challenges towards the construction and production of a Latin American city fairer in the context of the current crisis of capitalism

When the sustainable development is the keyword for nothing to change: environmental discourses in the Chilean forestry industry.

Enrique, Aliste - University of Chile

The Chilean forestry industry in one of the largest sector to contribute to Chilean GDP (3%). With more of a million of hectares, this sector is a key in the current Chilean economy. But, for his good moment, several institutional and political arrangements have necessary in the past. From 1974, a very important policy is in charge to guide the development of the sector. A subsidiary law has given an important promotion for pine plantations principally. Today, monoculture is a reality and the concentration of the land property is high.

In this context, several critics come on for the socio-environmental conflicts and problems. But in the other hand, important action has coming from the companies: the discourse of sustainable development and environmental care. From here, the "green market" has coming like a new situational context, with important framework and the development of different tools: certifications (FSC and others), CSR reports, social value of the production (social license to operate), between others.

This communication it's propose to debate about a hypothesis: is the environmental discourse and its different tools a dispositive only for legitimate the extreme Chilean model, without a real commitment with the development conditions in the forestry Chilean case?

We analyze several documents and sources for explore the implications of this kind of dispositive and its contextual conditions, in special for the territorial consequences. But at the same time, we are interested in maybe one of the most relevant issue in this case: the inexistence of socio-environmental conflicts in important extensions of this territory, in spite of the tall of the problems.

Embedded autonomy and capacity gaps: bureaucracies in tension. The issue of ProFeder (Argentina, 2003-2017)

Ariel Garcia - CONICET/UBA

The ability of state agencies to establish objectives is intrinsically linked to their capacity to execute them. In the Argentine case and for the agro-industry, in the last decades it has assisted to: a) expansion of the oil production from the humid pampa to marginal areas; b) internationalization of industrial crops in regional economies; c) foreignization of international trade. These transformations have segmented and concentrated the economic agents. On this situation, the National State has intervened with different instruments: a) programs of assistance to vulnerable agrarian sectors; b) modernization plans; c) differential exchange rate policies, centrally withholding taxes on exports; d) technology assistance policies from the National Institute of Agricultural Technology -INTA-, an aspect that implies a change in the technical role of its officials.

In the scenario described, it is of interest for this research to use the concepts of "embedded autonomy" and "capacity gaps" to analyze one of INTA's main instruments, the Federal Program for the Support of Sustainable Rural Development -ProFeder-. These notions allow to transcend the static analysis of apparently internal aspects of the state apparatus and to consider the links with social actors and economic agents to study retrospectively the recent transformations of the National State. Designed in 2003, ProFeder sought to establish itself as a transformative resolution of the extension programs present until the crisis of 2001-2002. Its dynamics have been contradictory and conflictive, although it evidenced the emergence of ways to link bureaucracies with popular demands. Specifically, this research aims to address the concepts of capacity gaps and embedded autonomy for the case of ProFeder in the period 2003-2017: a) micro-institutional and macro-institutional gaps in the components of the program; b) articulation between capacity gaps and bureaucratic embeddedness in the popular demands of the sectors conceived as the target population.

Territories of the global crisis: Capitalism, Democracy and Sustainability in question in Latin America II

Urban transport networks: territories of the capital and BRT systems. A look on La Matanza, Buenos Aires Metropolitan Region.

Andrea Gutierrez - CONICET/UBA

During the last two decades, the urban transport describes a change of paradigm, usually called as the "mobility turn". This change involves referential concepts, such as sustainability, and equity -as a goal of public policies- climbs within a rights approach framework.

Under this paradigm, one of the most adopted policies for urban transport is the Bus Rapid Transit (BRT), a Latin America innovation, exported for the world. There are a number of studies on this but still is difficult have economic analysis, specially based on Political Economy.

The objective of this proposal is have a look of the last BRT—and the first at metropolitan scale- of Buenos Aires Region, that connect the Buenos Aires City whit La Matanza (its largest municipality), tacking to account the bus companies that offers public transport on it, and put them in the context of the La Matanza's bus transport network. The methodology use official data for diagnosis the economic performance of the network, considering the criteria of public regulation to measure enterprises (according to lines) and considering the property of capital.

The results shows that the regulation subregister the economic performance of the bus companies and allows an unequal appropriation of benefits of the BRT system, and reflect on the effects for public policy to improve the coverage of the network, a significant issue for sustainability and equity in areas with deficits on accessibility and poverty.

Conciencia Urbana: A New Digital Tool to Promote Spatial Critical Consciousness among Secondary Students in the Postdictatorial Chile

Leslie Parraguez Sanchez - Pontificia Universidad Catolica de Chile

In Latin-American countries the use of digital tools for Critical Spatial Education and, even less, for the promotion of Critical Spatial Citizenship is practically zero. Considering the clear association between the profound socio-spatial school segregation of the Chilean metropolis and the emergence of the national student movement in 2011, in this paper I describe the historical context and the empirical research process that made us to develop a new digital tool to promote Spatial Critical Consciousness among secondary students of the country, and its main pedagogical challenges. The name of the project is Conciencia Urbana (Urban Consciousness), and it is currently in the Empirical Research stage, considering the complexities of the Spatial Education for Urban Youth, a highly politicized group that distrust of formal institutions and of the adult-centrist politics in general

In this manner, I seek to demonstrate that the high school student movement, and the urban youth in general, should receive more attention from the critical urban studies. However, not only as a social research focus, but also as a relevant political agent who could improve her/his arguments and proposals by receiving an early Critical Spatial Education to develop Critical Spatial Consciousness. Understanding that the equitable distribution of opportunities in the city is of great importance for the student movement, this project seeks to support them to go deeper in their current awareness process of connecting the crisis of equity in major Chilean cities with the crisis of the educational system and the emergence of the student movement.

Flooding, housing resettlements and the spatial logic of the market in Santiago de Cali

Hugo Sarmiento - UCLA

This paper presents the preliminary results from a study of the housing market strategies the City of Santiago de Cali, developers and residents use to negotiate the financial costs associated with Proyecto Plan Jarillon's resettlements (2012-2019). Widespread flooding caused by the 2011 El Nino events placed climate change adaptation on the Colombian development agenda. Plan Jarillon, a marco project of Colombia's Adaptation Fund, consists of the reinforcement of 27 kilometers of a levee along the Cauca River, and the city's flood control system more broadly. Integral to the project's strategy is the resettlement of approximately 8,700 families who have, over several decades, established informal settlements along the levee. Plan Jarillon then raises the questions: Is the spatial and economic logic of adapting a city to climate change, through a strategy which relies on housing resettlements, compatible with the current spatial and economic logic of the housing market? How are the economic threats and opportunities, generated by the resettlement and reinforcement strategy, distributed and negotiated across households, developers and the city? With support from La Pontificia Javeriana University, a comparison was made between a sample of families before and after resettlement. The city agencies and developers involved in the process were also interviewed. Data was collected over a period of approximately two months. The findings from this fieldwork are considered in relation to an analysis of the city's master plans, social housing policies and publicly available land and housing market data.

The creation of subcultural creative groups in Mexico in the interwar period and its impact on national cultural industries.

Alfredo Peñuelas Rivas - Universidad Autónoma Metropolitana-Unidad Cuajimalpa

Between the period between the end of the Spanish Civil War and the end of the Second World War, many plastic artists came to Mexico from Europe because of the need to emigrate from their countries of origin. The statism generated by the Mexican School of Painting caused that the great majority of them had to make their way in other fields, not necessarily painting, but related to the plastic arts such as the publishing industry, graphic design and cinematography.

In spite of the fact that the philosopher José Gaos invented the term "transterrado" referring to the Spanish exiles in Mexico who could find a linguistic and cultural continuity and, consequently, a better adaptation, in the case of painters, it did not happen that way. This investigation follows the trajectories of three Spanish exile painters (José Moreno Villa, Miguel Prieto and Vicente Rojo). Through the construction of intellectual networks we will try to define the trajectory of the main Spanish painters of the exile of 1939 and their insertion in the Mexican cultural industries of the mid-20th century.

This investigation will show how the arrival of the Spanish group created a subcultural group that was located immediately within an urban space in constant growth as Mexico City at the beginning of the 1940s that, although it had already hosted several opposing artistic groups to the post-revolutionary establishment, this was the first time that a massive group with heterogeneous conditions of origin, language, customs, culture and even political affiliation broke into the hegemonic order of Mexican culture in the twentieth century. The work of the Spanish painters would lay the first steps for the accommodation of the young European painters who would arrive during the Second World War and after that to form with it the new currents of Mexican art.

SUSTAINABLE DEVELOPMENT II: ENERGY

Session

Energy Geography – economic development potentials from innovation in energy systems, markets, and strategies

Teis Hansen - Lund University | **Fabian Faller** - Kiel University

The spatial organisation of power generation related processes is rapidly changing: production of energy is more and more decentralised due to renewable energy deployment; R&D for energy technologies is more and more decentralised, as various new SMEs enter the market around the world; and energy policy and strategies are more and more an inter- and supranational concern. Embedded in the western capitalist system this new energy geography is widely seen as growth opportunity for local and regional economies, as it supports the carbon decoupling of energy production, potentially allowing for sustainable industrial production, green mobility, as well as new regional value chains and energy markets. Still, we know little about the actual drivers of the new energy geography and its impact on economic development, including when and how regions may benefit in both economic and environmental terms; the relative importance of energy technology development and deployment activities in instigating economic development in different contexts; the multiple types of actors that may transform the opportunities offered by the new energy geography into economic development in various forms; and the potential deficiencies of ongoing transformations in the energy sector.

Against this background, the convenors of this session invite contributions that address energy geography in relation to emerging economic development opportunities.

Energy Geography – economic development potentials from innovation in energy systems, markets, and strategies I

Low-Carbon Frontiers

Tyler Harlan - Cornell University

Sustainability scholars typically talk about the ‘greening’ of development as a process of low-carbon transition, which entails the eventual replacement of fossil fuels with renewable energy. Recent work in economic geography complicates this notion by analyzing how localized policies and institutions shape transition pathways across space. Yet few studies examine the relations between places that influence how and why low-carbon technologies are deployed, either at the regional or global scales. Such analysis is crucial to understand how the costs and benefits of low-carbon transition are distributed, especially between resource-rich regions that produce energy and cities that consume it.

In this paper, I argue that the transition to large-scale renewable energy systems is creating new ‘low-carbon frontiers’ in resource-rich regions across the world, especially in the Global South. By low-carbon frontier, I mean the discursive and material construction of spaces as stores of low-carbon value, extracted through energy installations and transmitted to cities. Drawing on critical studies of carbon offset schemes, I show how ‘frontier’ discourse, the lack of state regulation, and histories of resource extraction and dispossession enables energy firms and local governments to profit from natural resources at the expense of local livelihoods. At the same time, these low-carbon frontiers are subject to the boom and bust cycles that accompany traditional extractive industries, due to fluctuations in electricity and commodity prices. This paper thus argues that frontiers are central to the relational geographies that accompany and shape low-carbon transitions.

Support for large scale renewable energy and attitudes towards economic and environmental impacts

James Donald - University of Victoria | **Jonn Axsen** - Simon Fraser University | **Todd Brunner** - Simon Fraser University

This study analyses levels of support for the development of different types of large scale renewable electricity generation technologies and attitudes towards their potential economic and environmental impacts. The energy transition will require substantial development of additional renewable electricity generation infrastructure across the energy system. Despite the widely accepted benefits of reduced greenhouse gas emissions and the potential for regional economic benefits, efforts to expand the deployment of low carbon electricity generation technologies, and in particular wind power, have been met with strong resistance

in many places (Cohen et. al. 2014). This resistance presents a significant social obstacle to achieving the energy transition. Perceived negative impacts on the local landscape, environment and health have been identified as factors contributing to this resistance to wind power (Pasqualetti 2011, Rand and Hoen 2017). The nature and extent of local environmental and economic impacts differ significantly for different renewable energy generation technologies, yet limited attention has been given to how these differences may influence levels of support. Based on a national survey of Canadian's (n = 1408), this study explores the relationship between perceived economic and environmental impacts and respondents level of support for further development of large scale solar, wind and hydro power generating facilities in their region. Using regression analysis differences in attitudes to the potential impacts of energy system technology options, and differences between population groups, are explored.

Driving and resisting actors in green building transitions. Insights from Freiburg and Brisbane

Sebastian Fastenrath - University of Melbourne

The built environment is a significant contributor to human related greenhouse gas emissions (IPCC, 2014), and buildings are increasingly seen as both a major cause and a solution to climate change. Transitions from conventional towards sustainable modes of building and construction are therefore playing an important role in international public debates on climate change and resource efficiency (UNEP, 2014, OECD/IEA 2013). In these debates cities or city regions are identified as the seedbeds of innovative solutions and political action. There is wide agreement that new forms of collaboration between a wide range of actors is needed to activate the 'transformative power' (WBGU, 2016) of cities and catalyse context-specific and innovative approaches. Therefore, understanding of best practices in sustainable forerunner cities but also processes of resistance in 'lagger' cities has high relevance in academia and policy making.

New perspectives are required to gain further knowledge about how sustainability transitions are embedded in specific spatiotemporal contexts (Hansen & Coenen 2015, Murphy, 2015). Drawing on the vibrant debates on urban sustainability transitions (Frantzeskaki et al., 2017; Hodson et al., 2017), this paper sheds light on green building transitions in the contrasting case study cities of Freiburg and Brisbane by exploring the interplay of changed practices, socio-political processes and related driving and resisting actors. While the case study Freiburg provides insights about significant shifts in the building sector over the last decades, the case study Brisbane provides findings on slow dynamics and processes of 'regime resistance' (Geels, 2014).

Energy Geography – economic development potentials from innovation in energy systems, markets, and strategies II

Mexico's energy reform and development of local value chains: exploring the link between natural gas supply and the automobile and fertilizer industry

Adrian Duhalt - Rice University

Mexico's energy sector is undergoing a profound transformation. The energy reforms introduced in 2013/2014 terminated more than seven decades of state control and now encourage private participation in every step of the value chain. New regulations are leading to develop domestic energy markets, being natural gas a case in point. In the past few years, Mexico has made significant inroads in constructing a natural gas market, attracting billions of dollars in investment to expand transport capabilities (pipelines) and enhance the supply of natural gas to different regions.

A more adequate supply of natural gas in Mexico carries a geographical dimension in the sense that regions may now seek to develop/strengthen productive capabilities. The automobile and fertilizer industry offer rich empirical evidence as to how Mexico's new energy landscape may impact regional economies and value chain development.

As for the automobile industry, the poor domestic supply of plastic resins, which are byproducts of natural gas and used in different car components, hinders competitiveness. With demand for plastic resins set to grow in tandem with automobile production in Mexico, natural gas is central to strength the car making value chain in the country. The argument could be similar for the (nitrogen) fertilizer chain. The current production of ammonia, which is the core raw material and at the same time requires natural gas, is limited and that affects the feasibility to produce fertilizers domestically. The supply of natural gas to existing ammonia facilities may impact production of fertilizers.

This presentation argues that policies pertaining the construction of a natural gas market must go beyond enhancing supply. The development of value chains ought to be part of the policy goals as well.

The role of standards in global production networks – empirical evidences from firms approaching the German offshore wind market

Assiya Kenzhagaliyeva - Norwegian University of Science and Technology and SINTEF Technology and Society | **Asbjørn Karlsen** - Norwegian University of Science and Technology

Standard development is important for the maturing of industry sectors. Global value chain (GVC) framework considers standards as a part of lead firm governance, focusing on the relationships between suppliers and clients. Standards play a particular role within the modular mode of governance by reducing transaction costs. Global production networks (GPN) theory pays attention to standards rather as a governmental regulatory instrument. The updated version GPN 2.0 brings these two frameworks closer together. Standards can be seen as a part of risk environment as they ensure process and product quality, cut costs and extend markets. The paper contributes to the theoretical debates on GPN and GVC, by defining the role of standards in the GPN 2.0 framework. As there is a lack of empirical studies on the topic, the paper aims to find out if and how standards enable and hinder suppliers' access to a market. This paper applies an extended GPN 2.0 framework on standards for analysing experiences of foundation suppliers and designers from different countries, operating in the German offshore wind market. As the respective offshore wind industry is maturing by developing technology and standards, it has succeeded in addressing the existential challenge of cutting costs and further cost reductions are demanded. In this multiple case study, foundation manufacturers and designers are strategically selected with regard to national and sectoral background. Data is collected from interviews and correspondence with industry managers, document studies, an offshore wind database and participatory observation at conferences and workshops. We find that the national and sectoral background of the actors involved, is influencing both standard setting, and suppliers' capability to comply with standards that give access to GPN. The paper concludes that the GPN 2.0 works as framework to integrate various types and aspects of standards found in GVC and GPN literature.

A regional perspective on renewable jet fuel production

Antoine Habersetzer - Bauhaus Luftfahrt e. V.

The aim of this paper is to take a regional perspective on renewable jet fuel (RJF) production by comparing both requirements and development potentials of different production pathways in Europe.

As alternative forms of energy production gain increasing market shares, questions of regional development potentials for different technologies move further up the agenda. While most research in energy geography is investigating electricity systems, less is known on economic development potentials of renewable fuels in general and of RJF production in particular. Considering the tremendous fuel demand and steep growth rates of air travel, (less competitive) regional economies might significantly profit from newly built up (or branched-out) RJF industries.

