Creativity-driven urban regeneration in the post-socialist context - The case of Csepel Works, Budapest

Taraba, Judit; Forgaci, Claudiu; Romein, Arie

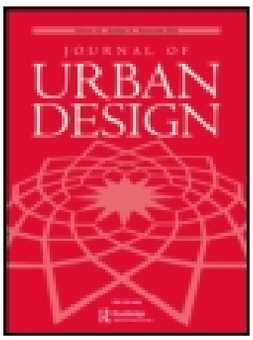
DOI
10.1080/13574809.2021.1951604

Publication date
2021

Document Version
Final published version

Published in
Journal of Urban Design

Citation (APA)
Taraba, J., Forgaci, C., & Romein, A. (2021). Creativity-driven urban regeneration in the post-socialist context - The case of Csepel Works, Budapest. *Journal of Urban Design*, *27*(2), 161-180. https://doi.org/10.1080/13574809.2021.1951604



Journal of Urban Design

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/cjud20

Creativity-driven urban regeneration in the post-socialist context - The case of Csepel Works, Budapest

Judit Taraba, Claudiu Forgaci & Arie Romein

To cite this article: Judit Taraba, Claudiu Forgaci & Arie Romein (2021): Creativity-driven urban regeneration in the post-socialist context - The case of Csepel Works, Budapest, Journal of Urban Design, DOI: 10.1080/13574809.2021.1951604

To link to this article: https://doi.org/10.1080/13574809.2021.1951604

Published online: 17 Aug 2021.

JOURNAL OF URBAN DESIGN
https://doi.org/10.1080/13574809.2021.1951604

Routledge
Taylor & Francis Group

Creativity-driven urban regeneration in the post-socialist context - The case of Csepel Works, Budapest

Judit Taraba[a], Claudiu Forgaci[b] and Arie Romein[c]

[a]Department of Urbanism, Faculty of Architecture & Built Environment, Delft University of Technology, Delft, The Netherlands; [b]Section of Urban Design, Department of Urbanism, Faculty of Architecture and the Built Environment, Delft University of Technology, Delft, The Netherlands; [c]Section of Spatial Planning & Strategy, Department of Urbanism, Faculty of Architecture & Built Environment, Delft University of Technology, Delft, The Netherlands

ABSTRACT

The complex institutional, economic, and societal trends that have characterized the post-socialist transition in Central and Eastern European countries have drastically reshaped urban development. The case of Budapest shows that three decades of nearly exclusive market-driven urban policies have resulted in a variety of social, spatial and environmental deficiencies. This paper presents the paradigm of creativity-driven urban regeneration and proposes an approach to implement this paradigm, with a key role for urban design interventions, to successfully address these challenges, specifically, the regeneration of industrial brownfields, in an integrated manner and to create more inclusive, just, and sustainable cities.

KEYWORDS

creativity-driven urban regeneration; post-socialist transition; civic engagement; co-design; industrial brownfield regeneration

Introduction

Urban development in post-socialist Central and Eastern European (CEE) countries can be described as a complex outcome of closely interwoven processes of fundamental institutional reforms, economic transformations, far-reaching social changes and urban spatial transformations. At the macro level, Rose and Mishler (1994, 159) identified a holistic regime change in these post-socialist societies. This regime change is conceptualized by Sýkora and Bouzarovski (2012) as a succession of institutional, social, and urban transitions. At the start, a series of fundamental institutional reforms were implemented to lay the foundation for a new type of societal order. The countries' political systems changed from single-party socialist regimes into parliamentary democracies and the public administration systems and state institutions were decentralized. This has been associated with greater local responsibilities for policy making and for the financing of urban development (Taşan-Kok 2012, 9). Over time, however, urban development has become increasingly dominated by the private sector. Local government policies suffer from a lack of financing and are influenced by neo-liberal principles. Furthermore, involvement of civil society actors in urban redevelopment is 'far from commensurate' (Keresztély and Scott 2012, 1116).

CONTACT Judit Taraba tarabajudit@gmail.com

Alongside institutional reforms, the economic systems of former socialist countries transitioned from state ownership, characterized by central planning, to a system ruled by capitalist principles of private ownership and competition. The position of the national state thus weakened dramatically, and market-led economics took the lead (Nedučin, Krklješ, and Gajić 2019; Keresztély and Scott 2012). Although the degree of radicality varied, all CEE countries implemented a harsh and highly experimental economic, financial, and fiscal 'shock therapy' that 'triggered a rapid transition but also created enormous stresses' (Taşan-Kok 2012, 8). One of the most severe economic consequences was the process of deindustrialization. After approximately four decades of protected, and highly directed, socialist economies, structural weaknesses in the industrial sector hampered their integration into the global system of production and marketing.

In the social domain, average standards of living declined. This was a consequence of the dramatic reduction of industrial employment rates, the decline of the real value of wages and salaries, the onset of inflation and a dwindling social welfare system to cushion the emerging poverty trap (Laki 2006; Scott and Kühn 2012). Post-industrial service sectors as new sources of employment have emerged, but almost exclusively in large cities, in particular national capitals, where there is a strong knowledge base, a diverse social-cultural society, and strong historical heritage (Scott and Kühn 2012; Jaroszewska 2019; Nedučin, Krklješ, and Gajić 2019; Szafrańska, Coudroy de Lille, and Kazimierczak 2019). The concomitant restructuring of these cities' labour markets triggered growing socio-economic inequalities (Laki 2006).

These interrelated processes of transition have had fundamental effects on the spatial fabric of post-socialist cities. An immediate effect was the appearance of large, often heavily contaminated industrial brownfields dispersed across urban areas. Somewhat later, around a decade after the regime change, socio-spatial segregation became obvious in larger cities, including gentrification. At the edges of their compact inner cities and in new, wealthier suburban locations, the inflow of foreign capital investment prompted the development of 'new residential quarters for those who were better off financially. This occurred in the form of single-family housing and gated communities' and in 'new shopping, office and leisure centres (Kovács, Wiessner, and Zischner 2013, 23). Overall, patterns of urban land-use in post-socialist cities have become scattered, haphazard, and increasingly unsustainable.

To create more inclusive, just and sustainable cities, the interactions between these detrimental social, economic, spatial, and environmental consequences of three decades of post-socialist transition require extensive, effective, and holistic urban regeneration programmes. This paper presents the paradigm of creativity-driven urban regeneration as a potentially successful strategy to address these challenges in an integrated manner. The main objective of the paper is twofold: it develops a three-stage process to implement this strategy in the specific post-socialist governance context and proposes urban design principles as key spatial tools for the implementation of the strategy. The practical case to explore the value of the strategy is Csepel Works, a large underused former industrial complex in the Hungarian capital of Budapest.

The following two sections describe, respectively, the socio-spatial impacts of thirty years of post-socialist transition and the current practice of urban redevelopment in Budapest. The fourth section explores the potentialities and bottlenecks of creativity-driven urban regeneration to address the different types of deficiencies of post-socialist

transition in an integrated manner. Building on these potentialities, the fifth section introduces an experimental design process for the creativity-driven regeneration of Csepel Works, where the three phases of initiation, piloting and implementation are explained. Finally, the discussion section highlights contributions of the creativity-driven urban regeneration strategy to create a more inclusive, just, and thriving city as well as some possible negative effects.

Socio-spatial trends in post-socialist Budapest

This section presents an overview of major trends in the urban development of Budapest since the regime change. Figure 1 distinguishes three consecutive stages of transition of which urban transition is the last one. But in the concrete context of a specific city, the pathway is not necessarily linear. In Budapest, the stages of societal and urban transitions are more interwoven than subsequent.

After the regime change, Budapest was no exception to the general trend of the massive closure of industrial companies. But this national capital, and by far the largest city in Hungary, was one of the post-socialist cities with a 'fertile soil' for the emergence of a post-industrial economy. Concomitant with deindustrialization, the creative, commercial, financial, and tourism service sectors have gradually developed. This reorganization of the urban production structure and labour market started before 1990 but accelerated in the decades after (Figure 2).

