A Scenario-Based Investigation of the Countryside's Role in a Post-Industrial Future



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Delft University of Technology Faculty of Architecture and the Built Environment Department of Architecture MSc. Architecture, Urbanism and Building Sciences AR3A010 Research Plan

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#### \_Introduction & Theoretical Framework

With ongoing urbanisation processes, people's living conditions are changing, and the countryside seems to lose relevance within this development. According to Touraine as well as Bell, humankind is shifting towards a *post-industrial society*. The predominant industrial sector is declining as the agricultural sector did during the industrialisation. Economic growth will be based on knowledge and academic labour<sup>1</sup>. While the city seems to be understood as the centre of these processes, the future of the countryside remains unexplored.

Simultaneously to the focus on cities, suburban districts are thriving and more peripheral villages experience popularity among weekend commuters. Due to rising land prices and speculative investments, the core city's role as the habitat of culture and knowledge is declining. The space in-between the centre and the countryside is hosting new facilities of these kinds<sup>2</sup>.

Movements around the world denounce the banishment from the city centre and base their concerns on Lefebvre's *right to the city*. However, by applying that right on a specific city, the thought is understood incorrectly. Lefebvre was concerned about the development of cities as industrial hubs in general and did not limit the theory to a specific context<sup>3</sup>. Citizens should have the power to utilize the city as a constitution. This needs to be assured in the spectrum of contribution to society, liberty, dwelling and occupation<sup>4</sup>.

As Barraclough remarks, these claims or rights are also not restricted to the city in an entrenched sense. The exclusive adaptation of the thought may be caused by the strong terminology, but Lefebvre acknowledges the change of the city with the industrialisation. A separation of city and hinterland is not possible without the former boundary represented by the city walls. Therefore, Lefebvre's right could be also applied in other contexts and implies a *right to the countryside*<sup>5</sup>.

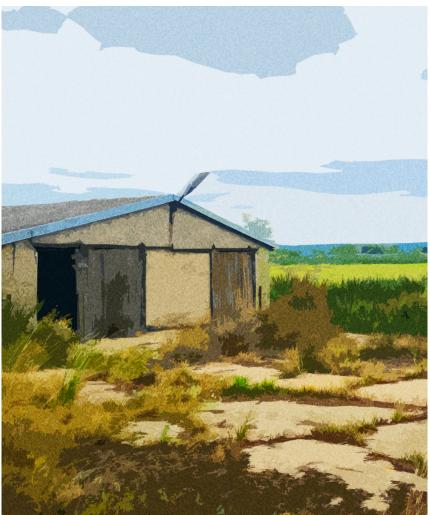
This research will explore the development of the countryside and its' role in a post-industrial future. The transformation of rural life patterns in the form of a *ruralisation* process could contribute to an adaptation of the countryside towards a sustainable future<sup>6</sup>. Living qualities which are commonly associated as urban could be incorporated in the hinterland and need to be assured for equal living conditions in the city and the space outside of it.

1 Touraine, The Post-Industrial Society: Bell, The Coming of Post-Industrial Society. 2 Borsdorf, Bender, and Haller, "Urbanisierungs-, Suburbanisierungs- Und Postsuburbanisierungsprozesse [Urbanisation, Sub-Urbanisation and Post-Urbanisation Processes]." 3 Uitermark, Nicholls, and Loopmans, "Cities and Social Movements: Theorizing Beyond The Right to the City." 4 Lefebvre, "The Right to the City." 5 Barraclough, "Is There Also a

Right to the Countryside?" 6 Chigbu, "Ruralisation: A Tool for Rural Transformation."



G1 Rural Realm: The boundary between the city and the space outside of it vanishes.



G2 Vacant Barn: Due to a progressing societal shift, facilities in the countryside remain abandoned.

### \_Problem Statement & Research Question

While various disciplines focus on rural studies, the discourse of spatial planners and theorists is widely centred around the city<sup>7</sup>. However, the city with its' current principles does not function without the hinterland as the provider of goods. A part of the rural population maintains and assures the living qualities in the city. With the current development, this trend is enhanced and a division in the society emerges<sup>8</sup>.

This division is already present in various conditions among rural communities and also an objective of the European Union. With financial subsidies, local policymakers tackle the uneven living conditions<sup>9</sup>. Nevertheless, these measures are mostly limited to the maintenance of an absolute minimum<sup>10</sup>.

The discrepancies seem to be rooted in the low density and the consequential distance of certain facility typologies in the countryside. Supermarkets, industrial locations, health care and other institutions of daily life are centralised which puts the rural population into a commuter society. Due to the scattered living, also public transport is unevenly distributed. People become highly dependent on the car. The countryside is restricted to a certain kind of people. However, with the societal change, the space could be the habitat for a variety of people and lifestyles. Considering the need of a rural population, the right to the countryside, and the claim for equal living conditions, this research raises the question: *How can rural life patterns be adapted to substitute qualities of urban density in the countryside*?

With 98% of the Earth's surface, however, the space outside of the city is too diverse and too extensive to be generalized<sup>11</sup>. Therefore, the research will focus on a case study and findings will be abstracted into a global context.