This paper tackles this research gap by performing a comparative analysis of regional input requirements and regional development potentials in Europe of three promising RJF production pathways: Fuels from hydrothermal liquefaction processes, solarthermal jet fuels, and power-to-liquid technologies. Even though these three emerging pathways produce quite similar final products, input requirements (especially feedstock availability) and externalities within regional economies differ significantly. Consequently, determining well-suited locations for RJF plants will strongly depend on the specific technology under scrutiny.

In this logic, this explorative paper has three main objectives: First, it aims to show to what extent specific RJF technologies are limited in their location possibilities due to regional input requirements. Second, it aims to discuss how regional externalities and synergies could increase the competitiveness of RJF technologies. Third, it aims to comparatively evaluate regional development potentials for different production pathways by taking into account both enabling and restricting characteristic of regions. These results can be used to deduce regionally adapted policy recommendations and transition strategies, and to discuss fruitful avenues of future research.

Session

Energy Transitions in Old Industrialized Agglomerations - The case of the Ruhr Area.

Ralf Schuele - Wuppertal Institut GmbH | **Johannes Venjakob** - Wuppertal Institut für Klima, Umwelt, Energie

In Germany, municipalities are faced with the demanding task to contribute to the German "Energiewende" by increasing energy efficiency and the share of renewable energies by 2050. Despite a comparatively high level of CO₂-emissions from the region's energy-intensive industry, even cities and regional development organizations in the Ruhr area have voluntarily committed to ambitious reduction targets in line with national objectives. Furthermore, many of these cities and regional actors have set up climate action plans to deal with the local dimension of energy transformations. However, representing a unique spatial unity of

energy sources (hard coal), centralised energy supply, and energy-intensive industry, in the Ruhr area conditions for implementation are much more challenging as in other metropolitan European areas.

With the focus on municipalities and regional development organizations, the proposed session „Management Challenges of the Energy Transition in the Ruhr Area“ (as a representative for a specific European type of old-industrialized agglomerations under transition) will address the following questions of regional climate and energy policy:

- What are main actors and organizations aiming at accelerating the energy transition in this agglomeration? What are their capacities to act, their targets, profiles of activity and main restrictions?
- What technical and social innovations have been under development to accelerate the energy transition within the specific conditions of this agglomeration?
- What activities have been started to improve the existing energy infrastructure towards sustainability (heat and electricity)?
- What efforts have been undertaken to involve the general public in decision-making processes at municipal and regional level?

The main objective of this session is to provide a lively showcase of research addressing the challenges, obstacles and innovative approaches to accelerate the energy transition in the Ruhr area.

Monitoring energy transformations at regional level: Enhancing the information basis for regional strategies

Ralf Schüle - Wuppertal Institut für Klima, Umwelt, Energie | **Jan Kaselofsky** - Wuppertal Institut für Klima, Umwelt, Energie
| **Jan Rasch** - Wuppertal Institut für Klima, Umwelt, Energie | **Michaela Roelfes** - Wuppertal Institut für Klima, Umwelt,
Energie | **Johannes Venjakob** - Wuppertal Institut für Klima, Umwelt, Energie

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In order to assess the state and the progress of energy transformations at the regional level, however, neither top-down CO₂-monitoring approaches (e.g. CO₂-inventories) nor elaborated bottom-up evaluation methodologies of relevant policy programmes in the energy sector are sufficient. In addition to these approaches, more comprehensive monitoring schemes are in demand that do not only assess specific emissions levels or energy indicators but reflect path dependencies and specific socio-economic dynamics of cities and regions adequately.

Thus, the paper will start with a review of existing monitoring schemes, thereby identifying the main components of such a comprehensive transformation monitoring system: Twelve qualitative and quantitative indicators aim at determining the state of on-going, regional energy transitions. In a second step, we will apply our comprehensive monitoring system to the specific dynamics and structures of the Ruhr area:

- The Ruhr area is Germany’s biggest industrial agglomeration, inhabiting 5 Million people and characterised by polycentricity.
- For decades now, the entire region is experiencing a continuous and enormous economic structural change caused and accompanied by an economic downturn, which shrank the industrial core of the Ruhr area. Thus, a close link between sectoral energy policies and structural policies aiming at the regional industry and business sector is particularly important.
- The Ruhr area is still characterised by coal-based power plants, which are surrounded by energy-intensive industrial plants benefiting from an integrated economy (“Verbundwirtschaft”). The resulting path-dependencies complicate a gradual transformation of the region’s energy infrastructures.
- Municipalities in the Ruhr area grapple with a high level of public debt and, as a result, tight budgets and limited capacities to manage the ‘Energiewende’.

Based on the results of our case study, we will conclude with recommendations regarding the improvement of the energy strategy for the Ruhr area on the one hand and a critical review and enhancement of our monitoring scheme on the other hand. We strongly suggest the application of such a comprehensive approach to evaluate regional energy transformations as it enhances the information basis for regional stakeholders and international investors alike. Additionally, it allows for the design of forward-looking energy policies and strategies.

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Sectoral energy-carbon nexus and low-carbon policy alternatives

Dewei Yang - Chinese Academy of Sciences

The intensive energy consumption in urban sectors is aggravating global warming, which triggers an in-depth thinking about energy-carbon nexus and low-carbon city actions. Hence, China has launched a pilot low-carbon city program to explore low-carbon pathways since 2010. This study employed a Long-range Energy Alternatives Planning System model (LEAP) to simulate six energy sectors-related GHG emissions in a pilot low-carbon Ningbo city, China. The LEAP-Ningbo model comprises three basic modules, i.e. energy supply, energy transformation and end-use energy demand in six urban sectors (i.e., household, service, agriculture, transport, industry, and transformation sectors), and resulting environmental impacts (CO₂ equivalents). The results identified by the business as usual (BAU) scenario indicate that total energy consumption is expected to reach 449.72 Mtce and results in emissions of 651.83 Mt CO₂e by 2050. In contrast, more aggressive policies and strategies involved in the integrated scenario (INT), which combines the energy structure optimization (ESO) scenario with the policy-oriented energy saving (PES) scenario, can lower energy demand by 14% and CO₂e emissions by 27%. A comparison among global cities and low-carbon plans helps identify the carbon emission level and define the actionable low-carbon policies. The high correlation between sectoral energy use and resulting GHG emissions implies energy-carbon reduction efforts, e.g., low-carbon energy substitution, intensive energy-saving policies, the improvement of energy efficiency, and industrial transformation. Achieving low-carbon city targets requires timeline-restricted actions and backgrounds-based measures in plans. The results of this study shed light on if and how cities can shape energy-carbon reduction trajectories and develop low-carbon pathways in China and beyond.

SUSTAINABLE DEVELOPMENT III: FINANCE

Session

Finance and Environmental Sustainability

Janelle Knox-Hayes - MIT | **Sabine Dörny** - Luxembourg Institute of Socio-Economic Research (LISER)

Issues of environmental change and sustainability are increasingly pressing as the human capacity to alter environmental conditions at the regional and global levels continues to expand with increasingly manifest consequences. Humans have long had environmental impacts on the micro scale, and these were relatively concrete to address in planning terms. As human ability to affect the environment on macro scales grows, the ability to shift geography to avoid impacts is radically decreased. At the same time, the ability to adjust to environmental changes and to implement sustainable solutions are increasingly financialized, as the global response to climate change (e.g. carbon markets) suggests.

'Green investments' have been gaining weight in global investors' strategies. Yet, green investments come not without costs. Critics point out that catchphrases such as 'green economy', 'impact investing' and 'smart growth' would only pretend to reconcile the economy with environmental concerns, yet neither abandon the capitalist logic of unending growth nor provide solutions to remedy resource depletion and environmental degradation. In contrast, debates revolving around 'alternative' or 'diverse' economies question the unbalanced growth- and profit-orientation and address new forms of societal power and control in more socially just and environmentally sustainable economic systems.

This session on finance and environmental sustainability invites conceptual and empirical contributions that seek to broaden our understanding of the relationship between finance and geography, and how this link shapes social system responses to environmental processes. We invite contributions on theoretical topics such as alternative economics, land valuation and environmental use, as well as empirical topics such as financing mitigation and adaptation, energy transition and infrastructure and technology transformation.

Finance and Environmental Sustainability I

Governance mechanisms for anchoring conversations to drive decision making on creating local sustainable finance solutions

Alice Bauer - University of Kassel | **Laurent Bontoux** - European Commission, Joint Research Centre | **Cristian Matti** - Utrecht University and EIT Climate-KIC

The financial dimension of transitioning towards sustainability is a major challenge for cities. Findings by the Climate Policy Initiative about the global landscape of climate finance reveal the importance of generating better understanding of processes that lead to engaging the private sector on local level, thus innovating on the governance of finance-related challenges.

This study explores how cities can use different mechanisms to co-create local climate finance instruments by leveraging expertise and knowledge from the local stakeholder system through combining bottom-up (context experts) and top-down (content experts) engagement. We present results from a comparative case-study setup, working in parallel with two contexts (Bologna, Italy and Frankfurt on Main, Germany).

Issues emerging from the study include:

- How do governance structures anchor specific conversation towards decision-making?
- Which mechanisms (information, indicators, alliances) become operational in decision making in highly diverse stakeholder settings when planning scenarios of alternative futures?
- What are the barriers (social, technical, political dimension) to implementation?

As a result of a multi-stage action research approach, outcomes present individually shaped and locally embedded solutions regarding legal and governance structures as well as regarding the financial instruments taken up. Empirically, this paper provides evidence about the governance of decision making in local climate finance processes. It also proposes results, to which extent practice-based indicators can help understand which types of knowledge support negotiation and mutual understanding in local stakeholder systems.

Digital Carbon Currency for a Low-Carbon Bretton Woods

Colin Nolden - University of Bristol Law School | **Michele Stua** - University of Sussex

This paper provides a conceptual framework for the redirection of capitalist growth towards environmentally and socially beneficial outcomes alongside economic objectives through the establishment of a Digital Carbon Currency (DCC) within a Low-Carbon Bretton Woods system.

By recognising atmospheric GHG-carrying capacity as an exhaustible natural resource, by establishing a timetable in which this exhaustible natural resource needs to be safeguarded, and by creating a system of demand for actions that protect this natural resource, GHG emission reductions can be certified as mitigation outcomes (CMOs) and subsequently assigned a value through positive carbon pricing. The UNFCCC Paris Agreement (PA) provides the basic mechanism for establishing such a system. To reduce transaction costs, the application of new technologies such as distributed ledgers and blockchain (DLT) promise transparent Measuring, Reporting and Verification of CMOs as units of DCC and their automatic registry on international transaction logs.

If such transaction ledgers succeed in demonstrating the authenticity and traceability of CMOs according to rules established by an appropriate governance framework based on the PA, units of a DCC may be issued (i.e. 1DCC/1tCO₂eq) and traded. By accumulating units of DCCs, countries adhering to the PA may fulfil their ambitions established in their Nationally Determined Contributions (NDCs) or higher ambitions in case countries decide to form transformational clubs. Transformational clubs in this context may be understood as a prerequisite for the establishment of a low-carbon Bretton Woods system.

By focussing on the energy service market, this paper shows how DLT has the potential to lower transaction costs between buyers and sellers of energy while establishing the necessary trust between agents for unleashing the forces of capital accumulation to pursue economic, environmental and social value through DCC accumulation, thus aligning finance and environmental sustainability.

Conceptualising climate finance: definitions, typologies and discourses

Felicia Liu - King's College London

'Climate finance' is increasingly widely discussed in public discourse, yet there appears to be a lack of consensus over precisely what it means. International agreements saw commitments of substantive sums up to USD 100 billion by developed countries per annum only to vaguely defined methods and climate goals (UNFCCC 2009). Likewise, existing literature tends to base analysis of 'climate finance' within boundaries defined by the researcher. In economic geography, literature critiquing climate finance usually focus on specific mechanisms such as weather derivatives (Randalls 2010), carbon trading (MacKenzie 2009; Bumpus and Liverman 2008; Lohman 2012), or more specifically Clean Development Mechanism (Bracking 2015a) or the Green Climate Fund (Bracking 2015b), without fully addressing the broader array of capital-raising and non-financial capacity building mechanisms. Whilst such literature provides valuable points of reflection on the neoliberalisation of nature and depoliticisation of environment and climate policies, this approach leaves us with a fragmented conceptualisation of climate finance. In light of the COP21 commitment to make financial flows consistent with climate targets, building a comprehensive conceptualisation of climate finance is crucial in facilitating further discussion and research.

This paper would provide a typology of climate finance by mapping the financial demand of the variety of climate-related projects and policies, identifying initiatives and projects that has been considered or not as 'climate finance', and discuss whether existing capital-raising and non-financial capacity building tools answers mitigation and adaptation demands. This paper would discuss both the practical gaps and systemic obstacles of using financial mechanisms to meet climate change goals. Contributing to an emerging literature that draws concern to the financialisation and subsequent depoliticisation of climate policy (Bracking 2015b; Swyngedouw 2010), this paper will argue that what is at stake extends beyond the concerns of 'neoliberalisation of nature' to bearing implications on human rights and social stability.

Pluralizing and Problematizing Carbon Finance

Paul Langley - Durham University | **Gavin Bridge** - Durham University | **Harriet Bulkeley** - Durham University | **Bregje van Veelen** - Durham University

'Carbon finance' is the sector within rapidly growing markets for 'green finance' that explicitly seeks reductions in carbon emissions. Setting out an agenda for human geography research into carbon finance, the paper has two principal motivations. First, the paper seeks to open up new terrain for research that will pluralize carbon finance. It will outline a three-fold typology of the relatively discrete forms taken by carbon finance that includes markets for carbon trading and offsetting that are already established as a research focus in human geography and allied fields, but which also features divestment from carbon intensive industries and investment in low-carbon alternatives. The divestment and investment forms of carbon finance are elaborated upon here with particular reference to research into recent trends and tendencies in the financing of the energy sector. Second, the paper seeks to encourage critical research that will problematize how the financing of a low-carbon transition beyond the energy sector is widely

understood by practitioners and policy-makers, as a linear flow of ready and willing capital waiting to be tapped. It will foster research that is attentive to the contingent and uncertain processes through which the investment mode of carbon finance is achieved. While each form of carbon finance is far from straight forward because carbon must be translated into assets – i.e. carbon as asset to be traded and offset; carbon as asset class to be divested from – these processes are especially fractious when attempts are made to capitalize on low carbon as would-be asset across diverse economic sectors.

Finance and Environmental Sustainability II

From Zero to One: How Environmental Policy affects New Venture Creation in Green, Non-Renewable and Conventional Industries

Theodor Cojoianu - University of Oxford | **Gordon Clark** - University of Oxford | **Andreas Hoepner** - University College Dublin | **Paolo Veneri** - OECD | **Dariusz Wojcik** - University of Oxford

The realisation of the urgency for our society to transition to a low carbon economy and the commitment by 195 countries to do so have culminated in the signing of the Paris Agreement in 2015. This meant that environmental policies and financing mechanisms for green technologies have become the main tactics in the world's strategy to avoid the dangerous consequences of climate change and environmental degradation. However, it is unknown how to best create incentives for both incumbent and emergent industries to work towards achieving a low carbon economy and how these incentives impact entrepreneurs. In this respect, our paper provides an account of how different type of environmental policies affect new venture creation in green technologies, non-renewable industries and conventional start-ups. We do so by analyzing the effects of environmental policy stringency from 2000 to 2016, compiled by the OECD at the country level, on both the regional and country level high-growth start-up rates across 24 OECD countries and 293 regions. The granularity of the environmental policy index as well as our start-up dataset allow us to analyze the different effects of market versus nonmarket policy instruments as well as technology specific and technology agnostic policies. We find that different environmental policies can have opposite effects on the decision of entrepreneurs to start new businesses across the aforementioned industries, which has important implications for policymakers, financiers and entrepreneurs alike. We contribute to the economic geography and entrepreneurship literature through illustrating how the recognition of business opportunities by entrepreneurs and entrepreneurial motivation are moderated by government environmental policies as well as by regional and country characteristics.

Unmasking the discursive relationship between finance and sustainability - Practices of resource efficiency in the Chilean forestry sector

Astrid Oppliger - University of Lausanne | **Michael Handke** - Heidelberg University

The forestry sector prides itself on being fundamentally sustainable and also sells this image successfully towards the financial markets. Timber resources from forest plantations are regenerative and processed entirely within industrial value chains. Certificates like for example FSC attest the sector to comply with minimal ecological and social standards. Financial markets "honor" these positive discursive connotations with high share prices and easy access to finance for forest and timber processing companies. Forestry in Chile can count on the governmental support and also attracts financial capital from abroad. Only slowly it becomes clear that the sector's sustainability discourses are misleading or at least do not tell the whole story. A closer look at three efficiency practices on the industry level reveals that they are unidimensional oriented towards the economic dimension of the equation, where the companies' shareholders profit most: (i) the replacement of pines by eucalyptus trees that are more productive but also more water consuming, (ii) the expansion of forest plantation towards riverbanks to enhance the access to groundwater and (iii) investments in insurance contracts to absorb losses due to recurring forest fire events all aim at maximizing shareholder values on the company level but do not take into account consequences for regional scale and for further generations. Severe negative externalities like for example increasing regional water shortages in the Chilean fort regions are made invisible through efficiency practices. It becomes obvious that the dimensions of time and space of these externalities are dissolved or neutralized through calculative practices. Expectations on financial markets circularly incentivize and accelerate these efficiency practices. Especially the practice of buying insurances against the risk of environmental catastrophes reveals that financialization is able to produce new systemic risks.