Closure of former industrial conglomerates has led to large unused or underused factory buildings and often severely contaminated brownfields. Much of these, including Csepel Works, are concentrated in the Transition Zone, a ring-shaped area that separates the Inner City from outer areas of Budapest (Figure 3). During forty years of socialist urban

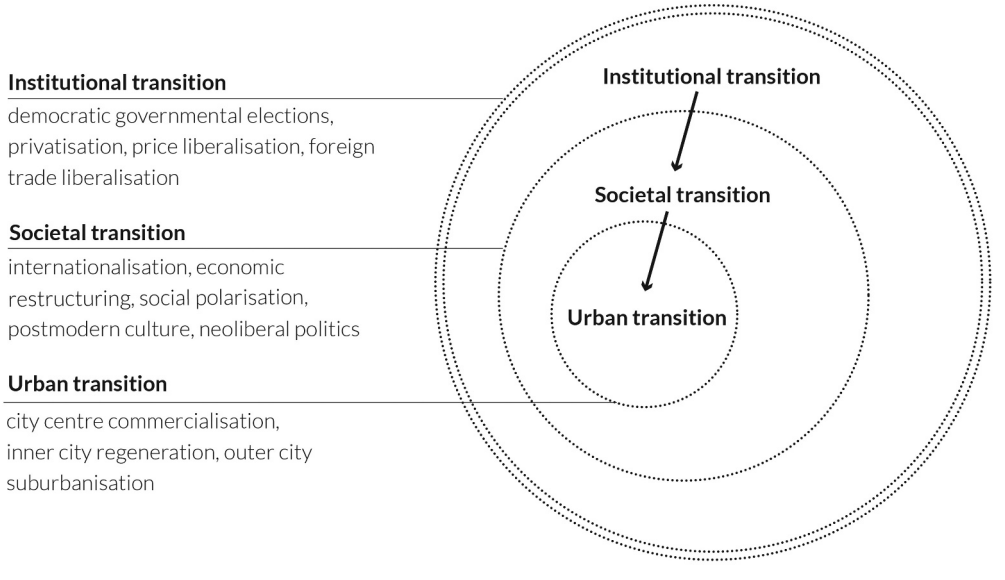


Figure 1. The three consecutive stages of a post-socialist transition. Based on the figure by L. Sýkora and S. Bouzarovski, *Urban Studies: An International Journal of Research in Urban Studies*, 49(1), p. 46, copyright © 2012 by SAGE Publications. Reprinted by permission of SAGE Publications.

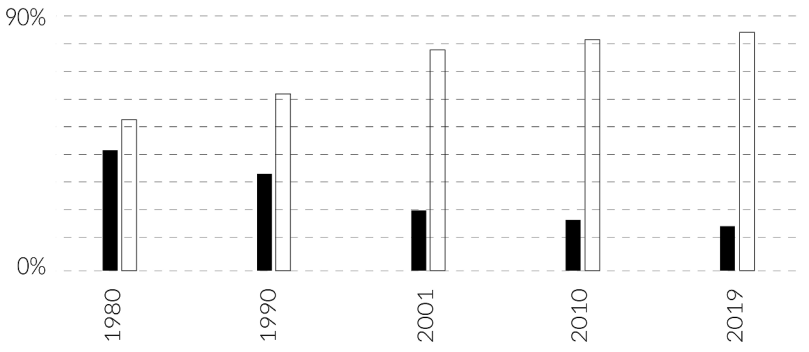


Figure 2. Labour force in industries and services in %, Budapest 1980–2019 (Based on A foglalkoztatottak száma nemzetgazdasági szektorok szerint, nemenként (2008–) (5.1.3.) 2020; Kiss 1998).

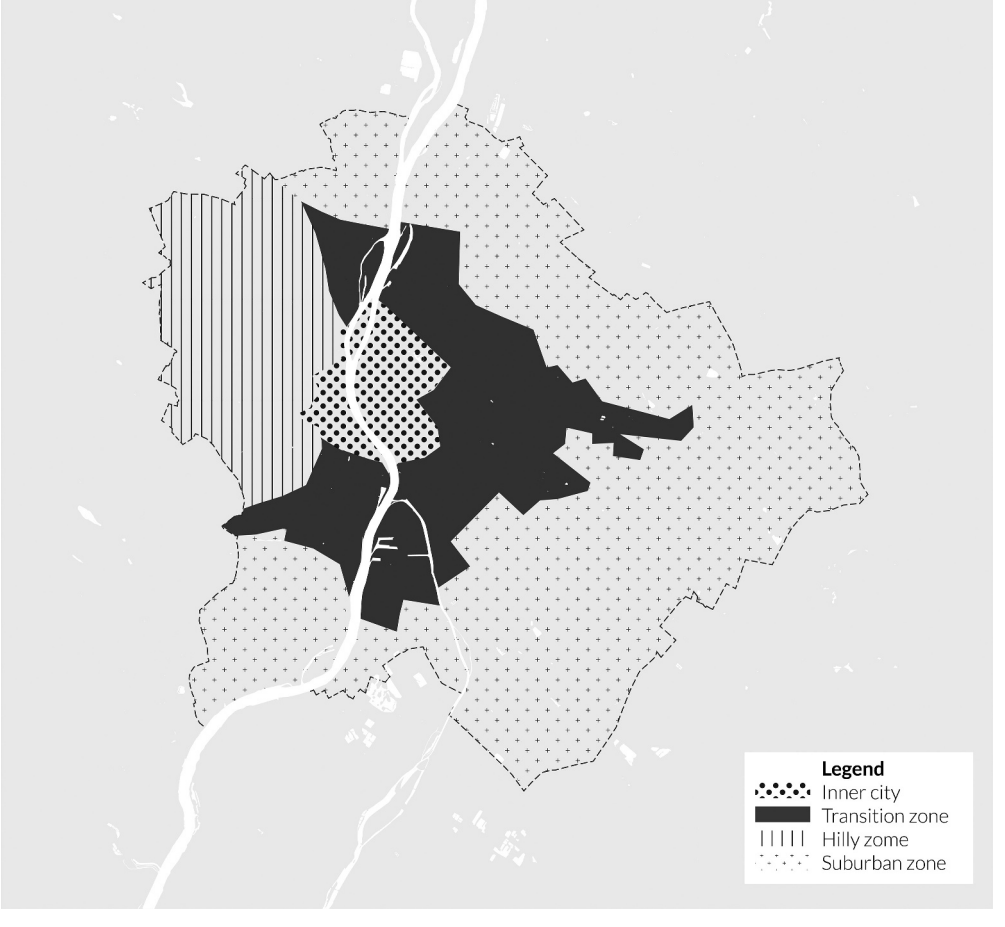


Figure 3. Major morphological zones of Budapest (Based on Budapest főváros rendezési szabályzat, no. 5/2015. (II. 16.) Főv. Kgy. rendelet 2015; Tamás and Tibor 2016).

planning, this zone had become a discontinuous spatial patchwork of large-scale manufacturing complexes, prefabricated Soviet-style housing, and remnants of rural land that were incorporated into the expanding urban fabric.

After the regime change, the processes of privatization and the fragmentation of land ownership and buildings have converted former industrial areas into a patchwork of obsolete and reused factory buildings, further aggravating the spatial discontinuity of the Transition Zone. The reused buildings were mainly transformed into multi-tenant buildings for small scale industry and service firms (Kiss 2019). Nevertheless, the total surface of unused or underused brownfields is still significant (Budapest Főváros Városépítési Tervező Kft 2018).

At the end of the socialist era, 52% of the housing stock in Budapest, all rental housing, was owned by the state (Keresztély and Scott 2012, 1117). The Transition Zone contained mostly prefabricated housing blocks, which accounted for 21.3% of the rental stock (Hegedűs et al. 2000). As part of the institutional transition, the national state transferred the ownership of its part of the housing stock, and with that, the responsibility for housing policy, to the district governments, the lowest level of the new two-tier administrative structure of Budapest. But because these local governments lacked the opportunity to acquire public money for the rehabilitation of this dilapidated housing stock, apartments were rapidly sold off to renters for affordable prices (Keresztély and Scott 2012; Taşan-Kok 2012). By 2019, the proportion of the social housing stock under public ownership in Budapest had decreased to 4.5% (Szociális lakásgazdálkodás (2004–) 2019).