Dirty Banking: An Empirical Look at Investment Banks' Treatment of Unethical Corporations in Primary Markets.

Michael Urban - University of Oxford | **Dariusz Wójcik** - University of Oxford

Practice and scholarship in sustainable finance is rapidly progressing. Short of proposing a radical alternative architecture of traditional financial systems and institutions, developments have focused on proposing tweaks that reconcile good business with sustainable development. Along these developments, we note that there has been little critical commentary on the responsibility of investment banks in underwriting the debt and equity of unsustainable and unethical corporations. In light of systematic empirical evidences, we show that investment banks are instrumental players in producing and re-producing environmental and social market failures. To do so we rely on a dataset of 750'683 debt and 171'434 equity securitisation deals which we cross-match with the list of 153 excluded companies produced by the Government Pension Fund Global (GPF-G) of Norway. Our analysis covers 13 years (2005-2017). Our results suggest that investment banks do not shy away from companies that have been publicly named-and-shamed for environmental, social and governance misconduct, neither do they restrain from servicing companies providing morally contentious products such as tobacco, coal and nuclear weapons. We show that while the market for unethical securitization has depth and scope, it is dominated by leading Anglo-American banks. While the evidence we bring forth suggests that underwriters may be morally bankrupt institutions, we argue that there are economic incentives for them to be more discerning of the clients they offer their services to. Firstly, reputational damages may outweigh economic benefits since unethical deals represent less than 2% of most underwriters' net revenues. Secondly, asset owners with a socially responsible investment agenda like the GPF-G may be interested in expanding their active ownership engagements to investment banks. As we show, 7% of the GPF-G total equity exposure is indeed linked to banks that underwrite the debt and equity of the very same companies it excludes from its investment universe.

Exploring the transformational green economy through transactional data: a pilot study in seven cities

Lucien Georgeson - University College London | **Mark Maslin** - University College London

The green economy, after rising in popularity following Rio+20, has received considerable criticism for its perceived alignment to conventional growth paradigms. According to Ferguson's (2014) typologies, while the 'weak green economy' and 'green growth' have many flaws, the 'transformational green economy' expresses a vision that is agnostic towards GDP growth and provides a potential rearticulation away from the predominant 'weak green economy' paradigm towards future 'strong green economy' visions related to post-growth and limits to growth literature.

It is therefore important to understand the extent to which contemporary trends in the green economy, and related areas like energy transitions, decarbonisation pathways and infrastructure transformation, could represent green economy transformations. Transactional data has previously been used to explore adaptation in cities, health and adaptation, weather and climate information, and the global green economy, as separate subsets of the economy. This study presents a new, pilot method that uses the transactional data methodology to measure economic activities in the green economy relative to the scale of an industrial sector as a whole. It therefore provides the potential to explore whether green economy transformations are taking place by comparing changes in green economic activities to the wider economy.

The pilot study presents data for three industries across seven cities. Compared to existing measurement, it presents the possibility to explore whether green economy spending in these sectors is changing and whether absolute or relative decoupling, or business-as-usual, is taking place. It can thus interrogate critiques of the flaws in green economy concepts and their relationship to growth. This study explores this experimental approach and its potential to understanding the geographies of economic activity in the green economy, and the potential of the transformational green economy to pivot green economy discourses and practices away from 'weak green economy' visions.

Session

Primary resources industries and finance - Development paths of resource peripheries

Johannes Rehner - Pontificia Universidad Catolica de Chile | **Michael Handke** – Heidelberg University

The exploitation of natural resources usually demands huge capital investments. Especially in resource peripheries, mining industries heavily depend on decisions that are made in the organized network spaces of international financial centers. Once operating, extractive industries themselves create massive but also highly volatile capital flows. However, the involved actors, patterns of financial decision making, and the geographical impacts of resource-related capital flows are insufficiently understood. How can resource peripheries benefit from earnings in the resource industries? The commodification of natural resources and the

financialization of their values seem to be decisive for the funding of mining activities as well as for securing revenues for large private actors. In parallel, public actors in different geographical contexts – like for example in Latin America – promote development models and state revenues that are based on extractive activities. Interdependencies between mining companies and their financial investors, and how these are mediated by politics, financial intermediaries, and international capital markets are yet to be included in this discussion. At the regional and local level, the awareness of environmental and social costs is growing, and central neoliberal concepts like property and the private use of resources are questioned. Resource peripheries represent conflictive zones where varied boundaries between different economic and societal claims are drawn and reproduced recurrently. Actors demand new concepts of regional governance that, in particular, are able to address the challenges of governing the flows of capital. We invite conceptual and empirical contributions that seek to broaden our understanding of the relationship between financial flows that are related to resource industries and their impact on regional development. Papers on the resource curse, neo-extractivism, regional governance and the commodification of natural resources are welcome to participate in our session. Also work that relates geographies of financialization to the values or properties of natural resources, as well as discussions on the role of (offshore) financial places for resource economies, are invited.

Primary resources industries and finance - Development paths of resource peripheries I

Are capital flows determined? Institutional complementarities between the financial and commodities systems in Chile

Michael Handke - Heidelberg University

Regulations (the rules of the game) and institutions (how the game is actually played) influence the decision making of the private economy and coordinate socio-economic interaction in society. “Institutional complementarities”, i.e. correlations between regulation and institutions make the game effective and competitive. In Chile in the last decade, complementary institutions have emerged that lubricate the interrelationships between the financial and commodities systems, facilitating and accelerating the flow of financial capital and, concurrently, helping to reduce economy-based societal risks. The theory argues that if institutional complementarities work well, they increase overall economic growth, stabilize capital flows and preserve the values of economic assets. The following paper critically discusses institutional complementarities in Chile and analyses varieties of systemic risks that accompany them. The discussion focuses on the risk that in serious economic downturn institutional complementarities can prove to be sclerotic and delay the overcoming of a crisis.

Extractive industries and fiscal transfers: Sub-national effects of natural gas revenue sharing in the Andes

Felipe Irarrazaval - University of Manchester

The relation between extractive industries and regional development has been largely discussed. From a GPN perspective, the key point for such relation is a strategic coupling process which allow region to capture value. However, a general trend for resource peripheries is the extractive industries just create enclave economies. As a result, resource-holder regions do not capture value from the productive process because the coupling between extractive industries and regions entails weak productive linkages and the employment of unskilled labor. Against this backdrop, what chance for development might have the regions which are coupled with extractive industries? This contribution looks for studying an alternative path for analyzing regional development which is based on the fiscal transfers which resource-holder regions receive. This research is developed through a comparative perspective of sub-national levels in Peru and Bolivia. Both countries transfer – i.e revenue sharing - the revenues which are collected from extractive industries to the ‘productive regions’ and other local governments through different formulas. As the revenues generated across different extractive industries differ noticeably, this work just analyzes natural gas production for keeping comparison parameters. Thus, the analysis is based in the main region of natural gas production for each country: Tarija in Bolivia and Cuzco in Peru. The main conclusion of this comparative analysis is that whereas might be fair that sub-national levels receive a large amount of revenues because the natural resources are below their jurisdiction, it is not necessarily a path which foster regional development. Even though the outcome of each case is specific, both cases share three conditions: development of new real state elites related to the new projects of the sub-national levels; an atomization of the social structures which demand revenues; and new sub-national divisions which look for access to the revenue sharing process.

Towards a neostructural theory of local development: Analysing public and private contributions in Chilean mining localities

Jonathan Barton - Universidad Catolica de Chile

Local and regional development theory points to the desirability of attracting foreign and domestic productive investment. This is based on the assumption that investment will generate employment, multiplier effects in local business, reduce poverty and improve welfare. The notion that this private investment is the principle motor of these outcomes is also well-established in the literature, however what is often overlooked is the relationship between public and private contributions to local development, and how local governance is framed to accommodate this. This relationship is the essence of a neostructural, rather than neoliberal, approach whereby the recognition of public sector investment and spending is placed alongside the private contributions in order to generate a more accurate picture of local experiences. In the case of Chile, often cited as a ‘miracle’ of neoliberal development based on private sector dynamism and flexibility, this paper reviews the experience of development in localities where mining is the principal productive activity. Investment, socio-economic, and public spending data is compared and contrasted. The conclusions point to the significant role of public spending in these mining ‘boom’ localities in order to compensate for important deficits not covered by the mining investment per se. Consequently, we argue for a theory of local development based on a neostructural rather than neoliberal perspective, where development is understood as a collaborative enterprise between private and public investments in order to generate benefits at different scales of analysis, e.g. export revenues as well as community welfare, rather than a trade-off between state and capital. In Chile, this neostructural approach has evolved into a local governance arrangement for local development.

Linking financial liquidity and resource extraction to city growth

Johannes Rehner - Pontificia Universidad Catolica de Chile

This paper proposes to link resource extraction to financial liquidity and city growth in order to explain why local economies in the context of resource boom show strong growth even when the extractive industry has weak local linkages. We conceptualize local impacts of boom and bust cycles in mining related medium sized cities in Chile through financial flows by employing ‘Dutch disease’ and the ‘secondary circuit’ of capital as theoretical references. Urban economic growth in terms of real estate investment and private consumption are explained as a function of commodity exports, wages and financial liquidity, using linear regression models based in monthly data (2005-2015). Results show the outstanding influence of mining and other wages rather than export revenues on retail in most cities. Divergent results are observed regarding real estate investment, being mining wages, financial liquidity, exports and also loans explanatory factors. We combine these findings with the spatial structure of fiscal income, levels of re-distribution from mining regions towards the center and also towards less developed regions. By calculating separate models for each city, important differences among contrasting types of cities appear. Thus the relevance of discussing the impacts of mining on economic development on a local, rather than on a national scale is evident and we present a proposal to consider financial liquidity and wages more systematically in the conceptual discussion of secondary and linkage effects of mining.

Primary resources industries and finance - Development paths of resource peripheries II

Think Global Act Local – Transnational Corporate Social Responsibility Meets Local Needs in Ghana

Ann-Christin Hayk - Trier University

The International Oil Companies (IOCs) ENI and Kosmos currently invest in numerous projects to improve the healthcare provision in the peripheral Ghanaian districts Ellembele and Nzema East as part of their corporate social responsibility (CSR) strategies. The Sustainable Development Goals’ call for development partnerships encourages such transnational corporations’ support of governmental efforts to overcome severe service provision shortages in the global South. In Ghana, though, no comprehensive national CSR policy is available (at least not enforced) to manage private sector social investments. Thus, the IOCs base their interventions on company-internal and universally applied policies (Anku-Tsede and Deffor, 2014; Boon and Ababio, 2009). Against this background, the questions arise how, to which extent, and how successful ENI and Kosmos voluntarily adapted their universal CSR strategies to the local context in the Ghanaian periphery. To find answers, this study explores the differences between the two IOCs’ initiatives’ level of alteration and sustainability. In doing so, it relates to a recent social-constructivist

approach to policy mobilisation that emphasises the necessity of adapting policies to local contexts through mutation and assemblage to avoid policy failure (Brownhill, 2013; McCann and Ward, 2013; Peck, 2011; Stone, 2017). The case study discloses different outcome of the IOCs' initiatives. Despite minor grievances, the constant perpetuation and positive local perception of ENI's healthcare projects suggest a fruitful adaptation of the IOC's universal CSR strategy to local requirements. Contrarily several difficulties lessen Kosmos' success in supporting healthcare structures and indicate little alteration of the IOC's company-internal CSR policy. With regard to the policy mobilisation discourse, these observations evoke recommendations for possible governmental mediations to guarantee successful CSR interventions on local level.

Trade Patterns in a Globalized World: Brazil's Recent Trajectory towards Regressive Specialization

André Nassif - Fluminense Federal University | **Marta Castilho** - Federal University Of Rio De Janeiro

The paper focuses on globalization through international trade flows. Despite the introduction of imperfect competition and firm heterogeneity in recent trade models, they predict intra-industry trade (rather than interindustry trade, as predicted by traditional models of comparative advantage) and static free trade gains between countries of similar endowments and per capita income. Although few theoretical trade models are worried about the impacts of free trade on a country's long-term growth, Neoschumpeterian models show that free trade can lead to divergent dynamic gains for countries in terms of innovation capacity, growth rates of productivity and per capita income.

This paper has two main goals. The first is to review and analyze the main theoretical predictions on the effects of global trade integration on trade patterns, considering country differences in terms of income levels and technology. The second is to analyze the specific case of Brazil, focusing on its trade integration over the last 25 years (1990-2015). The study of changes in Brazil's trade pattern can be of particular interest to policymakers from other peripheral countries.

We will use indicators such as the composition and dynamics of both exports and imports classified by factor content and competitiveness driver, the degree of export diversification, the measurement of the extensive and intensive margin of trade for Brazilian exports as well as econometric estimates of income-elasticity of demand for exports and import, to analyze the long-term growth dynamics, among others.

Preliminary results show that there has been a marked regressive specialization in Brazil's trade pattern in the 1990-2015 period. Primarization came together with a tendency of product concentration and a drop in exports of technologically sophisticated goods. These differences create distinct potentialities in terms of gains and losses associated to trade opening.

TOURISM

Session

Dark Tourism Spaces: The Commodification of the death, the disaster and the macabre

Alvaro López López - National University Autonomous of Mexico | **Gino Jafet Quintero Venegas** - Universidad Nacional Autónoma de México

Even though there has been a historic record dating from some centuries ago about the experiences of trips where visitors approach with phenomena linked to death, the disaster or the macabre, their academic focus derived from the English-speaking literature from the nineties, with studies such as Ashworth (1996), Foley and Lennon (1996) and Seaton (1996). The travelers' connection with death, disasters and the macabre has been called with different terms, but it is the one of 'dark tourism' the most dominant and consolidated among others (Light 2017).

As a result of the diverse academic papers reviewed by Van Broeck and López (2017), these authors assert that before a dark tourism practice is properly conducted, the proximity between visitors (not exactly tourists) and the exposure to sites of death, disasters or macabre, is normally held as a socio-cultural phenomenon. However, when there is a better knowledge by tourists or there is a bigger offer by the tourism industry, the phenomenon can be closer to dark tourism. Thus, the spaces where dark tourism occurs are inserted into an economic logic by the commodification of these socio-cultural phenomena.

Based on the above, the purpose of this session is to discuss how different socio-cultural phenomena associated with death, disasters or the macabre, are commodified by either the tourism industry or by the local communities until they become spaces of dark tourism. Thus, this commodification has spatial effects that are also of interest in this session.

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Bullfighting as a dark tourism practice in Mexico

Gino Jafet Quintero Venegas - Universidad Nacional Autónoma de México | **Alvaro López López** - Universidad Nacional Autónoma de México

Bullfighting is a Latin-American cultural element derived from both the cult of the bull as a deity and its ritual sacrifice in the ancient times. Nowadays, bullfighting is a public display consisting on fighting bulls either on horse or by foot in a closed ring for this purpose, called Plaza de Toros. The "Fiesta Brava" as it is known by the vernacular mind, is promoted as a (zoo)tourism resource for those visitors who wish to deepen in the cultural patterns of some Latin American countries, including Mexico.

The presence of this ritual not only strengthens and legitimizes the power relations among humans and non-humans but also has created domestic and international tourist fluxes as travelers are looking to live the experience of being in a bullfight as spectators. Ullfighting tourism is framed and promoted as a plethora of cultural resources; nevertheless if the activity is studied from a non-anthropocentric perspective and from the critical animal studies paradigms, it holds all the elements to fit within the theoretical framework of dark tourism as visitors enhance in a motivated displacement to witness the violent death of a sentient being. Traditionally, dark tourism has been defined as the travelling to places historically associated with death and tragedy. This work aims to reveal the tourist dynamics that have recently taken place from bullfighting to visit the bullrings and witness, as a private show, the death of an animal rather than visit bullfighting rings for the pure purpose of its historical and cultural value as a place.

Thanatouristic landscape in the festivity of Day of the Dead, in Janitzio Michoacán, México.

Sandra Romero - National Autonomous University of Mexico

The present proposal is based on the concept of dark tourism; which refers to the phenomenon that covers the exposure and consumption (by visitors) of death and/or disaster sites, real and commercialized. In the development of this concept, various forms

have emerged to refer to this kind of consumption, one of which is thanatourism, which is understood as traveling to a site total, or partially motivated by the desire to experience a real, or symbolic, encounter with death.

The Day of the Dead festivity is within the traditions that are of tourist interest in Mexico, as such, has elements that attract more than one type of tourist, and within the context of thanatourism, these elements are combined in the conformation of a landscape in constant evolution, where tradition struggles to maintain itself and at the same time coexist with other forms of appropriation and consumption.

Through the experience gathered during field work in 2015 and 2016, in the region of Lake Pátzcuaro and the application of various research methodologies, it is possible to characterize and interrelate the elements of the festivity that are of thanatouristic interest and their expression in the landscape of Janitzio in the context of the Day of the Dead.

From Dark Tourism to Cultural Heritage: Touring Tepito in Mexico City

Eveline Dürr - Institut für Ethnologie, LMU Munich | **Barbara Vodopivec** - LMU Munich

This paper explores the ways notions of dark tourism are turned into heritage tourism by government bodies. As urban spaces are remade for cultural consumption in the context of symbolic economy (Zukin), a range of actors attempt to turn 'slums' into attractive destinations and consumer experiences. From slum tourism to 'favela chic' these development strategies re-signify images, meanings and value of notorious areas in the city, making them accessible for tourists and other actors. This paper, which is the result of a collaborative research project, draws on an ethnographic approach to show how these processes transform poor neighbourhoods' socio-symbolic position and visibility in the city, generating power struggles for controlling the way these areas are represented, marketed and sold. We argue that while neoliberal economic restructuring can aggravate socio-spatial inequalities, it also creates new spaces of resistance and contestation.

The tourist performance of the "Night Walk" in Mexico: an interpretation based upon the perception of the tourists

Álvaro López López - Universidad Nacional Autónoma de México | **Gino Jafet Quintero Venegas** - Universidad Nacional Autónoma de México

In the community of El Alberto located in the municipality of Ixmiquilpan in the Mexican state of Hidalgo, the otomí people organize the "Night Walk", one of the recreational activities tourists can hire when visiting the area. The Night Walk is a tourist performance which represents the migration phenomenon of undocumented Mexicans who try to reach the United States. In this activity, several actors are involved: tourists play the migrants role while the local community act as "polleros" (border patrol officers), drug dealers and other subjects who might facilitate or hinder the migrants' main objective. This walk is a dark tourism expression as it not only represents the real risk of migration but can lead to an accident to the ones engaging in it. Based on both the dark tourism and the performance turn theoretical perspectives, and the triangulation of research methodologies -especially one focused on drawings-, this presentation shows the spatial perception of the tourists who engage in the Night Walk.

Session

Evolutionary approaches in the economic geographies of tourism: State-of-the-art and new avenues for research

Robert Hassink - Kiel University | **Jarkko Saarinen** – University of Oulu

In recent years, theories, concepts and approaches from the emerging field of evolutionary economic geography (EEG) (Boschma & Martin, 2010) have been transferred and applied to a tourism geography context (see Brouder et al., 2017 and Brouder 2014 for an overview). These contributions provide a vital push for the sub-field of the economic geography of tourism which usually is not so prominently represented in the community compared to other topics (e.g. geographies of knowledge and innovation, high-tech industries). We argue that evolutionary approaches can considerably enhance our understanding of crucial tourism research topics like the development of destinations or the networks of tourism businesses as tourism is a constantly evolving, highly dynamic and often volatile sector. For instance, EEG approaches can provide a more theoretically sound explanation for Butler's (1980) well-known destination area life cycle by referring to institutional and entrepreneurial elements such as lock-in and creative destruction instead of just the limits of destination carrying capacities.

This session aims to provide a forum to present and discuss the recent theoretical and empirical progress in the field and welcomes contributions, among others, on the following:

- Co-evolution in tourism

- Path-dependency, -creation and -plasticity in tourism destinations and enterprises
- Methodological considerations about the operationalization of EEG approaches in tourism research
- Critical discussions about the achieved progress and gained insights
- Insights for EEG approaches drawn from tourism
- Political economy implications for EEG and tourism

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Evolutionary approaches in the economic geographies of tourism: State-of-the-art and new avenues for research I

An evolutionary perspective of destination dynamics: recent developments and research agenda

Cinta Sanz-Ibáñez - Rovira i Virgili University | **Salvador Anton Clavé** - Rovira i Virgili University

This paper presents an overview of the current state of research adopting evolutionary economic geography (EEG) approaches – hitherto used in manufacturing and knowledge-intensive production sectors – to tourism destination evolution analysis. It does so by providing a literature review of scientific articles and publications produced since the 2010s. This literature includes seminal theoretical reflections and empirical case study research to interpret the mechanisms underlying the changes occurring throughout the evolutionary pathways of a range of destination cases in Europe, North America, South America, Asia and Oceania. The aim of such an exercise is to get a better picture of the contributions, difficulties and gaps arising from translating EEG approaches to tourism. The study highlights that EEG research in tourism enriches the whole discussion around the evolution of places and regions in economic geography by approaching destinations as complex places with economic, urban and residential functions that are transformed over time. This brings place characteristics and place dependence at the forefront of the debate on the configuration of evolutionary processes, while broadens the scope of these analyses in mainstream economic geography, sometimes critiqued for its strong quantitative micro-foundation based on firm routines. The paper concludes with a call for advancing theory and leading to more effective empirical research in the field. In this direction, the paper outlines the positive synergies that may emerge if EEG research applied to tourism develops further into: 1) analysis explicitly exploring dynamics that are pillars in EEG, such as the geography of knowledge networks (supported with Social Network Analysis techniques) or the role of institutions; and 2) studies promoting the cross-fertilisation with emergent concepts and theories including, among others, adaptive cycles, panarchy and resilience or cultural political economy and urban restructuring.

Explaining Growth Dynamics of Resort Areas: Human Agency, Pro-Active and Reactive Responses to Trends in Ski Resort Development

Rudi Hartmann - University of Colorado Denver

The path metaphor represents a main concept in the explanation of growth and change in tourist destinations in evolutionary economic geography. It is applied to ski resorts in Colorado, in particular, Vail Valley, an extended narrow urbanized corridor in the High Country of Colorado. It is argued here that the changing practices of skiing and mountain recreation in general initiated waves of modernization for mountain operations and the tourism infrastructure. As to Vail, it was the 1989, 1999 and 2015 World Alpine Ski Championships that were decisive 'moments' in the evolution of the Valley. While preparing for a new ski season and forthcoming world cup races were part of a competitive routine to be performed each year (path dependence), the world alpine ski championships represented events with a potential path creation. The paper examines human agency, pro-active and re-active responses to growth dynamics that have shaped the social and economic environment. In the final part of the paper, policy decisions made in Aspen/by Aspen Ski Company and in Vail/by Vail Resorts since the 1990s will be examined in a comparative study.

Applying the EEG approach for sustainable tourism development in food tourism: An evolutionary case study of the Otway Harvest Trail in Victoria (Australia).

Lukas Worth - Monash University | **Joseph M. Dr. Cheer** - Monash University

Culinary trails have become an important marketing tool for tourism developers in regional Australia. The escapist nature of food tourism has led to an increased demand for agritourism related experiences in Australia, particularly at the rural and coastal periphery. Gastronomy tourists seek distinctive cuisines and authentic foodscapes and very often these are best found in peripheral areas. Often, rural areas are strongly associated with a nostalgic and romanticised destination imagery. In contrast, many rural areas that are highly reliant on agricultural production are facing existence-threatening challenges such as depopulation, brain drain and decreasing numbers of farmers. The case study of the Otway Harvest Trail in Victoria (Australia) explores the co-evolutionary dynamic of food tourism and its impact on the regional economy. Contrasting the concepts of social capital, co-competition and related variety, the author provides methodological considerations about the operationalisation of the evolutionary economic geography (EEG) approach in food tourism. Culinary trails have a large potential to create a positive momentum enhancing the regional innovation system through knowledge transfer and increased social capital. As a result, these community-driven initiatives can bring significant economic benefits to rural producer communities by enhancing the local food production and foster regional collaboration. However, the question arises what future outcomes are desirable for rural tourism destinations in order to find a balance between safeguarding its authenticity and communal integrity while commodifying its foodscapes. Applying an EEG lens, different scenarios regarding the future development of culinary trails are discussed based on future predictions of the global food industry, and secondly, by exemplifying the past economic development within the examined region. Drawing on the co-evolutionary process and interplay of tourism and agriculture, the research aims at contributing to a better understanding of how culinary trails can be applied in the context of sustainable tourism development.

The trade-off of embeddedness in tourism development in historic villages: The case of Xidi and Hongcun

Kaixuan Huang - London School of Economics and Political Science

Sustainability of tourism development in historic villages is a cutting-edge research topic. To main harmony and protect resource, existing research tends to advocate localization in tourism development. Nevertheless, it fails to penetrate that learning capacity may be restricted under profound community participation. The stagnation in knowledge acquisition and transfer casts threat on sustainable development. To explore the impact of localization on learning capacity in tourism destination, this study selects Xidi and Hongcun as cases. Sharing identical location and tourism resource, they were inscribed into World Heritage List in the same year. However, they chose different extent of community participation in tourism development, which resulted in different development modes and completely different consequence. Dominated by local collective tourism firm, Xidi achieved great success at the beginning but subsequently witnessed decay in tourism industry. On the contrary, dominated by extraneous company, Hongcun undergoes enormous leakage but industrial upgrading as well, boosting tourist number and income. Ascribing community participation and localization to embeddedness, this paper argues that the trade-off between tourism leakage and learning opportunities in different embeddedness circumstances determines further industrial upgrading and sustainable development. High embeddedness in Xidi indicates low outbound leakage, but imposes restrictions on learning opportunities. Heavily relying on experience of local elites, Xidi failed to establish systemic, effective learning mechanism. It lacked knowledge and technique to implement industrial upgrading, such as renovating guest house into a boutique hotel. By contrast, low embeddedness in Hongcun implies high outbound leakage but efficient channel for knowledge acquisition. Constructing rigorous learning mechanism, the outside company brings advanced experience, knowledge and techniques. Consequently, the tourism industry is continuously upgraded, laying valid foundation for sustainable development. This study supplements a new analytical perspective for tourism development mode research.

Keywords: historic village; embeddedness; industrial upgrading; tourism leakage; learning capacity

Evolutionary approaches in the economic geographies of tourism: State-of-the-art and new avenues for research II

Overtourism, Seasonality and Destination Resilience: Applying Evolutionary Economic Geography

Joseph Cheer - Monash University | **Claudio Milano** - Ostelea School of Hospitality & Tourism Management | **Marina Novelli** - University of Brighton

The term overtourism suggests that the extent of tourism at a destination level has breached what are acceptable limits. This occurs in myriad ways but most pointedly concerns the contest for space and place where host amenity, wellbeing and resilience is pitted against the needs of the wider visitor economy and the combined economic imperatives of the tourism sector and government authorities. Overtourism suggests that local level capacity to deal with the seasonal influx of tourists has ruptured and governance frameworks have become ineffectual. The resulting outcomes include protest and resistance against tourism and the loss of sense of place. While seasonal tourism effects are not recent phenomenon, what is new is the pace, scale and nature of expansion underlined by public infrastructure development, property and real estate speculation, overcrowding, displacement of local amenity and the undermining of sense of place. UNWTO Secretary General, Taleb Rifai argues that tourism growth is not the enemy; instead it is a failure of management. Such an argument under acknowledges that tourism growth can occur beyond destination governance frameworks, especially where economic growth is imperative and where there is a disproportionate dependency on tourism. It also implies that placemaking happens largely at a local level outside of the global tourism supply chain. In linking overtourism, seasonality and destination resilience, we examine the encounter of peripheral destinations with seasonal tourism demands. Such destinations are especially vulnerable to overtourism given public infrastructure constraints, economic diversification limitations, services deficiencies, smaller populations and pressing economic development agendas developed as a result of dominance of metropolitan centers. Evolutionary economic geography perspectives are applied to identify path dependencies and tourism system dynamics that foster the disruptive effects of overtourism. This has implications for tourism planning and sustaining sense of place; fundamental to sustainable placemaking and the development of adaptive capacities.

Waterfront property-led development in Malta under neo-liberal capitalism: Changing tourist behaviour and the appeal of luxury borrowed spaces

Victoria Kennedy - Liverpool Hope University | **Janet Speake** - Liverpool Hope University

This study explores the under-researched intersections between the trajectories of waterfront property-led development and changing contemporary tourist behaviour. The research is positioned within the current phase of financialised neoliberal capitalism in which the financialisation of commercial property development is used to promote increased returns. It focuses on luxury waterfront property developments in Malta and uses qualitative bricolage methods. The study asserts that the development trajectory of prestige waterfront projects, and their longevity or otherwise, reflect the changing dynamics at the intersections of the behaviour of property developers, the affluent elite and tourists. A distinctive feature of changing tourist behaviour in the context of neoliberal capitalism, is the emergence of sharing economy platforms and an increased desire of tourists to borrow luxury spaces for short periods of time.

Touristification and alterations in real estate market

Alessandra Esposito - Sapienza University of Rome

The paper's leading assumption is that tourism has conquered a not expendable role in the evolution of the urban rent mechanism, thanks to the online platforms of the sharing economy. These platforms allow for the agile conversion of a large proportion of habitable spaces into short-term-rental through worldwide advertising. In doing so the service allows for the interception of both domestic and international tourist flows. And if, on one hand, this has allowed for the increase in intercultural exchanges, confrontation and sharing; on the other hands, in the absence of careful and unequivocal regulations, and on top of a current, continuous and growing tourist boom, it has contributed to progressive reduction of the cities residential offer transforming the home from a primary good into a consumer product, with a remarkable rent-gap effect on the neighbourhoods.

The paper briefly describes the current scenario, referring to some of the cities most affected by mass tourism in Italy and in Europe. In these cases, real estate speculation and sharing economy thus end with interweaving in a new era of urban practices, which seem to prefer a touch-and-go population to a city of residents. The latter, with a less competitive spending power and more demanding by nature, in the majority of cases ends up abandoning the location, discouraged by the absence of conventional services and the

tightening of the housing market. In its analytical part, the paper tries to provide a framework thus taking on the complexity of the issue and highlighting the geographical spread by maps and statistical data. In its pro-active part, it suggests restrictive measures of services such as Airbnb and develops a program for the conversion of the income generated by the STR into a resource for new housing policies.

Authenticity and World Heritage Historic Centers: How to explain the redundancy

Odete Paiva - Instituto Politécnico de Viseu | **José Luis Abrantes** - Instituto Politécnico de Viseu | **Fernanda Cravidão** - Universidade de Coimbra

Cities and their historical centers are unique places full of tourism experiences. The World Heritage Historic Centers (WHHC) stand out for their exceptionality (UNESCO, 2016) and constitute rapidly growing tourist destinations because sought by cultural tourists looking for authentic experiences in authentic places (NCDOT, 2000).

In the context of tourism demand, specifically in WHHC, authenticity is a fundamental aspect. However, despite the importance of authenticity, the phenomenon stills understudied, especially in what regards to its impact on tourists' behavior.

The present study aims to close this gap, is our goal to fill the lack of empirical research in the context of cultural tourism, specifically in the research of tourist experience authenticity and the relation with tourists' characteristics and their behavior, namely: cultural values, destination image, sense of place and behavioral intentions.

A survey of 1200 tourists visiting two World Heritage Historic Centers – Guimarães in Portugal and Cordoba in Spain allowed to establish a structural equation model in a multi-groups approach comparing tourists from three nationalities: Portuguese, French and Spanish. The results allowed to conclude that: i) cultural values influence the WHHC's cognitive image and affective; ii) cognitive and affective image impacts on place memory; iii) cognitive image and place memory influence experience authenticity; iv) intention to recommend and return are influenced by cultural values and experience authenticity. Discussion centers on the implications of model to theory and managerial development of strategies for cultural tourist destinations.

Session

Geography of uncertainty – Traveling in an unsafe world

Jürgen Schmude - LMU München | **Yoel Mansfeld** - University of Haifa

Safety and security play a key role in the tourism industry and are decisive determinants in tourists' destination choice processes. After the terrorist attacks on September, 11th 2001, and its consequences on global tourism, both tourism industry and tourism research began to focus on the influence of risks on tourism. Safety and security are considered as a *conditio sine qua non* for a positive development of a country's or region's tourism sector. External factors, such as economic fluctuations or natural and man-made hazards have a strong impact on tourism as an open and unstable system. Nowadays, every tourist has a large number of alternative destinations and therefore will most probably avoid all destinations which are perceived as unsafe. Therefore, the destination choice has a strong impact on the economic development of touristic destinations. Travel decisions are always associated with a high level of uncertainty and risk. Uncertainty with travel decisions arises from the tourists' inability to process the mass of information about destinations to which every potential tourist is exposed or simply as a result of lack of information. The characteristics of the product 'travel', intangibility, inseparability, variability, and perish ability, add to the high level of uncertainty in the travel decision-making process. Risk on the other hand derives from the choice "among alternatives that can be described by probability distributions over possible outcomes". Thus, in contrast to uncertainty caused by partial knowledge, risk refers to possible but calculable negative results.

In the session theory oriented presentation (e.g. concerning destination choice process and the impact of unsafely) are welcome as well as presentations of case studies (e.g. arabic spring, terrorist attacks, natural hazards).

Terrorism in Europe: Is there a threat to safety and mobility?

Cláudia Seabra - Polytechnic Institute of Viseu & Nova School of Business and Economics

In the old continent, terrorism is becoming frighteningly frequent. These events marked the beginning of a new unsafety environment. The positions are radicalized; the discourses are hard and proactive. The European Union is preparing measures to strengthen security and modify its legislation to prevent further attacks. Some voices arise in Europe, asking for changes to the free movement of people, even putting into question the Schengen agreement, with the return to border controls. What was an attack on freedom, mobility and way of life, condemned by all, will have an effect, it seems, in limiting other freedoms. Besides the importance and impact of the phenomenon, to our knowledge no studies were done regarding the impacts of terrorism on people's life in Europe. Is our goal to close this gap and make the first European study on the effects of terrorism on people and organizations.