Next to the increasing rate of private home ownership, the private sector had taken the lead in local renovation projects for housing in central parts of the city by the end of the 1990s. This was actively supported by district governments who lacked financial resources for the renovation and construction of residential buildings. The demolition or renovation of existing buildings and prestigious new-building projects resulted in a metamorphosis of a few districts of the Inner City during the 2000s.

The social consequences of these housing development projects were many: a rapid increase of owner-occupied housing – up to 80% of the total stock (Kovács, Wiessner, and Zischner 2013), and the gentrification-led displacement of existing residents (Keresztély and Scott 2012). Since 2013, Fellner et al. (2019) have observed a general tendency of rising housing costs compared to average income all over the city, which is sharpest in districts of the Inner City and the Hilly Zone. These developments of the housing market can be seen as indicators of increasing socio-economic inequality since the start of regime change when Hungary was a relatively egalitarian society. The value of the country's Gini coefficient of income (in)equality rapidly increased between 1980 and 2000 but has only slightly fluctuated since then and is now still below the EU average: 28.7 (HU) versus 30.4 (EU) in 2019 (Mavridis and Mosberger 2017; Eurostat 2020). Yet Budapest is exceptional because the loss of industrial employment has taken place simultaneously with the growth of a much larger post-industrial service economy than in the rest of the country. This has triggered the growth of a relatively wealthy middle class of service workers who can afford the private apartments that were renovated or newly built since the end of the 1990s.

At the beginning of the 21st century, most of the housing stock in the Inner City was in one of two conditions: either derelict or renovated and therefore more expensive. Desire

for a greener environment, more living space (including a garden), and affordable housing of a satisfactory quality created the conditions for suburbanization. This process started as early as the 1980s but accelerated after 1989. Between 1990 and 2019, the innermost part of Budapest lost around 38% of its residential population while the population in some of the districts of the Suburban Zone increased by 10 to 20% and secondary towns and villages in the greater Budapest agglomeration doubled or even tripled in population size (A népesség számának alakulása, terület, népsűrűség (4.1.1.1) 2011; KSH Statinfo – Budapest kerületeinek adatai 2020). This residential suburbanization has not occurred alongside a proportionate spatial redistribution of employment to suburban areas as the Inner City has evolved into the city's major centre of employment. Hence, car-based commuting has expanded in the greater Budapest area, accompanied by air pollution and congestion.

Along these structural institutional, economic, social, and spatial transformations, the level of civic engagement has remained low in Hungary. The score of all countries in the former Soviet bloc in Gallup's Global Civic Engagement Report (2016) was between 20 and 30, but Hungary was the lowest with 20. For the sake of comparison, the score of Slovenia was 42 and of both the UK and Ireland 64. For Budapest in particular, Keresztély and Scott (2012) observed an underperforming civil society in the field of urban development. Only in the late 2000s, the number of 'civil associations interested in preserving cultural, architectural, and social values' (ibid, 1123) slightly increased, but is still hardly capable of counterbalancing the interests of the private sector in urban redevelopment.

Post-socialist urban

Scott and Kühn (2012, 1111) comment that Budapest is 'in many ways a pronounced case of globalization and accommodation to market-driven logics of urban development'. As described above, the consequences include social inequality, the gentrification of inner-city spaces, car-based commuting due to unguided residential suburbanization, and a highly fragmented and low-quality urban fabric around the inner city. Consequently, parts of Budapest are in need of extensive and wide-ranging urban regeneration programmes.

Roberts (2008, 17) define urban regeneration as a 'comprehensive and integrated vision and action aimed at the resolution of urban problems and seeking to bring about a lasting improvement in the economic, physical, social, and environmental condition of an area in the city that has been subjected to change'. In Budapest, three decades of post-socialist urban policies have not yet developed urban regeneration programmes in accordance with this definition. The redevelopment projects started around 2000 are highly concentrated in the inner city and consist mainly of high-end housing and commercial property projects. Timár (quoted in Scott and Kühn 2012, 1096) described urban redevelopment strategies in the post-socialist countries as 'short-termism that is [. . .] expedient and efficient within [. . .] entrepreneurial logics of urban development but detrimental to social equity objectives'. These entrepreneurial logics are an integral aspect of the adoption of neo-liberal principles in policies that aim to encourage private capital accumulation.

In Budapest, the dominance of private interests in urban development is also explained by the institutional and financial barriers that often hinder the ability of local governments

to implement impactful change. The public administration of Budapest lacked an institutional framework for urban redevelopment policy during most of the 1990s. The first municipal Urban Rehabilitation Programme did not pass until 1997 (Keresztély and Scott 2012). Moreover, the two-layer governmental structure which formed after the regime change -a municipal government of the city and local governments of its twenty-three districts-, has hampered coordinated urban development. Although districts are increasingly aware of the need to collaborate, conflicts of interest between municipal and state-level planning remain a constant obstacle. Another barrier is the lack of local public funding. Although some funding for redevelopment projects became available in the 1990s from the Fund for Urban Renewal and the National Social Housing Programme (Kovács, Wiessner, and Zischner 2013), the city's revenues can barely cover the costs of maintaining the existing physical infrastructure (Stanilov 2007; Kiss 2019). Hence, district governments are financially dependent on the private sector, including foreign financiers (Scott and Kühn 2012, 1104), to support renovation projects.

It is very likely that a continuation of the established practice of urban development in Budapest would consolidate, if not further deepen, the detrimental effects of the post-socialist transition. The next section explores the potential of creativity-driven urban regeneration to do better, for example, to mitigate the socio-spatial effects of three decades of highly biased market-led urban development policy in an integrated manner, and to strengthen the inclusivity, spatial justice, and the sustainability of the city (Czirfusz 2015). Landry's (2008) observation that creativity-driven urban regeneration policy is especially suited to parts of cities with an industrial past where the current urban environment is less attractive for high-end market-led developments. This approach, in particular, aligns with the case of Csepel Works.

Creativity-driven regeneration

Urban regeneration strategies based on creativity (and culture) have been observed for over three decades in Western countries. In the early years of these strategies, the average urban context of these countries was similar to the more recent state of post-socialist cities. A structural process of deindustrialization and remaining industrial brownfields, a shift from the national to the local state as a key factor in urban planning, and a shift from a distributive to an entrepreneurial local state. The rationale for these strategies, to set urban regeneration in motion by supporting the establishment of creative industries, are most often primarily economic, but social, spatial or environmental objectives are also set (Foord 2008; Romein, Nijkamp, and Trip 2013), although not necessarily all combined in a single comprehensive strategy.

In many Western cities, creativity-driven regeneration strategies include the transformation of obsolete buildings of the industrial past into clusters of creative firms. Vacant old factory buildings and warehouses are a 'natural habitat' for creative businesses for several reasons, including low rent and suitability for a variety of creative activities due to high ceilings, large windows, and the adaptability of interior spaces. The sheer size of former industrial buildings provides opportunities to transform their layout and design, turning these into clusters of workspaces that meet both the individual and collective needs of creative entrepreneurs. A permanent and participatory process of co-creation through small-scale interventions meet the importance that creative entrepreneurs attach

to the malleability of their working spaces. Furthermore, these buildings emanate authentic atmospheres and raw aesthetics that are highly preferred by creative businesses (Aten and Romein 2020).

There is a high level of consensus in literature that two key features of creative business – small size and diversity of creative activities – create social networks of entrepreneurs and workers on the basis of various types of proximity (Balland et al., 2014). Spill-overs of knowledge and information generate innovations (Knudsen et al. 2007), in particular when entrepreneurs and employees in such communities work together in an 'ecology' of temporary projects (Grabher 2002). From an economic perspective, this ecology opens new markets, develops specializations, generates income growth, and strengthens the resilience of companies against economic downturn (Elsey 2018). Moreover, the practice of working in a collaborative environment with training opportunities provided by these incubators, (Romein and Trip 2020) can strengthen business and managerial skills, networking abilities, visibility, and the self-confidence of entrepreneurs and workers. All together, these improved personal capabilities might strengthen their civic engagement (Delconte, Kline, and Scavo 2016; Kay 2000; Stern and Seifert 2008).