Is important to understand the real effects of terrorism on the individuals' life, to address both the material as well as the psychological cost of terrorism in the people's behavior. The increased exposure to significant terrorism risks guides governments to become more vigilant in order to deal with impending crises. This requires a full analysis and the extension of our knowledge on the terrorist intrinsic nature by collecting new data to answer the remaining questions (Llussá & Tavares, 2007).

1. What is the real effect of the terrorism fear in citizens' activities and behaviors, specifically on people's daily life, including mobility, activities, decisions, etc.
2. What measures citizens consider critical to their security and safety, namely behaviors that they are willing to adopt and measures or regulations they consider essential.
3. Which is the real impact of terrorism in economics, especially in Tourism, one of the most sensitive but also important businesses in the European countries?

Cultural identity versus travel experience as determinants of risk perceptions: The case example of international tourists in Israel

Marion Karl - LMU University of Munich | **Sascha Jackisch** - LMU University of Munich

The rise in worldwide terror attacks and the growing number of destinations affected by terrorism, nowadays, leads to an increase in the relevance of research on safety, risk and uncertainty in tourism.

Past research on risk perception focuses on several influencing factors to understand the multidimensional concept of risk perception and to predict travel decision-making and travel behaviour in the context of risk. While past studies were helpful to identify the underlying factors that shape tourists' risk perceptions for specific cultural backgrounds separately, cultural background as an influencing factor has so far gained little attention in tourism research.

The objective of this study is to develop a multivariate model to analyse the tourists' risk perceptions on an individual level, focusing on the determinant culture. In contrast to past research, this multivariate approach allows to investigate several influencing factors simultaneously taking into account tourists' cultural socialisation.

Therefore, a quantitative survey using standardised questionnaires was conducted in 2017 among 805 international tourists in Israel. The interviews took place in four main hostels in Israel to gain a sample of tourists with similar characteristics influencing travel behaviour in the context of risk perception (e.g. age, educational level, risk affinity, travel experience) but different cultural socialisation. Cultural identity was, unlike in previous studies, not measured by nationality but in terms of individual migration biographies.

This enables to capture cultural impact on risk perception from different angles to better understand how socialisation from the host society and experience-driven socialisation influence tourists' perception of a destination's risk levels. This study's results will give insight into the concepts of global tourists with strong experience-driven socialisation versus national tourists with host-society-driven socialisation.

Examining the Effects of Natural Disasters and Terrorist Attacks on Tourism in India

Akshaya Kapoor - Maharishi Arvind University

Today, tourism sector occupies a major place in the Indian economy. It contributed to 9.6% of its GDP in 2016 and is a major source of foreign exchange earnings of the country. Tourism is an industry that is highly influenced by the tourist's choice and perception of a place. In many studies it was inferred that, perception of a destination's safety, plays a key role in influencing such choices. Hence, in this paper we tend to examine the effects of natural disasters and terrorist attacks on tourism in India. For this, four major case studies were analysed, two on natural disaster - Uttarakhand Flood & Landslide (2013) and Kashmir Flood (2014), two on terrorist attacks - Mumbai 26/11 attacks (2008) and Hyderabad bomb blast (2013). This analysis is based on the information procured from various surveys, reports, government policy documents and digital databases. The data so obtained are illustrated using graphs, charts and tables. In this paper, the patterns of domestic and foreign travellers, to these regions were examined, both before and after the incident. On a broad level, this paper throws light on various direct and indirect factors that are affecting the perception of security of such places. Suggestions, keeping in mind these factors, are also proposed to improve the image of the tourist destinations in India, which, in turn can further improve the earnings of this sector.

WORKPLACE AND LABOUR

Session

Labour and life: changing geographies of the workplace

Nina Willment - Royal Holloway University of London | **Katy Lawn** - University of London

This session will reflect on changes to capitalist work, its spatial constitution, and the consequent relations between labour and life. Stemming from the work of Herod (2001), a shift in the conceptualisation of the production of economic space has seen the 'worker' become a centralised force in shaping economic spaces of work and the geographies of capitalism. This session looks to bring a critical light to theorisations of work, workplaces and workers with this current era of contemporary capitalism. Classic accounts of work emphasised disciplinary power exercised through spatially and temporally bounded workplaces which produced a degradation of work and workers (Braverman 1974; Wright 2006). Today, labour theorists emphasise a capitalist 'biocracy' where a range of life abilities are 'put to work' through the blurring of boundaries between work and non-work spaces, times and identities (Fleming 2014; Gregg 2011). These arguments over changing relations between 'labour and life' require critical engagement. The complex heterogeneity of work is a recurrent yet underexplored aspect of economic geography, across both the global 'north' and global 'south' (e.g. Castree 2007; Crang 1994; McDowell 2009). As this boundary between financially remunerated work and 'life' feels to be continually eroding, economic geography scholarship can usefully resist all-encompassing accounts of changing capitalist work cultures; instead focusing on how the organisation and experience of work is shaped by particular forces. This session will therefore highlight current research in this area from within and beyond economic geography. Potential contributions may include: • Theorisations of workplace geographies; • Automation and emerging technologies of work(places); • Cultural imaginaries of labour; • Workplaces as sites of discipline and/or biopower; • Workplaces as sites of pleasure and vitality; • Workplace architectures and affective atmospheres; • Work, life and boundary spaces; • Creative methods for researching working life; • Moralities/ethics of work

Labour and life: changing geographies of the workplace I

Work-related Multilocality: Analysing the Role of employers

Lisa Stadler - Research Institute for Regional and Urban development ILS

In Germany and other western industrial countries work-related mobility is increasing in the context of deregulated and flexible labour markets, which cause short-term contracts and an increasing turnover of labour. The number of work-related moves is growing and at the same time more and more people work at long distance from their residence and commute to jobs outside their city, their region or even beyond their country. A strategy for households to prevent daily-commuting or the relocation of the whole household is to establish two or more residences and live multilocal. The increasing work-related mobility and multilocality is affecting diverse sectors and professions, especially highly-specialized workers in creative or knowledge-intensive sectors. In spatial terms, particularly bigger cities with several job opportunities and a high connectivity in long-distance transport systems have a higher occurrence of multilocal households, which can shape the cities' housing markets, infrastructures and social cohesion.

A large number of research deals with the employees' perspective on work-related multilocality. Especially mobility studies, sociology and urban studies focus amongst other things on the employees' motivations for multilocal living-arrangements, their residential location decisions, travel behaviour as well as effects on neighbourhoods, cities and regions. Although there is increasing knowledge about the employees' point of view, the role of employers remains unclear.

This paper focusses on companies and research institutes in knowledge-intensive sectors in bigger German cities and deals with the employers' influence on their workers' mobility, multilocality and place attachment. The paper will provide an overview of the state of research in the field of work-related multilocality and points out the importance of further research about the employers' influence on this phenomenon. Furthermore, it derives an empirical research plan which serves as basis for discussion.

Art/Work: how can modern art help us theorise the experience of boredom at work

Katy Lawn - University of London

Work and boredom have a history in which each is implicated in the other in often complex and contradictory ways. This is to say that work is advocated as the remedy for boredom as much as it is said to be its cause. This paper considers this ambivalent history,

and asks what artists from Andy Warhol to Ignacio Uriarte and Tehching Hsieh can offer our theorisations of both boredom and work in (post)modernity.

Artistic critiques of the ideology or cultural value of work as a practice often employ elements of boredom: meaninglessness, repetition, inconclusion. These engagements get at the dual function of boredom – as a theoretical lens as well as an experience – in particularly interesting ways. By evoking the experiential dimensions and conceptual complexities of boredom, they recognise being-bored as a reflective moment on the nature of experience itself and “actively mobilise boredom as a conceptual framework for sociocultural critique” (Gardiner & Haladyn 2017:4).

From psychologists claiming that we’re now experiencing a ‘boredom boom’ (Mann, 2007), to management theorists who assert that the new workplace epidemic is ‘boreout’ (Rothlin and Werder 2008), workplace boredom is now being talked about in ever more diverse disciplines. This paper addresses this burgeoning interdisciplinary interest by putting conceptual artworks in dialogue with management theory, psychological literature and social-scientific perspectives.

Exploring the positives of unemployment in pursuit of a new 'Politics of Time'

Philip Finn - Maynooth University

This paper pursues a critical exploration of the social master narrative of work, defined as paid employment, and its relation to the social construction of unemployment through the experiences of job-seekers in Ireland. Within the global North work assumes the position of a lodestar around which income, respect, substantive citizenship and social recognition are distributed. Unemployment, with its abundance of leisure-time, is thus perceived and experienced as undeserved; an imposed and interminable burden, while activities outside of paid employment are devalued in relation to it. Whilst acknowledging the substantial losses in relation to unemployment articulated by existing research, it is argued that they emerge out of our prior constitution as workers. Exploring positive aspects of unemployment is important in order to recognise the agency and humanity of individuals, but also politically important in opening up future possibilities in relation to unemployment and work.

The paper utilises Foucault's 'governmentality' to explicate how job-seekers are governed according to a 'job-seeking' rationality derived from and reinforcing the socially embedded master narrative of work. Such rationalities gain concrete manifestation through techniques such as behavioural conditions and sanctions attached to the receipt of Jobseeker payments.

It draws on 30 interviews with three cohorts of participants: active jobseekers, discouraged jobseekers and lone-parents. A focus on the experiences and agency of participants highlights the limits of governmental power as qualifications, disjunctions and reversals unfold in response to the governance of unemployment and the centrality of work underpinning it. While fidelity to the work ethic is often reiterated, it sits uneasily beside participants' desire for autonomy, developing and maintaining relationships, autonomous interests, community volunteering, and care work. These experiences are interpreted within a utopian framework based on the 'Politics of Time' (Gorz 1999; Frayne 2015) to displace the centrality of work in relation to other social activities.

Anchoring Resilience in and through Open Creative Labs in Amsterdam, Berlin and Detroit

Verena Brinks - Leibniz Institute for Research on Society and Space | **Oliver Ibert** - Leibniz Institute for Research on Society and Space; Freie Universität Berlin | **Suntje Schmidt** - Leibniz Institute for Research on Society and Space; Humboldt Universität zu Berlin

The presentation focuses on “Open Creative Labs”, understood as aesthetically designed workplaces that are let to diverse users on a temporary basis. As such, Open Creative Labs satisfy a growing demand for spatial contexts that allow for rather flexible, mobile and increasingly boundaryless work.

Based on more than 100 qualitative interviews with operators, managers and users of Open Creative Labs in Amsterdam, Berlin and Detroit, this paper conceptualizes labs as “anchors of resilience” which can fulfill different functions related to the uncertainties of contemporary knowledge workers outside standard employment forms (tenured full-time employment). Open Creative Labs provide (at least perceived) stability to knowledge workers, coping with volatile and transient working conditions (such as freelancers and project-based work). For early career entrepreneurs they offer an affordable work environment that corresponds to their rather modest financial resources. Open Creative Labs are also used by people seeking to balance their daily job and aiming at realizing something ‘meaningful’ and ‘valuable’. To others in turn, Open Creative Labs serve as first contact points to organize a career shift, often followed or accompanied by a period of re-orientation. Despite heterogeneity in terms of personal motivations, users of Open Creative Labs are usually characterized by mobility in terms of career paths and individual biographies.

These different user motivations illustrate the character of Open Creative Labs as hybrid workplaces renegotiating the differentiation between “work” and “life”. Through the conceptual lenses of work-related “resilience” and “anchoring”, the empirical phenomenon of Open Creative Labs is explored and contextualized. The analysis therewith contributes to an understanding of the changing geographies of work and workplaces.

Labour and life: changing geographies of the workplace II

When I'm making videos... when I'm there online pushing my mixes... you have to give it 100% 24/7. We are grime. We live and we breathe this: The workplace geographies and digital aesthetic labour of grime DJs in South East England

Nina Willment - University of London

Based on empirical research involving both online and offline shadowing and in-depth interviews, this paper will explore the digital aesthetic labour and workplace geographies undertaken by nine case study DJs working in the grime music scene in the South East of England. The paper will seek to theorise the workplace geographies of DJs through the lens of aesthetic labour (Warhurst et al, 2000). DJs are an example of labourers where the boundaries between work and non-work spaces, times and identities blur almost unrelentingly. DJs work through various spaces: of collection and curation; of social networking; of musical performance. Within the grime scene, the multiplicities of DJ's labour spaces/practices are further complicated as grime DJs play a critical role in the development, support and organization of the grime music scene at all levels (Bramwell, 2015). As aesthetic labourers, grime DJs must continually work to brand themselves as creative producers, asserting their authority and ability to generate social and economic capital as a form of remuneration for their labour. Many of the key practices of self-branding used within the project of aesthetic labour involve the grime DJ undertaking continual practices of aesthetic labour within the digital sphere. In particular, the paper will therefore consider the grime DJs labouring body as extended digitally; highlighting how DJs undertake practices of digital aesthetic labour within the 'workplace' of the digital realm.

Employee rights and travel planning at the workplace

Thomas Vanoutrive - University of Antwerp

One of the sites where work and non-work spaces, times and identities intersect is the daily commute. In the wake of the rise of sustainable mobility, a particular discourse on workplace travel plans has emerged which promotes measures that change individual travel behaviour. A variety of publications emphasise the benefits for employers and see commuter plans as a 'business management tool' with benefits for society as a whole. This discourse attempts to persuade employers by arguing that green commuter incentives increase staff retention, that cycling employees are healthier, that expensive parking space can be reduced, that company image improves and that plans can be part of corporate social responsibility schemes. Promoting the uptake of workplace travel plans is also seen as an attractive option for public policy since employers co-invest in government transport policy. However, several authors have pointed to the moralising tone of mainstream sustainable mobility policies, the restricted focus on individual mode choice, and the blurring of the boundary between work and family life. Building on this critique and on case studies of discussions in workplaces, this article aims to broaden the debate by raising the question whether some mobility measures, such as a bicycle rack, can be considered as rights to which employees are entitled. In other words, the investments included in a workplace travel plan are thus no longer seen as incentives to influence, nudge or steer employee travel behaviour, but as the outcome of a discussion on the mobility needs of employees, taking into account the environmental and societal impact of commuting.

Gendered geographies of finance, women's work experience in Frankfurt and market feminism

Kristina Kämpfer - University of Oxford

Highlighting the lack of gender equality in the workplace of finance, gendered narratives rose to prominence in the aftermath of the Global Financial Crisis (GFC). In their studies, behavioural economists stressed the gender difference between women and men and attributed risky as well as speculative behaviour and practices to the latter. Feminist scholars challenged this emphasis of binary gender stereotypes and the negligence of context, like material and immaterial resources, as shaping human behaviour and practices. However, almost all of these accounts on gender and finance leave women's experiences of working in finance and the multiplicity of these understudied. Exploring the gendered geographies of the workplace as illustrated by the example of the international financial centre (IFC) of Frankfurt, my study shows that applying such gendered perspective allows to address questions central to feminist theory and investigate spatially variegated work cultures and practices. Data collected from 10 semi-structured, in-depth interviews with members of the female financial elite in Frankfurt revealed a generational gap between junior and senior women, suggesting that work experience informs their attitude towards diversity policies, especially in the case of women's networks. Additionally, women employed in client-facing roles perceived their gender as (competitive) advantage when interacting with male clients. Furthermore, female bankers who gained work experience in both Frankfurt and London stated that Germany's financial centre promoted a work culture that is less favourable to diversity in general and women in particular. These

findings demonstrate that work cultures and practices in finance have a gendered dimension that remains neglected in financial geography to date. Drawing on Hannah Arendt's theory, I problematize and explore the emancipatory and political potential of work experiences and practices, arguing that this lens offers an alternative narrative to popular criticism according to which feminism is simply co-opted by the market.

Living Below Zero: Being and Belonging in the Indentured Components of Global Production Networks

Laurie Parsons - Royal Holloway

The Cambodian construction industry rests on a bedrock of slavery. Workers in the kilns serving the country's voracious appetite for bricks are overwhelmingly indentured to their bosses, unable either to repay their debt or exit this draining, dangerous and poorly paid industry. Loans grow inexorably throughout workers' lives, often being finally passed on to offspring who have toiled in the kilns since childhood. Thus, few escape this inheritance once they have received it and lives led under conditions of long term indenture consequently come to reflect the reality of this inescapable debt.

This paper explores the experience of life under these conditions. Using in-depth qualitative testimonies, it interrogates the intimate and affective dimensions of indebtedness by asking how birth, marriage, illness and death are interpreted when each leads workers further below zero net assets. In doing so, it adopts a linked, multi-sited approach to investigate how historic inequalities are compounded and entrenched by twin forces of the market and the changing climate. Moreover, it extends these experiences beyond the immediate context of the kilns, examining how the geopolitical realities of a developing country linked into global production networks are reflected and internalised in the intimate lives of its citizens.

Session

Labour Geographies of Work, Workplaces and Workers' Struggles in an Age of Authoritarian Austerity

Kendra Strauss - Simon Fraser University | **Feng Xu** - University of Victoria

Workers and their organizations are increasingly challenged by authoritarian populism, austerity policy and anti-worker politics in many parts of the world while corporate power seems undented. The ability to shape economic policy and landscapes in favor of labour thus remains a daunting task. At the same time, shifting constellations of power within and between the "global North" and "global South" are being met with creative responses and forms of organizing from working people and their organizations. Migrants' rights, struggles for decolonization, anti-imperialism and climate justice all represent opportunities and challenges for labour movements. These sessions will explore these developments and the uneven responses of workers in contemporary and historical perspectives.