Creativity-driven regeneration tools such as placemaking and tactical urbanism (Lydon, Garcia, and Duany 2015) also enhance civic engagement by utilizing the creative ideas of people that are not involved yet in the practice of urban redevelopment. By making use of such local initiatives, these areas can be regenerated collaboratively in a way that does not require frequent and detailed monitoring by local public authorities. In fact, such control would even be counterproductive. What is more, an open atmosphere and accessibility for residents of the surrounding area to the transforming of buildings and in-between open spaces can restore a community's emotional bond to the history of these places – for many their former working places – and expose them to the new, creative users and the places and products they create (Delconte, Kline, and Scavo 2016).

In line with the observation by Egedy and Kovács (2010), that creative industry could be the base of creativity-driven regeneration projects in Budapest. This type of industry is key in the exploration of the city's potential for creativity-driven urban regeneration. For post-socialist cities in general, Marian-Potra et al. (2020, 3) observe 'a tendency to adopt [. . .] approaches to the use of creativity and culture as economic resources'. The economic sector of creative industries has indeed developed in Budapest in the last thirty years (Figure 4). An important driver of its potential in Budapest, and other post-socialist cities, is the re-emergence of 'freedom of creativity' after over four decades of institutional censorship imposed by the socialist national state during which art was a tool for propaganda and science confirmed the political ideology (Bolvári-Takács 2011).

The widespread availability of industrial relics in Budapest is another key factor for the development of creative industry clusters. At present, creative businesses and cultural institutions are mainly located in the Inner City and in the Hilly Zone. These are the most attractive parts in the Budapest metropolitan region for creative businesses whereas the South-Eastern parts, with lower average socio-economic status and quality of life (Figure 5), are the least attractive (Egedy and Kovács 2010; Kovács et al. 2007). However, rents tend to increase in the gentrifying inner city and its smaller office spaces are not the best fit for new companies with special needs for space. This leads to both the displacement of existing creative companies and a decreasing attractiveness for emerging start-

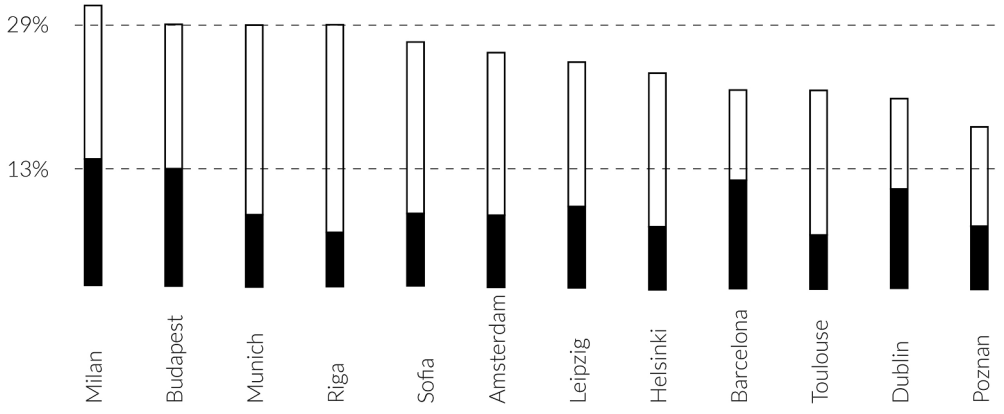


Figure 4. The proportion of people working in the creative industries (red) and in the knowledge-based economy (black) in some metropolitan areas in Europe (Based on Egedy, Kovács, and Szabó 2014).

ups. In this context, the numerous unused or underused remnants of the socialist manufacturing industry in the discontinuous urban fabric of the Transition Zone that borders the Inner City, and the Hilly Zone have the potential to develop into new hotspots for the creative industries.

Creativity-driven urban regeneration in the Transition Zone could simultaneously address several socio-spatial deficiencies from the three decades of post-socialist transition:

- Business revenues and jobs
- Increasing land and real estate values
- Strengthening civic engagement
- Empowering local district governments
- Shorter commuting distances
- Less congestion in inner city
- Involvement of local residents
- Less fragmented urban fabric

This would help to catalyse the transformation towards a more vital, safe, and liveable area (Delconte, Kline, and Scavo 2016). It first creates clusters of workspaces in large under- or unused buildings for new creative businesses that are founded and run, more often than not, by highly educated young people. Moreover, it can be noticed that the growth of creative clusters as a bottom-up process is often self-reinforcing as well: rumour of success spreads fast and attracts more starters and mature businesses. Besides, developing clusters of creative activities attracts business in a variety of ancillary amenities, e.g., in culture, entertainment, and food services. This way, jobs and services that are currently highly concentrated in the inner city could be spread out to areas in the surrounding Transition Zone. The number of people that must travel to the inner city for work and leisure activities, creating traffic congestion, would be reduced. Moreover, the development of creative clusters and consumer services goes hand-in-hand with enhanced land and real-estate values in the Transition Zone.

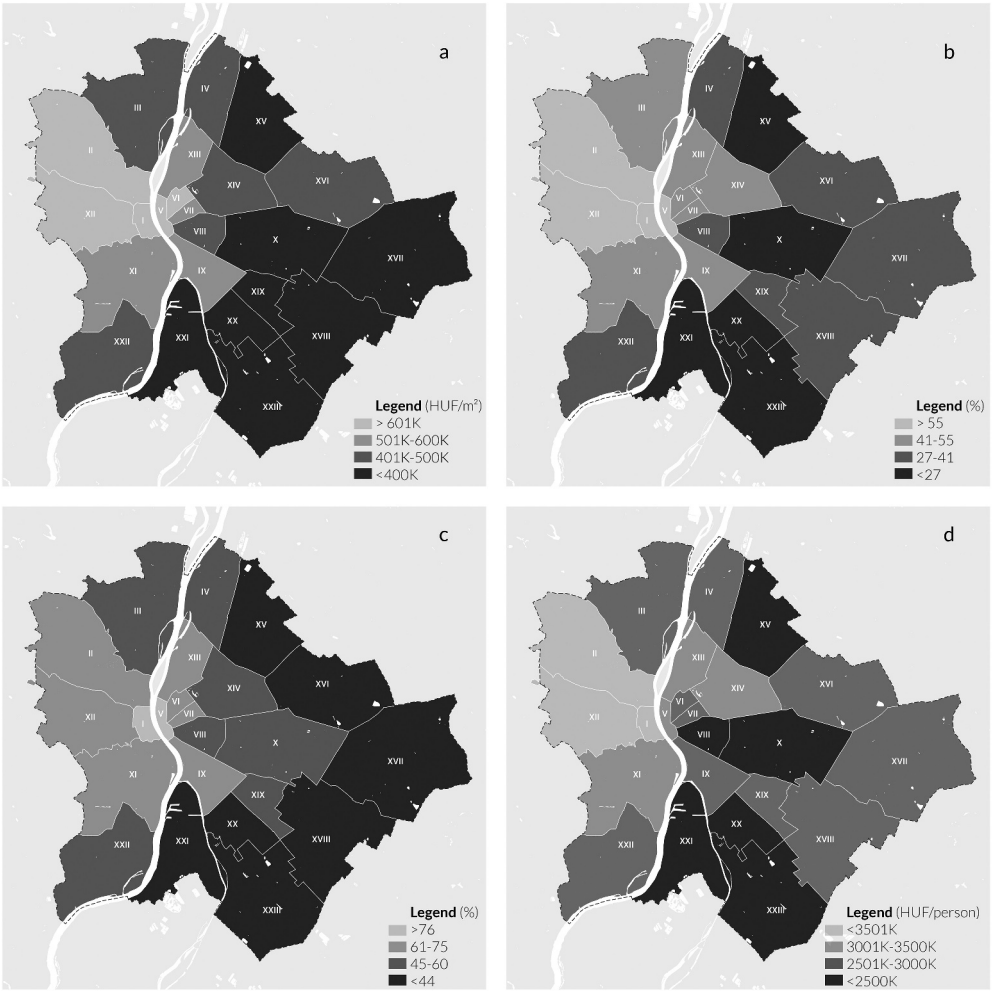


Figure 5. Maps showing the differences between the South-Eastern and North-Western districts of Budapest. a. Average square metre prices in 2018 (Data source Fellner et al. 2019). b. Proportion of people with a diploma in 2016 (Data source Központi Statisztikai Hivatal 2016). c. Life quality index in 2015 (Data source Otthon Centrum 2016). d. Average income per person in 2014 (Data source Nemzeti Adó és Vámhivatal 2015).

In Western experiences of creativity-driven urban regeneration, the roles and relationships between local governments, private property developers, and agents of civil society, (i.e., collectives of artists and other 'creatives') vary. But the degree of dominance in the profit-driven private sector is rarely as undesirably large as it is in Budapest, and most likely other post-socialist cities. By nature, the private sector is mostly interested in short-term economic benefits. It also invests in brownfields outside the Inner City, including the Transition Zone, but mostly by cherry picking, i.e., buying the best plots with a high level of connectivity and a low level of soil contamination to transform the obsolete industrial buildings into luxury lofts or bulldoze these to make room for new high-end residential developments. Such projects are both unaffordable and inappropriate for creative businesses.

For a successful creativity-driven regeneration of the Transition Zone, the local government should use their political power and financial resources to stimulate cooperation with interested private developers. Most of all, this collaboration should include creative collectives in order to transform these sites (the remaining 'cherries' as well as lower quality industrial sites) into spaces that tend to be favoured by creative industries. This would enable collectives to get involved in urban development, hence contributing to a stronger civic engagement in Budapest. Moreover, by taking control of the spatial planning of regeneration, local governments can mitigate the spatial fragmentation of the urban fabric in the Transition Zone.

An experimental design proposal for Csepel Works

This section proposes an urban design experiment that aims to explore and demonstrate the potential of creativity-driven urban regeneration to offset one of the detrimental trends of post-socialist transformations; the persistent underutilization of the industrial brownfield of Csepel Works (Figure 6) located at the intersection of the Transition Zone with the XXIst district of Budapest.

The XXIst district is one of the most disadvantaged, even in comparison with other districts in the South-Eastern part of the city. Associated with its traditional industrial identity, it is still perceived by many as a workers' quarter. In the last thirty years, very few high-quality developments have been built in the district and certain parts even show signs of further marginalization because the socio-economic status of newly settled residents is worse than of those who have been living in the area since the regime change (Hegedüs, Horváth, and Kovács 2015). The 240-ha industrial site of the Csepel Works occupies a considerable part of the district next to the Danube River. Although this riverfront location, located in proximity to the inner city, has a high potential for socio-economic and spatial development, currently only 30% of the space in the buildings of the Csepel Works are used by the companies that are currently active on site (Horváth and Szemerey 2019). Some of these companies are in the creative industries but many others are in low-grade industrial and warehousing activities that create additional environmental problems and do not provide job opportunities. The intention of this proposal is to turn the area into a creative cluster, including discouraging low grade activities by the local government.

Figure 6. Photograph of the Csepel Works on Csepel Island. Public domain.

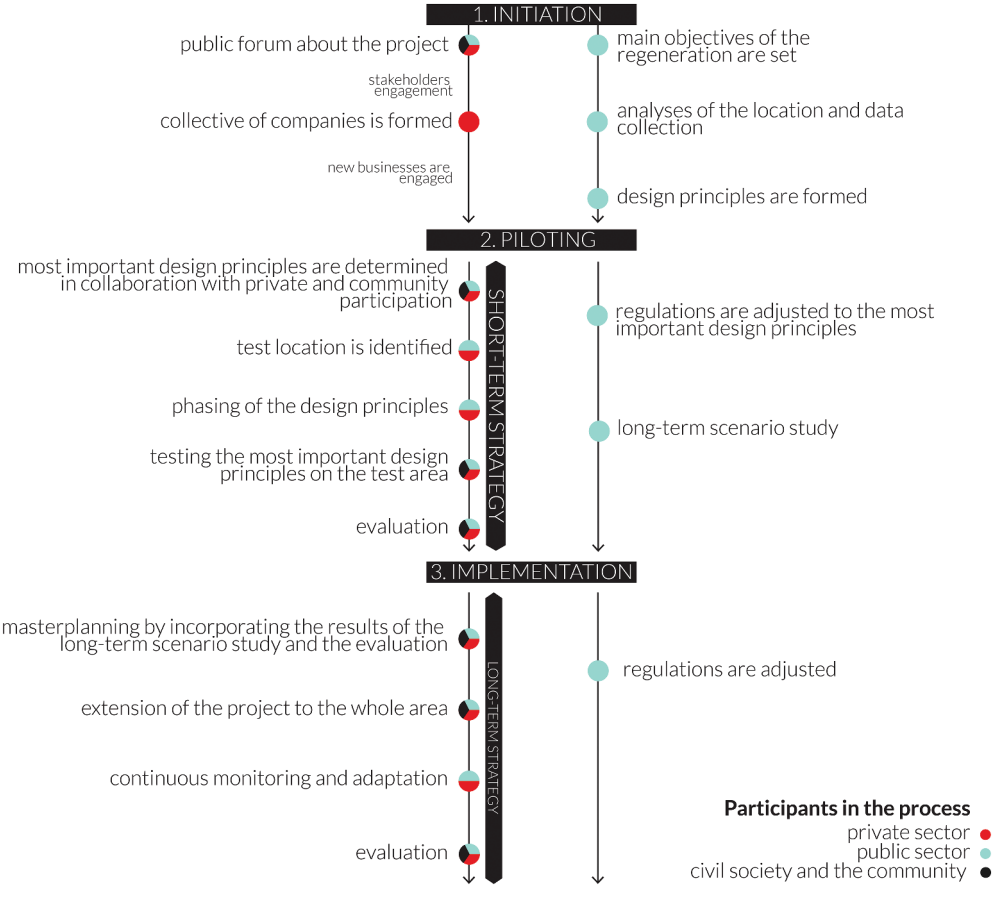


Figure 7. The three phases and steps of the proposed design process, with an indication of the involvements of the private and public sectors, as well as civil society and the community.

Due to the sheer size of the site, the challenge of its regeneration towards a sustainable urban district as well as the importance of well-defined interactions between different types of actors with different interests to face these challenges, a design process is proposed, comprising three main phases: initiation, piloting, and implementation (Figure 7). For the growth of self-reinforcing creative clusters, the co-creation of the environment by active roles of agencies of different types is not a blueprint plan, but an incremental process. Therefore, the proposed design process offers a flexible framework that allows for adaptations and input from the actors involved.

Initiation

In both the first and second phase, the involved actors in the design process are primarily governments, businesses, property owners, and civil society agencies; the private sector of real estate developers have not shown interest in the Csepel brownfield yet (in the form of buying land to start new development). So far, civil society agencies have scarcely been successful in implementing urban transformation initiatives

in Budapest (Keresztély and Scott 2012). Hence, relying heavily on the potential of bottom-up processes is not likely to be feasible and effective. In this context, the initiator should be a governmental agency, i.e., the government of district XXI. The initiator sets the main objectives of regeneration, gathers data, commissions studies to formulate an initial idea about the future development, and develops a preliminary set of urban design principles. As this process advances, various non-governmental stakeholders, such as local community groups and collectives of creative businesses are given more influence, responsibilities, and control, not only to secure their interests but also to build up social networks of mutual collaboration and a stronger sense of community. Good collaboration is a prerequisite for local stakeholders to actively transform their environment in accordance with their interests through placemaking and tactical urbanism. To support the process of civil initiatives, an organizational setup is proposed (Figure 8), wherein the role of creative industries and civic engagement is guaranteed, and the flow of financing, information, and people are facilitated.