Papers and presentations may address (but are not limited to) the following topics:

- Migrant labour regimes and flows and migrant workers politics
- Solidarities among labour, anti-fascist, and anti-racist groups
- Labour internationalism in an era of rising nationalism
- Labour, urbanization and urban politics
- Right-wing unions and new fascist mobilizations
- Possibilities for labour and left populism
- Immigrant, indigenous and workers of colour organizing against white supremacy
- Greening work and labour politics amidst climate change skepticism
- Labour's engagement with LGBT and Queer activists and workers
- Resistance by unemployed and underemployed
- New workers' movements and community organizing (e.g., Fight for \$15)

Basic income as a new compromise.

This session is a companion session to those organized at the 2018 AAG and CAG conferences.

Labour Geographies of Work, Workplaces and Workers' Struggles in an Age of Authoritarian Austerity I

The struggle for the rights of temporary labour migrants in low growth Japanese capitalism

Daniel Kremers - German Institute for Japanese Studies

Temporary migrant labour is bound to become a more important economic factor for Japan's low growth capitalism. Among the more than 1 million foreign nationals currently employed in Japan over 200,000 are temporary migrants, brought to Japan through the so called Technical Intern Training Program (TITP). In this paper, I will outline the structures and struggles resulting from this bilateral migrant labour regime, by pointing out its legal institutional dimensions, its political aspects and its connection to the Japanese labour movement which is ideologically and organizationally divided. The Japanese government has designed and successively extended the TITP since 1991 to facilitate unfree temporary labour migration from the People's Republic of China (PRC), Vietnam, Indonesia and other countries that receive official development assistance (ODA) from Japan. While through the program bi-national contacts between government agencies and private businesses are highly institutionalized. These institutional linkages have eliminated freedoms, which workers can otherwise individually or collectively use to improve their situation. Their access to information, their freedom of movement and their capacity to solidarize and organize are heavily restricted. Furthermore, only a minority of the Japanese labour unions, that are divided into a corporatist, a social democratic and a communist camp, practice solidarity with migrant workers. While the corporatist enterprise based unions and their national federation RENGO have lobbied against granting more freedoms to migrant industrial workers, local community based unions with social democratic and communist affiliations have formed platforms and networks to organize migrant workers and advocate for immigration policies that recognize and establish equal rights of migrant and non-migrant workers. Their political influence however remains weak as they face an oligarchic government with a neo-liberal and nationalist agenda and a public opinion that is dominated by an oligopolistic corporate media, who deem unfree temporary labour migration a well-balanced compromise.

At the Intersec on of Urban- and Care-Policy: The Invisibility of Eldercare Workers in the Global City

Xu Feng - University of Victoria | **Kendra Strauss** - Simon Fraser University

The global population is both urbanizing and aging. Consequently, urbanization as a set of processes and logics is coeval with demographic shifts and changing relations of social reproduction, including the growing need for paid caregivers for older people. Nevertheless, while feminist urban scholars and migration researchers have drawn much-needed attention to reproduction, bias in urban policy, reconstructed in the rhetoric of the global city, makes paid and unpaid reproductive labor invisible and denies care needs. At the same time, the role of urbanization in shaping the labor market for paid eldercare work is often underexplored in research by scholars of care labor. The invisibility of especially lower-paid eldercare work and workers, and their importance to "aging" global cities, thus often eludes both urban research and care research. This does not mean that policymakers do not "see" eldercare workers (labor shortages, for example, are often referred to), but rather that policy ignores their needs as workers and urban residents. In this paper we use comparative case studies and the concept of territorialisation to re-focus on the urban context of paid eldercare work in two 'aspiring' global cities, Shanghai and Vancouver. Our analysis highlights the policy context of struggles for recognition, representation and better pay and conditions for eldercare workers in both places.

Pregnancy in Singapore: Migrant domestic workers' right to the city

Huey Shy Chau - Yale-NUS College & University of Zurich

Migrant workers in temporary migration schemes are often granted less social rights than citizens and permanent residents. In contrast to high-wage workers, migrant domestic workers are not allowed to bring dependents and are ineligible to apply for permanent residence in Singapore. Moreover, they have to regularly undergo medical examinations. Domestic workers who are found pregnant face termination of their employment and expatriation. Singapore's graduated system of rights is related to the small city-state's transformation from a developing country to a so-called neoliberal-developmental state that has been prioritizing economic growth over social rights.

This paper examines how migrant domestic workers deal with questions around pregnancy and family life in Singapore. Drawing on a 'rights to the city' approach, I ask about the ways domestic workers claim access to resources and participation in the city. Based on observations and interviews with domestic workers and other key actors that are relevant for domestic workers' right to social reproduction and participation in the city, I present first results on how domestic workers manage urban space by themselves and for themselves.

Navigating workspaces in the context of long term ill health – what do older workers with cancer deserve from the labour market?

Jennifer Remnant - University of St Andrews

In the ageing workforces of the Global North, increasing numbers of older workers are experiencing long term ill health. These workers are compelled to navigate new identities, changed bodies and, potentially, altered perceptions of what ‘work’ is and how they are able to perform paid work. Simultaneously, they are subject to capricious decision making in individual workplaces and the labour market more widely, often in a context of austerity with limited opportunity for collective bargaining.

This paper draws on qualitative data from interviews conducted with workers aged 50 and over diagnosed with cancer, employers (line managers, human resources staff and occupational health staff), healthcare professionals and staff from a cancer support charity in the UK. It explores how older workers experiencing cancer can feature in the obscuring of boundaries between work (designed for ‘healthy’ bodies) and non-work spaces relating to their (continued) ill health.

Employers framed decisions about the support, or lack of, provided for their employees with cancer around subjective notions of deservingness. At a local level, disciplinary power was still exercised in spatial and temporal terms to compel ill or disabled workers to relinquish sick role identities, irrespective of need, and resume working identities, thus contributing to wider narratives of how ill health can get caught up in labour relations. Employers defaulted to subjective assumptions about what constitutes work, even in the context of long term ill health, that have long term and largely negative implications for ageing workforces, and ageing workers at both an individual and structural level.

Labour Geographies of Work, Workplaces and Workers’ Struggles in an Age of Authoritarian Austerity II

Non-institutional mobilisation of organised labour in Spain: the cases of the Movistar’s contractors strike and the hotel room cleaners’ movement

Martí López-Andreu - University of Leicester

This paper discusses organisation and mobilisation of labour happening outside traditional institutionalised channels in Spain. Since 2010 the austerity policies substantially modified the employment and collective bargaining regulation. These reforms, with a strong neoliberal bend diminished institutional capacities of unions, eroded traditional forms of management of industrial conflict and resulted in a decrease in salaries. In this context, forms of organisation and mobilisation relying in past experiences (assemblies, direct action, etc.) and the use of a repertoire of mobilisation traditionally used by social movements have produced relevant experiences of labour unrest developed outside (or even against) traditional channels managed by main unions. The analytical tools of new forms of conflict at work (Martinez Lucio, 2011; Gall, 2013), mobilisation theory (Kelly, 1989; and Atzeni, 2014) and approaches on collectivism (McBride and Martinez Lucio, 2011; Taylor and Moore, 2015) are used to frame and understand two cases. Firstly, the more than 2 months Movistar’s contractors strike, involved employees and self-employed workers (mostly men) from the main company and different levels of outsourcing organising in assemblies, developing direct action and working together with social movements in a fight for recognition and to confront the fragmentation of working conditions. The second case analysed is the self-organisation aside from main unions of hotel room cleaners in an association called las kellys (mostly women) that used direct action aiming to improve working conditions in the sector. The two cases show different features but they commonly permit to identify the emergence of non-institutional forms of labour protest that are developed main union’s dynamics in Spain. These trends show that neoliberal practices have lead to the disorganisation of conflict and the emergence of protests in the periphery of the Eurozone that relate to social movement union practices (Waterman, 1998, Sullivan, 2010) traditionally identified in the Global South.

Patchwork politics and the fabric of defiance: Garment worker struggles in authoritarian Cambodia

Sabina Lawreniuk - Royal Holloway, University of London

The ‘tightening authoritarian grip’ (O’Neill 2017) of Cambodia’s ruling party marks its response to near electoral defeats in 2013 and 2017 that threatened to unseat the 30-year-rule of Prime Minister Hun Sen. Crackdowns on freedoms of expression, association and assembly have seen newspapers and radio stations shuttered; protests lethally dispersed; and the leading opposition party banned, its leaders jailed or exiled. Consequently, a regime already infamous for its violent repression of rights is ‘descending into dictatorship’ (Croissant 2018).

Cambodia's garment unions are a particular target for ire. Representing 700 000 workers with 'the highest union density' of any sector in Asia (Nuon and Serrano 2010), their threat results from their size and ties to the (now dissolved) opposition. Alongside draconian anti-union legislation, the Prime Minister regularly warns activists to 'prepare your coffins', following a record of political assassination and killing of strikers by police. Publicly, this strong-handed approach is justified by invocation of President Trump's attacks on the media and protest. At the same time, however, the ruling party is attempting to bring garment workers under its patronage. The Prime Minister hosts weekly forums for thousands of workers, handing out cash gifts, posing for selfies, and offering policy initiatives designed to win hearts and minds.

In this paper, I draw from an institutional ethnography of the labour movement in Cambodia, including interviews and observation with over 100 workers and unionists. I show how renewed attention on the garment sector through the 'crisis of democracy' (Dahles 2018) has reshaped popular political imaginings of garment workers and their own political subjectivities, challenging dominant gendered and racialised readings of the mainly female workforce as 'docile' and 'passive' (Lilja 2016; Marston 2007). The findings offer a timely insight into the dynamics of resistance in emerging economies in the geopolitical ascendance of the illiberal order.

Labor re-regulation, industrial restructuring and variegated landscapes of workers' struggles in 'new-normal' China

Gengzhi Huang - Guangzhou Institute of Geography

In the past decade, China has seen the rising power of workers, who are more militant than before in fighting against predatory capital in the context of globalization. This paper situates workers' struggles in China in the new political economic environment, in which industrial relation is being recalibrated under the strategy of constructing harmonious capital-labor relation. It then analyzes the landscape of workers' struggles based on the labor movement data (2011-2016) from China Labor Bulletin, which is a NGO in Hong Kong. Despite the absence of independent labor unions, China's workers are able to mobilize collective actions in spontaneous ways to fight for their rights and interests in the condition of industrial restructuring that brought about adverse impacts on their work and lives. Geographically, workers' actions concentrated in the eastern coastal region, the core of "world's factories" in China. However, with the process of spatial restructuring of industrialization, some cities in middle-western regions have turned into centers of class struggle. While delayed wage remains the main reason triggering collective actions, workers' claims are diversified as they demand for higher wage, improved working conditions and more independent unions. This paper argues that a new landscape of workers' struggles in China is in production and this production is embedded in the process of institutional change and industrial restructuring unfolding in the era of 'new normal'. How to understand and explain this landscape and its impacts on industrial relations and economic geographies in China are important questions of Chinese labor geographies study.

Entrepreneurship and employment in post-Crisis Greece: Restructuring under austerity and recession

Maria Tsampra - University of Patras | Reveka Gkerats - University of Patras

Although a new landscape of uneven restructuring has been shaped in Europe in the aftermath of the global financial crisis, research considering territoriality and spatial diversity is limited. In countries moderately hit, economic recovery signaled the rise of job offers and a drop of unemployment rate. But in countries severely hit, the mismatch between labour demand and supply is aggravated in quantitative and qualitative terms: taking Greece as a case of prolonged recession, high-skills workers recorded the biggest employment rate drop. In less hurt economies, SMEs were significantly more resilient to the crisis, but the Greek SMEs have suffered disproportionately more under extreme austerity. On this ground, the study provides insight of crisis-induced structural shifts in Greece's labour market. Secondary data for 2013-2017, indicating positive trends both in new entries and employment in the Greek small business sector, illustrate post-crisis flows of hires and layoffs across industries (NACE2) of different specialisation level. Hires and layoffs are analysed respectively in terms of job qualifications and skills (STO2, ISCO2). Employment conditions are examined by types of contract and earnings. Primary data are also analysed, with focus on quantitative and qualitative aspects of jobs offered by local enterprises and jobs pursued by local labour force. The results reveal that post-crisis enterprises hardly generate any jobs, while labour is undervalued in every aspect: skill requirements, earnings, stability and security, career prospects. Expanding atypical employment has eroded typical work, largely through contracts' conversion to casual work arrangements. Employment flexibilisation is assigned to low-specialisation industries (restaurants, cafes, etc). Employment precariousness equally affects highly and low qualified employees; while unemployment mostly affects the highly qualified. Concluding, crisis-induced reforms under acute austerity have impeded economic restructuring towards innovative competitiveness and social inclusion.

Session

Labour Geography and Capitalist Reproduction

Felix Silomon-Pflug - Goethe University | Stefanie Hürtgen - Universität Salzburg

More than 20 years ago, both mainstream as well as radical economic geography were profoundly criticized for their blindness to labour's geographic agency, reducing it to an economic factor or a passive object of capital's strategy (Herod 1997). Since then, a wide range of literature and case studies has demonstrated labour's active space, scale, and place making. However, there is also a serious critique on labour geography. This critique tackles a certain empiricism due to the prevalent theoretical disconnection of labour's resistance and social abilities with wider societal, political and economic structures (Peck 2003; Mitchell 2011; Coe 2012; Herod 2016). Hence, the need for further development of labour geography is obvious to strengthen its very impact.

In our session, we want to discuss consequences and further steps following this debate. Our guiding question is: How can labour be conceptualized as an active, intervening social agent, transforming social landscapes and society - without falling into the trap of an "agency-centred ontology" (Peck 2013)? Following this question we invite theoretical as well as empirical contributions which could cover the following but also related issues:

What is the relation between labour's spatial agency and the contemporary capitalist social formation?

What kind of socio-spatial abilities and what kind of constraints do we observe on labour's side, and how could we conceptualise them?

In what manner is labour's scale making important for the contemporary capitalist mode of production?

How can we theorize conditions of labour's agency without falling back taking them as pure structural conditions, objectifying labour?

Researching Labour Agency and its impact on the reproduction of Global Production Networks

Michael Fütterer - University Salzburg

The perspective on labour in labour geography has changed over the last twenty years. Instead of conceptualising labour only in terms of "abstract labour as the origin of surplus value" (Rainnie et al. 2011: 161) more research is concerned with "trade unions, other forms of worker organization and individual workers as sentient actors who make decisions" (ibid.). Hence, it is important to link workers' agency to the contested reproduction of Global Production Networks: neither are workers simply resisting exploitation nor are they mere objects of capital's reorganisation of production. Instead it has to be analysed how workers' agency both shapes Global Production Networks and is shaped by horizontal and vertical dimensions of a Global Production Network (Lund-Thomsen/Coe 2013: 4). Drawing on work on global ethnographies and Critical Grounded Theory (Burawoy 2009, Belfrage/Hauf 2015) and first experiences from my field work on the labour agency of garment unions in India I want to present starting points for a methodological framework which allows to analyse the prospects and constraints of local labour agency and how it is link it to wider structures of the Global Production Network in the global garment industry.

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Waste works – reflections on labour agency in informality. The case of plastic recycling networks in Calcutta.

Nicolas Schlitz - Osnabrück University

In this talk, I am going to delineate the concrete social and economic relations that structure the labour geographies of plastic waste handling and recycling in Calcutta, India. Thereby, I wish to complicate our understanding of labour agency with respect to both, the micro-politics of everyday economic practices (in relation with multiple but concrete social and political struggles) and the up-scaled uneven geographies of capitalism, they are embedded in.

Plastic recycling economies in India are historically premised on the period of political and economic liberalization of the late 1980s, which involved the privileging of 'modern' urban economies over 'traditional' rural livelihoods, while unleashing a prolonged dynamic of jobless growth only met in its scope by the exponential production of (plastic) waste. The informality of

plastic recycling networks in Calcutta draws an odd picture, where labour relations are often overdetermined by and hard to distinguish from other social and economic relations. They take a number of different forms, from ‘self-employment’ and collectively organized work to wage relations, but also including varying degrees of petty entrepreneurship. Drawing on Gidwani’s notion of an “infra-economy” (2015), and framed by an emphasis on the “dis/articulations” (McGrath 2017) of globalized capitalist social relations, I argue that the societal entanglements of waste and recycling work in Calcutta offer a new perspective on the variegated forms of labour implicated in globalized recycling and destruction networks (Herod et al. 2014; McGrath-Champ et al. 2015) – and potentially contribute to a renewed understanding of labour agency in labour geographies (Peck 2003).

Theorizing Structural Conditions for Labour Agency in GPN: A Multi-Level Analysis of the Labour Control Regime in the Bangalore Garment Export Industry

Tatiana López Ayala - University of Cologne

While labour geography has achieved to bring labour back into theoretical discussions as an active agent of the political economy, it has also been criticized for its partial and often over-celebratory perspective on agency. Existing studies in labour geography have been reproached for tending to focus on isolated success stories of workers from manufacturing sectors in developed countries (Coe/ Jordhus-Lier 2010) and for lacking “a sense of the limits and tensions arising from deeper underlying power structures” (Cumbers 2015:147). This paper aims to contribute to closing these gaps by developing a relational framework for the analysis of the structural conditions shaping the agency of local unions in low wage export-manufacturing sectors located in newly-industrializing countries. Through combining the relational ontology of the GPN approach (e.g. Henderson et al. 2002) with the concept of Local Labour Control Regimes (Jonas 1996, Kelly 2011), the presented framework takes into account the embeddedness of local unions into broader political-economic structures at the global level as well as their embeddedness into territorial relations at the horizontal dimension.

Through the lens of this heuristic framework, the paper analyses the structural conditions shaping the agency of unions in the export-garment industry in Bangalore. It highlights how the political and economic strategies of actors, acting at and across multiple scales within the GPN, co-produce the Labour Control Regime at the local level and, thus, structurally condition and constrain the agency of local garment unions in multiple ways. Empirical data for the case study were gathered from a total of 32 qualitative interviews conducted in 2017 with representatives of local unions, labour rights organizations and factory managements as well as with employer and government organizations at the state and national level.

Exploitation and labour regimes: a research agenda

Satoshi Miyamura - SOAS University of London | **Elena Baglioni** - Queen Mary University of London | **Liam Campling** - Queen Mary University of London | **Alessandra Mezzadri** - SOAS University of London | **Jonathan Pattenden** - University of East Anglia | **Benjamin Selwyn** - University of Sussex

This paper proposes to further the research agenda on labour centred analyses of contemporary capitalism that has emerged in recent years from the increasing dialogue between the fields of labour geography, labour process theory and GVC/GPN analyses, as well as debates around informality and precarity, reproduction and nature/ecology. The labour regime is conceived as an intermediate category, one that is empirically dependent, but that allows for some degree of comparison between ‘moments’ of exploitation and the relations of production necessary to them. Taking the production of surplus value as the epicentre of capitalism, the paper locates the moment of production as being in constant relation to the much broader terrain where all the necessary conditions for capitalist production are realised, evolve, and are fought over. From this perspective the ‘narrow’ moment of labour exploitation (as surplus value creation/extraction) can be more fully connected to the totality of social relations and power dynamics that underpin it: labour exploitation becomes a prism to discover a much larger world – the historically and geographically uneven development that allows the (re)production of value on unequal terms. By exploring the world that underpins labour exploitation the symposium ultimately wishes to emphasise how the constant fragmentation of labour across productive/unproductive, or paid/unpaid lines, creates both obstacles and opportunities for class struggle.

Session

Recent perspectives on workplace and labour

Tatiana López Ayala - University of Cologne

Exclusion Processes and Precarization of Women Labour: A Case of the Bidi Sector in India

Pallavi Joshi Lahari - Jawaharlal Nehru University

Introduction:

Bidi is the hand rolled country tobacco smoke of India. It is one of the major unorganised industries and a common livelihood option for the rural Indian women. Bidi rolling activity is primarily homebased and sub-contracted. It's a labour intensive job with menial rewards and moreover a serious health hazard. Such a production process creates severe conditions of precarization and the Bidi rollers constitute one of the most vulnerable labour segments.

Methods:

The work adopts an inductive approach to create a framework of precarization processes in the sector. The work is based on the survey, narratives and in-depth interviews of a set of women Bidi rollers and middlemen contractors in Sagar district of Madhya Pradesh. Therein repeated themes were identified to chart out a concept framework of multiple exclusion processes that flow into conditions of precarity.

Discussion:

The study deduces that there are exclusionary processes working at multiple planes like of gender, caste, assets, mobility, skills and autonomy that keep women in this region to the Bidi work. These are the set of processes that help establishing, flourishing and sustaining precarious conditions for labour. Precariousness in the Bidi sector, exists in the form of poverty, lack of social protection, lack of bargaining power, weak social capital, hazardous work and working conditions. Thereon, such precarious work puts the labour at a disadvantage and furthers the exclusion process, creating a self feeding cycle, which is hard to break.

Conclusions:

This is one attempt in mapping the socio-spatial constraints that act upon labour in a rural Indian setting. Such an understanding is important to understand the source of precarity in work & labour market, which in itself is an important determinant for other determinants like social health & wellbeing, economic stability and political strength.

The evolution of educational specialization on the Swedish labor market

Therese Danley - Umeå University

With the growth in higher education and integration of new technologies in workplaces, the specialization of workers has become increasingly prevalent. In Sweden, the share of the working age population with three or more years of higher education rose from 11% in 1990 to 26% in 2015. While much attention has been given to the spatially uneven accumulation of human capital, less focus has been on the development of human capital specialization in different regions. The purpose of this paper is to assess whether the overall increasing complexity of economic activities and the larger supply of formal skills have led to more diverse sets of skills within industries or to a deepened spatial division of labor. Empirically, this is studied by calculating the evolving composition of educational fields in regions from 1990 to 2015. The co-occurrence of educational fields is used to describe the degree of specialization within industries and the degree of shared skills between industries. This is done to determine to what degree interdependencies are developed between industries and how the local industry structure influences the evolution of skills across space.

Gendered societal transitions: unpacking the shifting gender dynamics of labour-capital relations in global production networks

Eleni Sifaki - University of Manchester

This paper investigates the shifting interaction between commercial pressures and gender relations in production networks and their implications for women's role and agency in the table grapes sector in Greece. Theoretically the paper brings together global production networks (GPN) and feminist political economy literatures to inform and contribute to a gender analysis of global production networks. Empirically, the paper explores transformations in the table grape production system and their gender implications across three periods: a) the period of the producer-led export market b) the period of the buyer-led production network and c) the period of economic crisis and austerity. The paper finds that while in the period of the producer-led export market women were unskilled labour, the expansion of supermarkets offered skills and economic opportunities, enabling them to bargain during

the economic crisis even as unwaged labour in table grapes. The paper argues that it is the continuous and dialectical interaction between gendered societal relations and commercial pressures, what the author calls gendered societal transitions, that leads to shifts in women's position. This has implications for understanding women's agency as dynamic and constitutive of commercial transitions in production systems.

The Impact of Tourism on Women's Empowerment and Livelihoods in Victoria Falls, Zimbabwe

Tariro Sibanda - Monash University

The town of Victoria Falls, Zimbabwe, is located in a protected national park surrounded by local communities that all work in tourism in one form or another. Traditionally Zimbabwe was a patriarchal society which caused women to be marginalized. This study investigates the impacts of tourism on livelihoods on Victoria Falls, focusing particularly on women's empowerment. The researcher employed a mixed method approach through the use of structured questionnaires and semi-structured interviews. The extent to which tourism has impacted women's empowerment was analysed by disaggregating the data to compare the results between men and women. The findings show that tourism has led to a change of livelihoods in the town. This has caused the community to be solely dependent on tourism and left them vulnerable to shocks. Tourism has positively impacted women's livelihoods in Victoria Falls, however, the data indicated that they were not at the empowerment level.

4. Posters

POSTER SESSION

Does the Weather matter for Economic Growth? Evidence on Weather Shocks and Anomalies in European Regions

Linus Holtermann - Ruhr-Universität Bochum | **Marie-Christin Rische** - HWWI

Climate change is widely perceived as a severe future challenge and has made its way onto many policy agendas. For developing strategies, it is crucial to understand and predict the economic impacts of climate change. Under theoretical considerations, economic systems should be adapted to weather fluctuations within a common range. Only rather unexpected and unusual conditions should cause disruptions. However, due to the complexity of matching the economically relevant parameters of short term weather phenomena to highly spatially and temporal aggregated GDP data, potential effects might have been concealed in the past. Furthermore, economic entities have been considered as isolated systems and potential contagion-effects via spillovers have been neglected in the literature so far.

We look at a smaller spatial scale and not only examine temperature or precipitation averages, but also annual weather anomalies. We empirically investigate whether these measures have affected the economic performance in European NUTS-3 regions during 1980-2012. By employing spatial panel models and differing between regional types, we also explore spillover-effects between regions and investigate which types of regions might be (most) vulnerable to 'extreme' weather conditions.

Preliminary results reveal negative growth effects of temperature rise in European regions. The effect size is enhanced by spillovers between regions that are interconnected via trade flows or geographical proximity. Further findings reject the hypothesis that regions respond uniformly to climate change. Spatial heterogeneous patterns of response indicate that the major metropolises show a high degree of resilience towards gradual rise in temperature. In contrast, weather anomalies inflict damage to all regions once a specific intensity threshold is exceeded. The size and direction of the growth effect for both the rise in level and anomalies depends on the prevailing climate conditions of a region, which indicates highly non-linear effects of temperature on economic production.

Leisure activity patterns and determinants of the middle class on weekday and weekend in Chinese metropolitans: A case of Guangzhou

Dandan Dai - Guangzhou University | **Fang Wei** - Guangzhou University | **Jing Wu** - Guangzhou University

Middle classes have tremendous impacts on urban socioeconomic transformation along the rise of China, since they are becoming the common part of Chinese society, particularly in mega-cities like Guangzhou. Middle-class residents in Chinese metropolitans show special characteristics compared with western countries, particularly their leisure activity pattern is one of the pivotal features in identifying the middle class. Nevertheless, previous literatures pay little attention to leisure activity of middle class in Chinese metropolitans. To fill the literature gap, this paper uses time-space visual methods to show leisure activity patterns of middle class and formulates the model to reveal their determinants, based on the comparison of weekday and weekend. The formulation is applied to the descriptive and empirical analysis using data drawn from a middle class activity-diary survey collecting detail leisure time-use and household-personal socio-demographic information in 2014 Guangzhou. The descriptive analysis displays the space-time heterogeneity of leisure activity patterns on the weekday and weekend showing the "U-shape" and "M-shape" respectively. The empirical analysis employs individual and household socio-demographics, residential environment and activity-travel characteristics as explanatory variables. Among them, the density of facilities associated with leisure, activity duration, activity partners and travel mode appear to be the most important determinants of leisure activity of middle classes on the weekday and weekend. These results are helpful to understand leisure activity of middle class in developing countries.

Globalization of real estate markets. New challenges for institutions educating property appraisers.

Sabina Żróbek - University of Warmia and Mazury in Olsztyn | **Ryszard Żróbek** - University of Warmia and Mazury in Olsztyn

The globalization of activities of various entities, including the real estate market, forces the need for the standardization of valuations. Bad, inadequate, outdated, misunderstood by valuation recipients are one of the causes of recent crises in financial markets - and global crises.

For this reason, the expectations of an accurate and "real" valuation by customers are becoming more and more visible. It is connected with the necessity to secure the public interest, for which the market transparency, a uniform understanding of the market value category, and a clear indication of the manner of determining this value are important. Meeting these needs is a constructive dialogue between valuation practitioners and real estate and other disciplines. Universities should become more providers of up-to-date knowledge base, clear curricula offering motivational strategies to students than giving them ready-made property valuation procedures.

Responses of Urban Transportation Systems to Epidemic Outbreak: Case Study in Seoul during MERS Outbreak

Ji-Hye Lee - Seoul National University | **MooYoung Choi** - Seoul National University | **Segun Goh** - Heinrich-Heine University Dusseldorf | **Keumsook Lee** - Sungshin Women's University

A lethal epidemic affects human behavior, since it evokes the fear of contagion throughout society. Understanding this process on the societal scale may provide insight into the collective properties of human movement. To study the effects of infectious disease outbreak in urban society, we analyze the smart card transaction data in the Seoul Bus and Metro Transportation systems before and after the Middle East respiratory syndrome (MERS) outbreak. MERS was rampant in Korea from 20 May to 28 July in 2015 and drew keen attention from all over the world. The smart card transactions around the beginning of MERS are expected to contain abundant information on passenger flows. Fluctuations in the number of passengers using each station during weekdays are probed through correlation functions. The distribution of fluctuations is also investigated. Power-law behavior is observed in spatial correlations while the distribution of fluctuations becomes more skewed after MERS. Implications of the obtained results are discussed.

Reinventing New Zealand's Blue Economy

Stephen FitzHerbert - National Institute of Water and Atmospheric Research (NIWA) | **Kate Davies** - National Institute of Water and Atmospheric Research (NIWA) | **Nick Lewis** - The University of Auckland

This poster presents a research project that endeavors to identify, frame and enact a 'blue economy' in New Zealand from more or less connected elements of marine economy. Internationally, the term 'blue economy' is used increasingly in policy circles and interpreted to mean anything from radical green initiatives to often highly capitalised investments designed to exploit marine resources. The former implies a moral economy centred on radically green practices and ethics, while the latter tends to be used as category that aggregates all (not necessarily interconnected) marine economy at some spatial scale or other. Our research focuses attention on entrepreneurial, investment and management initiatives that work with the dynamics of marine environments to create economic and social values. It begins from the hypothesis that to move beyond standard references to sustainability requires innovations in thinking, investment, production and regulation. The project asks whether it is possible to discern and/or enact a blue economy that sustains or enhances the resourcefulness of those environments and their communities. Our reinventing blue economy project aims to know and enact economy differently by challenging and enriching the categories and data of which economies typically manifest as an object.

Constraint-adaptation challenges and resilience transitions of the industry–environmental system in a resource-dependent city

Xueli Gao - Chinese Academy of Sciences | **Dewei Yang** - Chinese Academy of Sciences

Resource-dependent cities face the significant challenge of industrial transition under resource and environmental constraints. However, the interplay between industrial and environmental variables and their resilience trajectories remain insufficient concern. A constraint–adaptation framework was established to quantify the constraint–adaptation trajectory and resilience transitions of the industry–environmental system in the transition pilot of Baiyin City, western China. In this framework, an environmental performance index (EPI) was employed to reveal constraints of four resources and three environmental variables on local industrial development, combining with industrial indicators (i.e., industrial structure entropy and the shift-share method) to reflect the industrial structure adaptation. Then the resilience trajectories of seven environmental variables were simulated to depict the industry–environmental system resilience dynamics using the four-phase adaptive cycle theory. Results from 1990 to 2016 in Baiyin City demonstrate that: (1) heavy dependence on mineral and energy resources, and resulting atmospheric and solid waste pollution, undermined local industrial competitiveness; (2) although the secondary industry increased before 2011 and recently exhibited an ascending trend, the total increase fell dramatically from 2012 to 2016 (total deviation of –30.64%); (3) the system underwent a vulnerable resilience transition to great adaptive capacity, with most resilience values greater than 0.5 (ascending

adaptive capacity with resilience values from 0 to 1) in the past five years; (4) aggressive transition measures must be adopted to enhance adaptive capacity in the industry–environmental system and foster co-benefits. This study provides a model to explore the transitions of resource-dependent cities in and beyond China.

Green, greenery, and greenwashing on the housing market in Poznań

Barbara Maćkiewicz - Adam Mickiewicz University | **Magdalena Szczepańska** - Adam Mickiewicz University

Colour is the basis for visual perception and at the same time it is one of the main means of communication. An adequate selection of colours evokes specific associations and emotions, often affecting the assessment of e.g. a given location, as well as decisions made in connection to it. This is particularly important in managing space, as well as being used in the marketing of real estate. The colour green especially, which is a symbol of healthy, ecological, active and a secure life, seems to be particularly important in promotional activities carried out by developers. At the same time, it is well known that the presence of greenery in urbanized space positively affects its aesthetic values, contributes to the improvement of living conditions and the well-being of its residents. Therefore, developers not only commonly use the colour green, especially its light shade, in advertising materials, but also willingly refer to green areas in the names of their investments.

The aim of the present research is to draw attention and to critically evaluate the presence and intensity of "green" in promotional materials, visualizations and on websites regarding housing investments on the Poznań housing market. There are reasons to argue that developers in Poznań are aware of the beneficial effect of the proximity of green areas on the prestige of the property and want to add greenery to their properties. The results of the research into the relationship between greenery and the housing market have so far confirmed that green areas have a clear impact on the location decisions of developers in Poznań. In addition, it was found that developers tend to exhibit the presence of greenery in the vicinity of their properties. This has been proved by the popularity of "green" investment names on the housing market. However, the values of green area accessibility indicators calculated for the investment projects carried out on the Poznań housing market indicate that this "green" factor is being abused in promotional activities, and in the use of environmentally- related names for construction companies who consciously use eco-related names and logos when advertising, much in a 'greenwashing' way.

The University as an agent of cooperation and territorial development in southern Europe. The case of the Euroregion Galicia-North of Portugal (Spain-Portugal)

Angel Miramontes Carballada - University Santiago de Compostela

This territory is located in the periphery of southern Europe, specifically in the northwest of the Iberian Peninsula. The Euro region is formed by Galicia (Spain) and North of Portugal (Portugal) and concentrates in its 51 thousand km² more than 6 million inhabitants. It is a territory with a strong social, economic and cultural relationship, but with marked weaknesses (aging, mobility, etc.) that can be overcome. In fact, the different political administrations that have competence over this space have been working for many years in the development and dynamization of this territory. There is also a broad list of management bodies, both Spanish and Portuguese, focused on this development task (EGTC, Provincial Councils, Inter-municipal Communities, etc.). There are even examples of projects and initiatives subsidized by the EU for the revitalization of this space. For all this, this paper shows and explains the peculiarities of cooperation and territorial development of a peripheral space in southern Europe. But emphasizing the influence that the three universities of Galicia (University of A Coruña, University of Santiago de Compostela and University of Vigo) and the 3 universities of the North of Portugal (University of Minho, University of Porto and University Trás-os-Montes Alto Douro) working together. Because in addition to showing some innovative results of the collaborations between these universities. Emphasis will be placed on exposing the influence that universities have had in this territory to solve various problems that without their collaboration would have been difficult to correct.