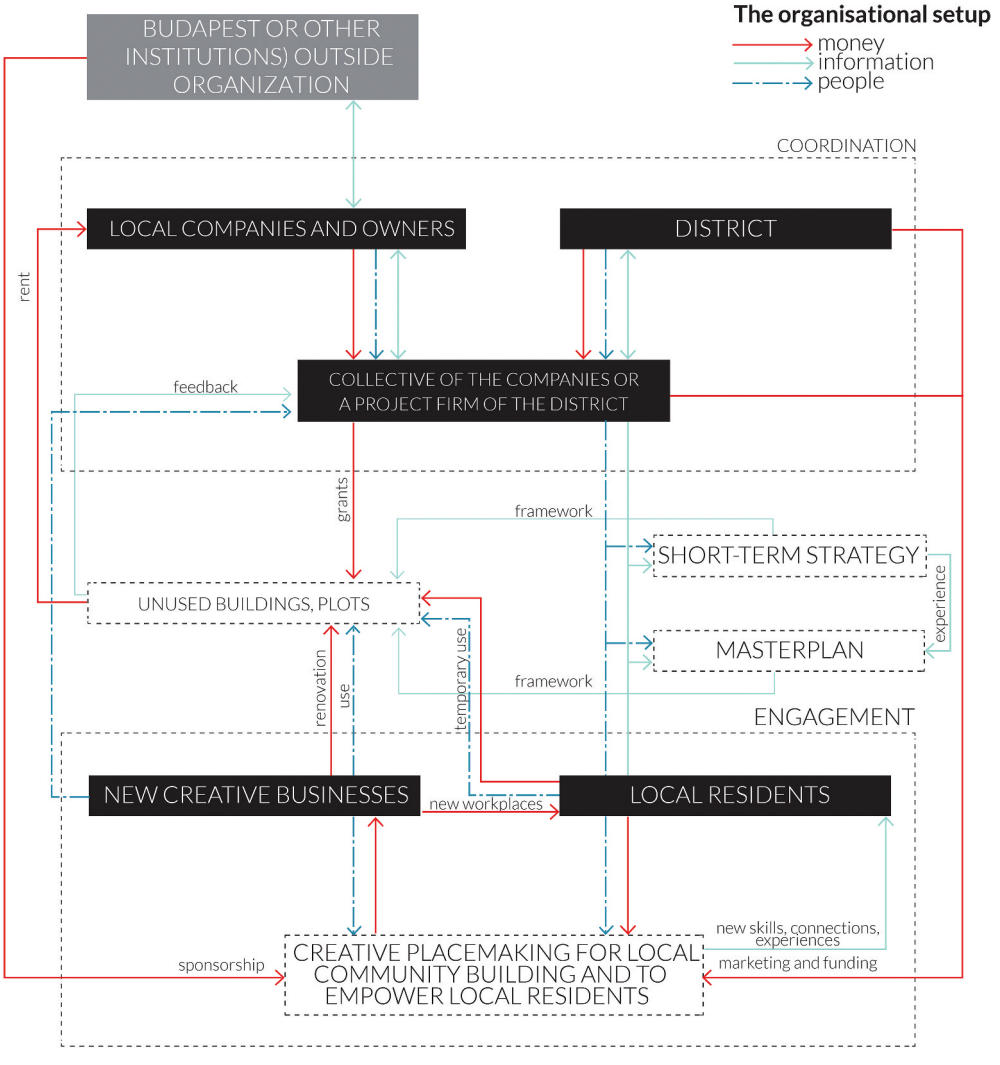


Figure 8. The proposed organizational setup.

Based on initial studies of the area, a set of urban design principles for Csepel Works is formulated as input for the next stage (Figure 9). To formulate urban design principles which encourage creativity-driven regeneration, it is necessary to shift the focus from the current single-sided market-driven paradigm of urban development. The design of a thriving creative milieu requires a combination of hard and soft physical infrastructure elements, both in- and outdoors, that encourage creative people to meet, deliberately or coincidentally, to interact, to build up social and economic networks. Interventions include the preservation of the existing atmosphere of industrial architecture, placing outdoor furniture, prioritizing pedestrian and bicycle traffic for both connectivity inside the 'creative area' and towards the adjacent urban fabric, e.g., by making privately owned streets publicly accessible (e.g., Aten and Romein 2020).

Interventions to enhance collaboration between economic stakeholders involve incentives to stimulate entrepreneurial and creative activities, for instance by creating flexible workspaces supporting a 'project ecology' of creative producers, occasional financiers, additional service providers and commissioning partners. Furthermore, interventions include a proposal for the spatial distribution of customer or non-customer-oriented functions to improve the businesses' 'discoverability' (Croxford et al. 2020). Finally, existing visual signs of the traditional manufacturing are maintained to promote collective branding.

Other design principles are meant to increase civic engagement through workshops, competitions, temporary community use of obsolete buildings, and placemaking sessions to attract new entrepreneurs and visitors from neighbouring communities to the area. The increased involvement of the members of the local community could potentially empower them, improve their skills and their networking ability, confidence, and self-expression, which are all much-needed skills in the low-income neighbourhoods surrounding the Csepel Works area. This can also be backed by an improved connection between local educational activities and businesses.

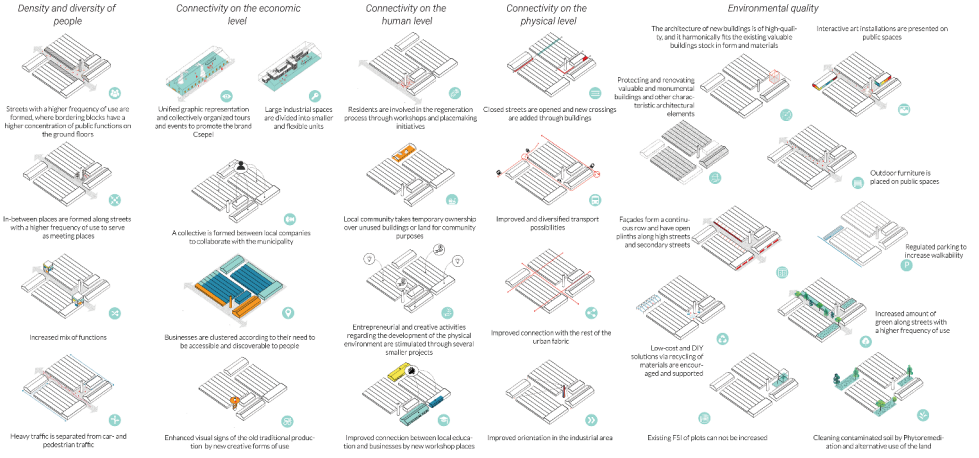


Figure 9. The set of developed design principles.

Accordingly, the urban design principles in Figure 9 are not only meant to address the physical characteristics of the environment, but also to increase the density and diversity of people, of creative businesses, the connectivity between people and businesses, and a mix with businesses providing ancillary services.

Piloting

In the phase of piloting, non-governmental stakeholders, including creative industries and other existing local businesses, can gain more control by determining which design principles are the most important and by setting a timeline to implement these (Figure 10). By visualizing the most important relations between the design principles in an integrative manner, it becomes understandable which ones are the most influential. These principles are the ones which should be prioritized from the start to increase the effectiveness of the design. This way the collaboration can be improved between the district government and non-governmental groups and organizations because the

Figure 10. Prioritization of the design principles.

importance of relations can be altered and identified together. In a joint effort, the implementation of the most important urban design principles can be started.

In the short term, some buildings and public spaces are collectively chosen for regeneration pilots engaging artists and creative businesses. These kinds of actors are likely to be attracted by financial incentives (affordable rent or grants) and the industrial atmosphere of the Csepel Works. The pilot locations are either used temporarily for community activities or rented out for a longer time under favourable terms, while, in return, the condition of these buildings is maintained or renovated by the tenants.

During this time, the municipality can examine the possible future outcomes of different scenarios, which are used to confront the current situation with fast or slow development, with different development drivers, as well as different degrees of deviation from business-as-usual development practices.

Implementation

In the implementation phase, the masterplan is created by incorporating input from the piloting phase and different scenarios (Figure 11). By now, the actual situation can be compared with the developed scenarios to find out which is the closest to reality. In doing so, the implementation time of the different design principles can be changed accordingly. Finally, the successful practices and new measures can be extended to the greater area of the Csepel Works. By this phase, the involved actors (governments, businesses, property owners, and civil society agencies) are joined by real estate developers, who will likely to be interested in the development of the area because of the initial success of the implementation and piloting phase. However, their role can be better controlled through the established collaboration of the other actors represented in the first two phases.