The spatial impacts model of trans-strait fixed links in Pearl River Delta, China

Qitao Wu - Guangzhou Institute of Geography | **Hongou Zhang**

The major trans-strait fixed links are constructed in different countries to promote regional economic and social development. This paper proposes a spatial impacts model for the trans-strait fixed links in the Pearl River Delta, China. To verify the rationality of the model, four quantitative indicators, including weighted average travel time, the economic linkage intensity, the economic linkage membership grade, and the fractal index are used to investigate the effect by construction of Humen Bridge, Hong Kong–Zhuhai–Macao Bridge and Shenzhen–Zhongshan Bridge. The results show that the Hong Kong–Zhuhai–Macao Bridge and Shenzhen–Zhongshan Bridge greatly improve the regional accessibility with a maximum decrease weighted average travel time of 1.38 hours and 0.4 hours. The central part of the Delta has greatest impacts. The links increase the economic linkage of cities of

each sides. The cities directly connected to the fixed links (Hong Kong, Shenzhen, Macao and Zhongshan) experience the highest increasing economic linkage. The regional spatial pattern evolves from unipolarity to multi-polarity and integrates a more advanced and sophisticated spatial network. The theoretical spatial impacts model for the trans-strait fixed links accords with the actual development in the Pearl River Delta.

Firm performance and multi-scale territorial resources in Wallonia (Belgium): Toward a model using business accounting

Pierre-François Wilmotte - Université de Liège | **Jean-Marie Halleux** - Université de Liège

The research project aims to explore the relationships between firm performance and their territorial and/or location specific resources. By territorial resource, we mean the specific features of the territories that affect the ability of companies to develop their business. Our ambition is to compare different categories of territorial resources: accessibility at both, the micro and the macro level; the “prestige” of place; the economic environment; the size and the quality of workforce... The main goal is to measure the differences in terms of scales and intensity of these territorial resources. We postulate the existence of three structuring scales around the firm internal perimeter: the Walloon [regional] scale, the sub-regional scale and the scale of the site where the firm is located.

This proposal of poster presents the first model of our PhD project, using the business accounting data. First, we expose the State of Art related to the territorial resources to select variables. These variables are linked with the available data from European, Belgian and Walloon sources. Then, we lay out the methodology of this model, explaining the added value created by the Walloon firms thanks to internal factors of the Walloon firms (measured by accounting data) and to the territorial resources. Finally, we expose the data used as well as our first results.

How Firm Heterogeneity Affects FDI Agglomeration and Location Choice: Micro-Evidence from New Foreign Manufacturing Firms in the Pearl River Delta

Yuyao Ye - Guangzhou Institute of Geography

Micro-level effects of firms on the FDI agglomeration have been somewhat neglected in the existing literatures. However, heterogeneous firms may differ in their location preferences, thus emphasizing different site attributes, while the same site attributes may have different levels of influence on heterogeneous firms. This study explores how and to what extent firm heterogeneity affects the geographic agglomeration and location choice of foreign direct investments (FDIs) at a sub-national level, based on micro-evidence from 3558 new foreign manufacturing firms (NFMFs) in the Pearl River Delta, China. Kernel density, geographical detector technique, and spatial regression were estimated to provide evidence that foreign firms' location choices are determined jointly by site attributes and firm heterogeneity.

Keywords: Geographic agglomeration; Multinational enterprise; Kernel density; Geographical detector technique; Spatial regression

An analysis on the socioeconomic factors affecting regional differences in the generation of municipal solid waste among municipalities in Japan

Akihiko Namie - Kwansei Gakuin University

This study aims to analyze the socioeconomic factors affecting regional differences in the generation of municipal solid waste (MSW) among municipalities in Japan. Generally, the volume of MSW per capita in urban regions tends to be larger because of the concentration of offices and shops, active business and consumption by densely inhabited people and offices, and so on. It is a matter of course that the total weight of MSW is enormous in urban regions than depopulated rural regions, however, the per capita weight of MSW does not necessary become larger as the population increases. For example, the weight of MSW in Yokohama City, whose population is largest among cities in Japan, was 866g per capita per day in 2015, which was below the average in Japan. In contrast, the statistics shows that residents living in smaller towns and villages discharged more MSW than Yokohama and other urban regions in 2015. The generation of MSW from households, offices and shops seems to be influenced by the characteristics of households and establishments, the natural and living environment, economic activities, municipal policies regarding MSW management, etc. The interests of this study are (1) the relationship between socioeconomic factors which seem to affect the generation of MSW and actual weight of MSW per capita and (2) the changes of this relationship from 2000 to 2015.

Cultural legacies and recent creative dynamics in the artisanal production centers in the center-west region of Brazil

Camila Rodrigues da Fonseca - Instituto Federal de Brasília - IFB | **Richard Siqueira** - Instituto Federal de Brasília - IFB

The aim of this study is to delimit how cultural legacies originated from the peoples that occupied the region of the center-west of Brazil added elements and knowledge to the handcrafted practices catalyzed in the most recent dynamics of regional artisanal production. In the study we develop a historical contextualization and delimit the elements that make up these legacies of cultural identity based on a creative economic geography to understand the latest dynamics of the region. These spaces and cultural reserves in the country are organized geographically through artisanal production centers in some states such as Goiás, Mato Grosso, Mato Grosso do Sul and Federal District. In the vicinity of Brasília, the capita of the country, there are tourist cities with interesting historical and cultural components, where there is formation of clusters of handmade productions. Such clusters are centers of creativity and a kind of platform of new artistic trends in the region. Remarkably, they are also useful tools for perpetuating local knowledge. New craft practices often blend cultural legacies, add new technologies, and assimilate trends and environmental preservation criteria established by these communities. There is a creative interconnection between these craft centers within associations and cooperatives. Clearly, there has been a growth of these artistic manifestations in Brazil in the last decade. Native populations and those that migrated from other regions to the construction of Brasília in the 1960s were populations of the North, Northeast and Southeast regions, in which they contributed to the phenomenon of artisanal practice as a source of complementary income for many families. Creativity is present in many aspects of artisanal production and it helps to refresh new trends in the Brazilian society. However, the cultural legacies are key to the understanding of these new trends in the region.

The Industrial Ecologilization Path for Fine Chemical Industry in Ecological Development Zone under the Policy Regulation : Taking Coating Industry in Shaoguan City as an Example

Lixia Jin - Guangzhou Institute of Geography | **Weilian Chen** - Guangdong Research Institute of Petrochemical and Fine-Chemical Engineering | **Fang Lan** - Guangdong Open Laboratory of Geospatial Information Technology and Application | **Changjian Wang** - Guangdong Academy of Innovation Development |

Based on the study of the choice of industries and the path of industrial development, the case study on the transformation and upgrading of stock industries under the policy regulation still needs to be strengthened. Based on the theoretical perspective of industrial chain and industrial ecologilization, taking the coating Industry of national key ecological development zone in the mountains of northern Guangdong Province as an example, this paper studies the ecological development path of polluting industries transferred to ecological development zone under the industrial transfer policy. The research found that under the dual policy regulation of environmental regulation and industrial access negative list, the coatings enterprises in the ecological development zone generally face the fate of upgrading or shutting down. From the three levels of government, industrial park and enterprise, the research constructs the ecological path to promote sustainable development of industry. Then it suggests that the subjective status of government should be stressed in the process of the ecological industry. The ecological policy regulation system should be reformed and improved by implementing the ecological incentive mechanism and fine management mechanism for industrial access the negative list, which standardizes and guides enterprises/parks to actively participate in industry ecological practice, and promotes the industrial ecologilization of ecological development zone.

Key words: Policy Regulation; Industrial Ecologilization; Industrial Chain; Coating Industry; Ecological Development Zone

Factors Promoting the Geographical Expansions of International Production Networks—Some Case Studies of Japanese Firms' Thailand Plus One Strategy

Yasushi Ueki - Institute of Developing Economies Japan External Trade Organization (IDE-JETRO) | **Fusanori Iwasaki** - Institute of Developing Economies Japan External Trade Organization (IDE-JETRO)

This study builds the mechanism of how and why some firms extend their production networks to geographically rural or local area by utilizing the case examples of the Association of South East Asian Nations (ASEAN). Due to the limitation of available labor forces and wage increase of Thailand, in ASEAN, especially, Mekong region, firms try to move or extend their production sites to neighbor countries of Thailand, so called, "Thailand plus One." Several previous studies mention the expansion of production networks or value chains is one of the elements of Thailand plus One strategy and it has driven by the development of hard infrastructure within this region. Development of the infrastructure is one of the significant conditions but not the sufficient conditions for firms to decide the extensions of their production networks to more rural area.

Through the case study of the Small and Medium-size Enterprises (SMEs) in the Mekong region, the authors analyze the geographical extension of the production networks from the perspectives of each business behavior. In our case firms, they develop "Thailand Plus One" strategy between Thailand and Lao PDR. Through the interview based qualitative analysis, the author found some elements of firms' decision makings. Of course, the physical infrastructure improvement between neighbor countries, or the

proximity of the language (between Thailand and Lao PDR) is significant pieces, especially for SMEs, but the authors emphasize on contribution of the market-side innovation. By introducing the e-commerce, apparel firms are able to produce simple standard products (without seasonality) and difference seasonal products (e.g. gift products) which enable lead time longer than conventional seasonal apparel products for Japanese market. By making use of e-commerce, longer lead time allows developing production sites to participate in the high quality developed countries markets.

Ex-post Evaluation of Green Community Initiatives in Chile

Cristian Mardones - University of Concepcion

This study contributes to the limited literature about the impact assessment of environmental issues. Specifically, the study performs an ex-post evaluation of a program known as 'The Environmental Protection Fund' that improves the environment via various community initiatives that promote education and citizen participation in Chile. A method of instrumental variables is used to determine the effect of this program on perceived problems associated with multiple environmental components according to the allocation characteristics of the selected projects and the nature of the data available. The results show that the effectiveness of the program, as measured by improvements in environmental perception, is only achieved in the component associated with odor pollution and that there are nine other environmental components in which no improvements are seen. Therefore, it is concluded that a reallocation of resources is essential to improve the impact and cost-effectiveness of the program. These results are robust to different specifications of explanatory variables and estimation methods.

PM2.5 air pollution and county population: Evidence from international oil and gas prices

Yi-Chen Lin - Tamkang University | **Wen-Shuenn Deng** - Tamkang University

This study contributes to the limited literature about the impact assessment of environmental issues. Specifically, the study performs an ex-post evaluation of a program known as 'The Environmental Protection Fund' that improves the environment via various community initiatives that promote education and citizen participation in Chile. A method of instrumental variables is used to determine the effect of this program on perceived problems associated with multiple environmental components according to the allocation characteristics of the selected projects and the nature of the data available. The results show that the effectiveness of the program, as measured by improvements in environmental perception, is only achieved in the component associated with odor pollution and that there are nine other environmental components in which no improvements are seen. Therefore, it is concluded that a reallocation of resources is essential to improve the impact and cost-effectiveness of the program. These results are robust to different specifications of explanatory variables and estimation methods.

The ambivalence of value in the pharmaceutical Research and Development (R&D) – Devaluation as an impulse for creativity

Alice Melchior - HafenCity University Hamburg

This contribution to valuation studies investigates the dynamic value-negotiation process and its interplay of upvaluation and devaluation of an idea in the pharmaceutical innovation process in Germany. In contrast to innovation research this contribution does not focus on the implementation of a new pharmaceutical product at the market, but on the fuzzy-front end and the inherent value-negotiation process within non-linear innovation processes. Thereby this research contributes to previous valuation studies by focusing at research-inherent tensions in a knowledge-intensive innovation process. Using qualitative interviews, conducted with participants of the pharmaceutical R&D field and a two-week observation in a clinical research laboratory near Berlin, a neglected interplay of devaluation and upvaluation of knowledge within the innovation process could be identified.

Based on the empirical data it became apparent that there are a variety of ambivalences and research-inherent value dissonances within the pharmaceutical R&D which bases on different disciplinary, theoretical and methodological values. This ambivalence of values fosters a dynamic value-negotiation process with multiple process-internal and phase-internal tensions. By looking more closely at these tensions an interplay of devaluation and upvaluation of the idea within the pharmaceutical innovation process could be identified. Hereby devaluation is understood as a non-satisfying fulfillment of value requirements, while upvaluation is defined as adapting the core idea to a new value requirement. Within this interplay between devaluation and upvaluation, devaluation mostly occurs at the phase transitions as a value judgement, whereas upvaluation occurs mostly as a phase-internal process, which is triggered by its preceding devaluation. Hence devaluation can be understood as an impulse for upvaluation processes and creativity within the pharmaceutical innovation process.

Hidden and unjust geographies?. Finding places of marginalization and vulnerability in Lisbon Metropolitan Area

Maria de Fatima FERREIRO - ISCTE – Instituto Universitário de Lisboa | **Alexandre GONÇALVES** - CERIS/IST-UL | **Isabel Loupa RAMOS** - CERIS/IST-UL | **Sebastião SANTOS** - DINAMIA'CET/ISCTE-IUL

In a globalized world, inequality, socio-economic marginalization or vulnerability are not geographically confined. They exist beyond official borders, whether they are local, regional, national or international. Metropolitan areas, especially diverse and contrasted concerning uses, activities or livelihoods, are therefore spaces with a heterogeneous distribution of social and economic opportunities or vulnerabilities. Lisbon Metropolitan Area (LMA) is no exception. With a population of 2,8 million inhabitants, it's the most competitive economic centre of the country, with increasing global integration. Its geography, a blend of 'leading' territories (highly attractive for global finance), co-existing with 'lagging territories', where problems such as lack of land use planning and investment, landscape disqualification, economic disadvantages, or social-spatial exclusion persist, it's not easily captured by the official data collected and made public. This paper will present research achievements related to an iterative process of clustering, ranking and spatializing (ArcGIS) 'edge-values' of collected data (Census, Land Use Maps, Other Institutional sources) at distinct desegregation levels, that allowed the identification of territorial typologies, places and communities in LMA, where extreme processes of socio-economic, institutional or environmental marginalization occur. It will also discuss the role of this methodology in testing the way statistical information and mapping is being produced, used and communicated and how it may influence investments, urban planning decisions, policy options or even knowledge production. If territorial analysis and action is exclusively driven by indicators average-values and administrative borders, it may be persistently pushing off-the-map, pockets of disadvantaged geographies, weighing statistical relevance against social urgency and hindering the path towards a more inclusive city.

Renewable Energy Cooperatives: A vital component of the energy transition in Europe

Tim Roesler - Philipps-Universität Marburg | **Julian Schwabe** - Philipps-Universität Marburg | **Markus Hassler** - Philipps-Universität Marburg

Social innovation is an important and often times neglected component of the energy transition that is currently taking place in Germany. This type of innovation can for example materialize in the form of cooperatives for energy supply. Such cooperatives, which operate local energy supply infrastructure like biomass heating plants or solar photovoltaic installations, have emerged in several rural areas in Germany during the past decade. Given the potential of self-sustaining rural energy supply on a local level, such cooperatives can be a vital part of a transition towards sustainable energy supply not only in Germany, but on the European level. Additionally, such cooperatives can support the regional economy by internalizing the revenue generated from collectively owned energy supply infrastructure and strengthen the local community by facilitating social interaction. This poster introduces research findings about the development of bioenergy village cooperatives in Germany as well as future areas of research within the Interreg-Project "Creating new local Energy Community Co-Operatives" (ECCO).

Smart specialization and institutions: Towards an institutional process of discovery and change

Maximilian Benner - Centre for Social Innovation (ZSI)

Scholars and policymakers in regional development have gained much experience since the arrival of the smart specialization discourse in EU regional policy and since the emergence of the first tools for policymakers to develop research and innovation strategies for smart specialization (RIS3) and to pursue the entrepreneurial discovery process (EDP). From the point of view of relational and evolutionary economic geography, the EDP can be seen an opportunity to address institutional questions. Institutions can explain, for example, why some policies are eventually successful while others are not. Under the umbrella of RIS3 design, we might expect the EDP to reveal institutional patterns specific to the context of the regional or national economy in question, and to define policies aiming at a combination of both upward and downward causation. Doing so is important because designing context-specific regional policies such as a RIS3 requires a deep understanding of the institutional context of the economy. The paper develops a conceptual framework that describes what kinds of rule-institution relationships can be affected during the EDP. Furthermore, the framework is meant to clarify how the EDP and subsequent RIS3 implementation can be used as a vehicle for institutional change if and when deemed necessary by combining processes of upward and downward causation of institutional change. The framework describes the two roles of the EDP in terms of institutions: First as an institutional discovery process, and second as a basis for an institutional change process. The paper includes case studies of two regions (Lower Austria, Austria and South Tyrol, Italy) and two small countries (Slovenia and Croatia). The case studies will focus on how these regions or countries organized the EDP that eventually led to the definition of their RIS3. The guiding research question of the empirical case studies is how institutional-sensitive the EDPs in these four cases were, and what policymakers can learn from these experiences.

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