Figure 11. Axonometric visualization showing probable urban design interventions in piloting and the implementation phases.

Discussion and conclusions

This paper attempts to find answers on how to accelerate urban regeneration in cities of post-socialist CEE countries by means of urban design. Given that the current market-driven urban development practices expedite the detrimental trends that characterize post-socialist transition, new experimental ways such as the creativity-driven regeneration process presented in this paper are needed to counterbalance these. Although the proposed process and design principles are specific to Csepel Works, its basics can be implemented in other degrading areas in the Transition Zone, hence contributing to a more inclusive, just, and sustainable city. It offers a solution to brownfield areas which are ignored by profit-driven private developments due to factors such as high levels of soil contamination, their location away from the city centre, and numerous private owners. According to the cadastre of brownfields and unused areas (Budapest Főváros Városépítési Tervező Kft 2018), plots with such characteristics often remain untouched, while smaller plots closer to the city centre are transforming at a fast pace. Due to the participatory, collaborative, and scalable nature of the proposed process, it offers a realistic alternative to the regeneration of such neglected areas.

Furthermore, although urban contexts of regeneration strategies are city-specific, there are reasons to consider post-socialist cities a category of such contexts with shared characteristics. Hence, it is worthwhile to consider the usefulness of the proposed process and design for other cities in this category.

Although a poorly developed civil society certainly poses a challenge in such a participatory and collaborative process, the presented method creates opportunities to increase civic engagement and networking possibilities. The proposed design is therefore not a blueprint but a process wherein the role of the municipality is primarily to build trust in the community and to provide a framework for creative development. However, a changing political attitude can hinder this process, for instance if the municipality decides to withdraw their support. The impact of this on the further development of the site would mostly depend on the capabilities of the community to reorganize itself without governmental support. It is also a process of learning, as the culture of collaboration and negotiation is not particularly well developed in Hungarian society either. It is in the Initiation and Piloting phases where creativity-driven regeneration plays the most important role as a tool for community development and as a first step in transforming the environment.

There are also possible negative consequences which need to be carefully considered when planning for creativity-driven urban regeneration. A phenomenon that is likely to occur is its gentrifying effect. In anticipation of this tendency, policies and other community-based measures taken from the start should safeguard against the potential displacement of the most vulnerable economic stakeholders and resident groups.

In addition, creativity-driven regeneration can increase inequality. Creative businesses typically generate more job opportunities for highly educated people while the gentrification effect might reduce the chances of survival of smaller, producer-type companies that provide job opportunities for less educated people. Hence, it is important to take advantage of the tendency of creative and ancillary firms to cluster geographically and to develop social and economic networks between them that keep the area vibrant and innovative. This would also help local small-scale ancillary businesses to remain in the area. As Stern and

Seifert (2008, 11) put it, 'if a successful creative economy is based on a social organization – not individual endowment – then a strategy of social inclusion would identify opportunities for social mobility and wealth-creation across the sector, not just at its top'.

With these possible adverse consequences in mind, the design process introduced in this article aims to be an inspiration for those working on the regeneration of post-socialist cities under similar conditions as presented in the case of Budapest. The spatial trends which reconfigured post-socialist cities in the last thirty years should not be accepted without a critical examination as it is essential to experiment and try new approaches to counterweight them.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Claudiu Forgaci http://orcid.org/0000-0003-3218-5102

References

A foglalkoztatottak száma nemzetgazdasági szektorok szerint, nemenként (2008–) (5.1.3.). 2020. "Központi Statisztikai Hivatal." Accessed 3 January 2020. https://www.ksh.hu/docs/hun/xstadat/xstadat_hosszu/h_qlf017.html

A népesség számának alakulása, terület, népsűrűség (4.1.1.1). 2011. "Központi Statisztikai Hivatal." Accessed 30 December 2020. http://www.ksh.hu/nepszamlalas/tablak_teruleti_01

Aten, P., and A. Romein. 2020. "Place as a Guiding Principle for Spatial Design of Creative Clusters in Urban Areas." In *Creative Cluster Development Governance, Place-Making and Entrepreneurship*. 1 ed, edited by M. Komorowski and I. Picone, 85–97. London: Routledge.

Balland, P.-A., R. Boschma, and K. Frenken. 2014. "Proximity and Innovation: From Statics to Dynamics." *Regional Studies* 49 (6): 907–920. doi:10.1080/00343404.2014.883598.

Bolvári-Takács, G. 2011. *A Művészet Megszelidítése: Folyamatok És Fordulatok A Művészetpolitikában, 1948–1956*. Budapest: Gondolat K.

Budapest főváros rendezési szabályzat, no. 5/2015. (II. 16.) Főv. Kgy. rendelet 2015. Accessed 30 December 2020. https://net.jogtar.hu/rendelet?council=fovaros&docid=A1500005.FOV

Budapest Főváros Városépítési Tervező Kft. 2018. "Barnamezős És Belvárosi Használaton Kívüli Területek Kataszter Adatállományának Frissítése És Üzemeltetése." *Budapest Főváros Önkormányzata*. Accessed 30 December 2020. https://budapest.hu/Documents/V%C3%A1ros%C3%A9p%C3%ADt%C3%A9si%20F%C5%91oszt%C3%A1ly/Kataszter%20leiras.pdf

Croxford, B., T. Domenech, B. Hausleitner, A. V. Hill, H. Meyer, A. Orban, V. Muñoz Sanz, F. Vanin, and J. Warden. 2020. *Foundries of the Future: A Guide for 21st Century Cities of Making*. Delft: TU Delft Open.

Czirfusz, M. 2015. "Obliterating Creative Capital? Urban Governance of Creative Industries in Post-socialist Budapest." *Europa XXI* 26: 85–96. doi:10.7163/Eu21.2014.26.5.

Delconte, J., C. S. Kline, and C. Scavo. 2016. "The Impacts of Local Arts Agencies on Community Placemaking and Heritage Tourism." *Journal of Heritage Tourism* 11 (4): 324–335. doi:10.1080/1743873X.2015.1088019.

Egedy, T., Z. Kovács, and B. Szabó. 2014. "A Kreatív Gazdaság Helyzete Magyarországon A Globális Válság Időszakában". In *Turizmus És Településmarketing: Tanulmánykötet*, edited by I. Tózsa, 17–26. Budapest: BCE Gazdaságföldrajz és Jövőkutatás Tanszék. http://real.mtak.hu/16477/

Egedy, T., and Z. Kovács. 2010. "Budapest: A Great Place for Creative Industry Development?" *Urbani Izziv* 21 (2): 127–138. doi:10.5379/urbani-izziv-en-2010-21-02-006.

Elsey, W. 2018. "Council Post: Why Your Company Should Be More Socially Responsible." Forbes. Accessed 8 May 2020. https://www.forbes.com/sites/forbesbusinessdevelopmentcouncil/2018/05/30/why-your-company-should-be-more-socially-responsible/

Eurostat. 2020. "Gini Coefficient of Equivalised Disposable income—EU-SILC Survey." Accessed 23 November 2020. http://appsso.eurostat.ec.europa.eu/nui/show.do?lang=en&dataset=ilc_di12

Fellner, Z., Á. Bereczki, G. Hajnal, D. Pankov, K. Szűcs, and S. Winkler 2019. "Lakáspiaci Jelentés." *Magyar Nemzeti Bank*. Accessed 24 November 2020. https://www.mnb.hu/letoltes/lakaspiaci-jelentes-2019-majus-hun-0508digi.pdf

Foord, J. 2008. "Strategies for Creative Industries: An International Review." *Creative Industries Journal* 1 (2): 91–113. doi:10.1386/cij.1.2.91_1.

Gallup. 2016. "Global Civic Engagement Report." Accessed 24 October 2019. https://www.shqiperiajone.org/sites/default/files/pdf/2016%20Global%20Civic%20Engagement%20Report.pdf

Grabher, G. 2002. "The Project Ecology of Advertising: Tasks, Talents and Teams." *Regional Studies* 36 (3): 245–262. doi:10.1080/00343400220122052.

Hegedűs, J., G. Székely, E. Sik, and S. Molnár E. 2000. *Lakásviszonyok 1999*. Ed. E. Bukodi. Budapest: Központi Statisztika Hivatal. https://www.ksh.hu/docs/hun/xftp/idoszaki/pdf/lakasviszonyok3_1999.pdf

Hegedüs, J., V. Horváth, and V. Kovács. 2015. *Budapest XXI. Kerület Csepel Szociológiai Vizsgálata*. Budapest XXI: Kerület Csepel Önkormányzata, Főépítészi Iroda.

Horváth, B.. and S. Szemerey. 2019. "Shared Future: Reactivating Stakeholder Networks in the Former Csepel Plant.„ In *Shared Cities Atlas : Post-Socialist Cities and Active Citizenship in Central Europe*, edited by H. Doudová. Rotterdam: nai010.

Jaroszewska, E. 2019. "Urban Shrinkage and Regeneration of an Old Industrial City: The Case of Wałbrzych in Poland." *Quaestiones Geographicae* 38 (2): 75–90. doi:10.2478/quageo-2019-0023.

Kay, A. 2000. "Art and Community Development: The Role the Arts Have in Regenerating Communities." *Community Development Journal* 35 (4): 414–424. doi:10.1093/cdj/35.4.414.

Keresztély, K., and J. W. Scott. 2012. "Urban Regeneration in the Post-Socialist Context: Budapest and the Search for a Social Dimension." *European Planning Studies* 20 (7): 1111–1134. doi:10.1080/09654313.2012.674346.

Kiss, D. 2019. *Modeling Post-socialist Urbanization: The Case of Budapest*. Basel: Birkhäuser.

Kiss, J. 1998. "Az Ágazati Gazdaságszerkezet Szerepe a Regionális Differenciálódásban Magyarországon." *Tér És Társadalom* 12 (1–2): 138–162. doi:10.17649/TET.12.1-2.466.

Knudsen, B., R. Florida, G. Gates, and K. Stolarick 2007. "Urban Density, Creativity and Innovation." Accessed 26 December 2019. http://creativeclass.com/rfcgdb/articles/Urban_Density_Creativity_and_Innovation.pdf

Kovács, Z., R. Wiessner, and R. Zischner. 2013. "Urban Renewal in the Inner City of Budapest: Gentrification from a Post-socialist Perspective." *Urban Studies* 50 (1): 22–38. doi:10.1177/0042098012453856.

Kovács, Z., T. Egedy, Z. Földi, K. Keresztély, and B. Szabó (2007). "Budapest: From State Socialism to Global Capitalism. Pathways to Creative and Knowledge-based Regions." (ACRE report 2.4). AMIDSt, University of Amsterdam.

Központi Statisztikai Hivatal. 2016. "Mikrocenzus-Területi Összehasonlítás." Accessed 30 December 2020. https://www.ksh.hu/mikrocenzus2016/docs/teruleti/index.html#/

KSH Statinfo—Budapest kerületeinek adatai. 2020. Accessed 30 December 2020. http://statinfo.ksh.hu/Statinfo/haViewer.jsp

Laki, L. 2006. "Rendszerváltozások Magyarországon a 20. Században." In *Társadalmi Metszetek: Hatalom, Érdek, Indiviudalizáció És Egyenlőtlenség a Mai Magyarországon*, edited by I. Kovách, 39–78. Budapest: Napvilág.

Landry, C. 2008. *The Creative City: A Toolkit for Urban Innovators*. 2nd ed. London: Routledge.

Lydon, M., A. Garcia, and A. Duany. 2015. *Tactical Urbanism: Short-term Action for Long-term Change*. Washington, DC: Island Press.

Marian-Potra, A.-C., R. Iș fănescu-Ivan, S. Pavel, and C. Ancuța. 2020. "Temporary Uses of Urban Brownfields for Creative Activities in a Post-Socialist City. Case Study: Timișoara (Romania)." *Sustainability* 12 (19): 8095. doi:10.3390/su12198095.

Mavridis, D., and P. Mosberger (2017). "Income Inequality and Incentives. The Quasi-Natural Experiment of Hungary 1914–2008. In Working Papers." (halshs-02797438; Working Papers). HAL.

Nedučin, D., M. Krklješ, and Z. Gajić. 2019. "Post-socialist Context of Culture-led Urban Regeneration – Case Study of a Street in Novi Sad, Serbia." *Cities* 85: 72–82. doi:10.1016/j.cities.2018.11.024.

Nemzeti Adó és Vámhivatal. (2015). "Egy Főre Jutó Összevont Jövedelem." Accessed 30 December 2020. https://ado.hu/ado/nav-dinamikusan-nonek-a-jovedelmek-a-fovarosban/

Otthon Centrum 2016. "Életminőség Index És Ingatlanárak." Accessed 9 January 2020. https://www.oc.hu/ingatlanpiac/hirek/piaci-hirek/itt-a-legjobb-elni-magyarorszagon

Roberts, P. (2008). "The Evolution, Definition and Purpose of Urban Regeneration.„ In P. Roberts & H. Sykes (Eds.), *Urban Regeneration: A Handbook*, 9–36. SAGE Publications Ltd. https://doi.org/10.4135/9781446219980.n2

Romein, A., and J. Trip. 2020. "Business Incubators as Tools for Creative Cluster Development." In *Creative Cluster Development Governance, Place-Making and Entrepreneurship*. 1 ed, edited by M. Komorowski and I. Picone, 85–97. London & New York: Routledge, Taylor & Francis Group.

Romein, A., J. Nijkamp, and J. Trip 2013. "Creativity-led Regeneration: Towards an Evaluation Framework." Accessed 5 May 2020. https://repub.eur.nl/pub/94916

Rose, R., and W. T. E. Mishler. 1994. "Mass Reaction to Regime Change in Eastern Europe: Polarization or Leaders and Laggards?" *British Journal of Political Science* 24 (2): 159–182. doi:10.1017/S0007123400009777.

Scott, J. W., and M. Kühn. 2012. "Urban Change and Urban Development Strategies in Central East Europe: A Selective Assessment of Events since 1989." *European Planning Studies* 20 (7): 1093–1109. doi:10.1080/09654313.2012.674345.

Stanilov, K. 2007. "Urban Development Policies in Central and Eastern Europe during the Transition Period and Their Impact on Urban Form." In *The Post-socialist City: Urban Form and Space Transformations in Central and Eastern Europe after Socialism*, edited by K. Stanilov, 347–360, Dordrecht: Springer.

Stern, M., and S. Seifert 2008. "From Creative Economy to Creative Society." *Culture and Community Revitalization: A SIAP/Reinvestment Fund Collaboration—2007–2009*. Accessed 25 February 2021. https://repository.upenn.edu/siap_revitalization/6

Sýkora, L., and S. Bouzarovski. 2012. "Multiple Transformations: Conceptualising the Post-communist Urban Transition." *Urban Studies* 49 (1): 43–60. doi:10.1177/0042098010397402.

Szafrańska, E., L. Coudroy de Lille, and J. Kazimierczak. 2019. "Urban Shrinkage and Housing in a Post-socialist City: Relationship between the Demographic Evolution and Housing Development in Łódź, Poland." *Journal of Housing and the Built Environment* 34 (2): 441–464. doi:10.1007/s10901-018-9633-2.

Szociális lakásgazdálkodás (2004–). 2019. "Hungarian Central Statistical Office." Accessed 24 November 2020. https://www.ksh.hu/thm/2/indi2_7_7.html

Tamás, C., and L. Tibor. 2016. "Functional Zones of Budapest after the Regime Change." In *Settlement Morphology of Budapest*, edited by C. Tamás and L. Tibor, 173–259. Cham, Switzerland: Springer International Publishing.

Taşan-Kok, T. 2012. "Introduction: Contradictions of Neoliberal Planning." In *Contradictions of Neoliberal Planning*, edited by G. Baeten and T. Taşan-Kok, 1–21. Dordrecht: Springer.