7 Roskam, "Inventing the Rural: A Brief History of Modern Architecture in the Countryside." 8 Koolhaas, "Ignored Realm." 9 Berkhout, Hart, and Kuhmonen, "EU Rural Development Policies: Present and Future." 10 Kersten, Neu, and Vogel, "Gleichwertige Lebensverhältnisse: Mindeststandard Alleine Genügen Nicht [Equal Living Conditions: Only Minimum Standards Are Not Enough]." 11 Koolhaas, "Ignored Realm"; Marsden et al., Constructing the Countryside.



#### \_Reflection on Methodology

To answer the research question, a reference space needs to be declared in a first step. For that purpose, the degree of urbanisation in the European Union will be taken into account to map rural areas. It is important to mention, that rurality, cannot be defined solely by density or isolation as proposed by the EU. From a sociological point of view, rurality is more intertwined with life patterns which are, moreover, vanishing in the countryside of the Global North due to urbanisation processes<sup>12</sup>. Due to the extent of this paper, this complexity has to be abstracted. Therefore, the spaces which are declared as rural according to the EU will be the basis of the investigation.

The choice of a specific space will be focused on a region in Eastern Germany, considering its' history. Due to the divide after the Second World War and the reunification in 1989, people left rural areas in Eastern Germany which led to vacancies that currently attract different actors<sup>13</sup>. This development puts the area into a state of upheaval, and it can, therefore, function as a representative.

With the methodology of central places by Walter Christaller<sup>14</sup>, the classification of the EU will be further differentiated. Dependencies of a region can be determined and mapped. This methodology was also used during the Nazi regime as a planning instrument<sup>15</sup>. Therefore, this methodology is highly biased. However, this research is not connected to the ideology. Furthermore, the theory of central places remains validity until today as well as the importance to infer interdependencies of localities. Therefore, it needs to be implemented in the analysis.

Within the selected region the distribution of facility typologies of daily life will be located to contextualize these dependencies. The interrelation will be further analysed and mapped based on of the local commuting praxeology. That data derives from a comparison of a person's residence and the address of their workplace. With the modal split of the region and the estimated time for travelling on the detected distances, it will be possible to draw flows and conclude on the current living quality of the rural population regarding their travel dependency. Considering the sources, the knowledge is purely based on quantitative data. However, the rural population is also characterized by a sense of community which affects the life patterns<sup>16</sup>. This informal influence cannot be captured on the basis of data. Further, it will not be possible to include such knowledge in this research. Due to the ongoing measures of the COVID-19 pandemic, travels and interviews with local residents are not possible. The qualitative part of the live patterns will be, therefore, limited to personal experience and assumption.

After a comparison of the current state with prior commuting praxeology in the region, the development will be analysed and visualised in diagrams. This knowledge will be the basis of a trend extrapolation to assume about the region's future. However, also these

12 Brenner, "The Hinterland, Urbanised?"

13 Burke et al., Ländliche Verheissung: Arbeits- Und Lebensprojekte Rund Um Berlin [Rural Forecast: Working and Living Projects Around Berlin].
14 Christaller, Central Places in Southern Germany.
15 Shane, "Notes on Villages as a Global Condition."
16 Henkel, "Geschichte Und Gegenwart Des Dorfes [History and Presence of the Village]."

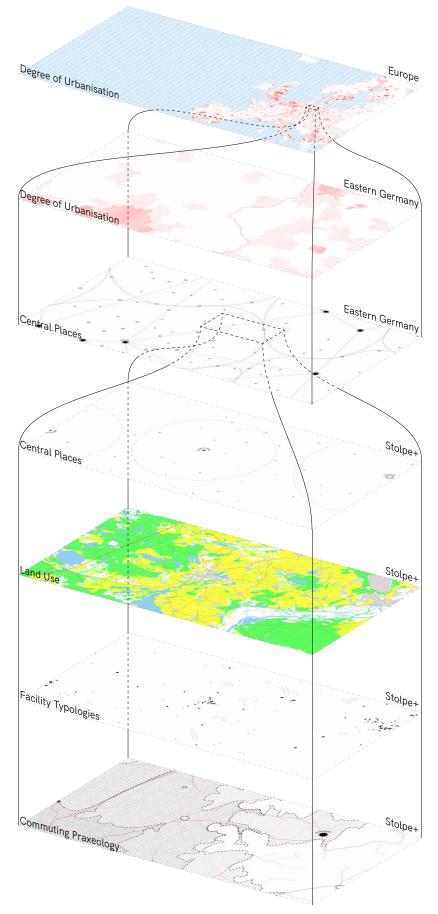
findings will be limited to quantitative data and personal experience due to the current restrictions.

Finally, the trend will be manipulated with assumed scenarios and possible developments centred around rural life patterns to conclude on the living qualities in the countryside and therefore answer the research question. Due to different research contexts, goals, school of thought, relevance within researches, and the importance of individual distinction, a variety of scenario building methodologies arose<sup>17</sup>. Also, in spatial planning, there is no generally applicable approach. The Institute for Future Studies and Technology Assessment methodology condenses the concept of multiple established scenario building strategies. Further, it considers prior developments and current trends. Therefore, that methodology will be the basis for the scenario building process.

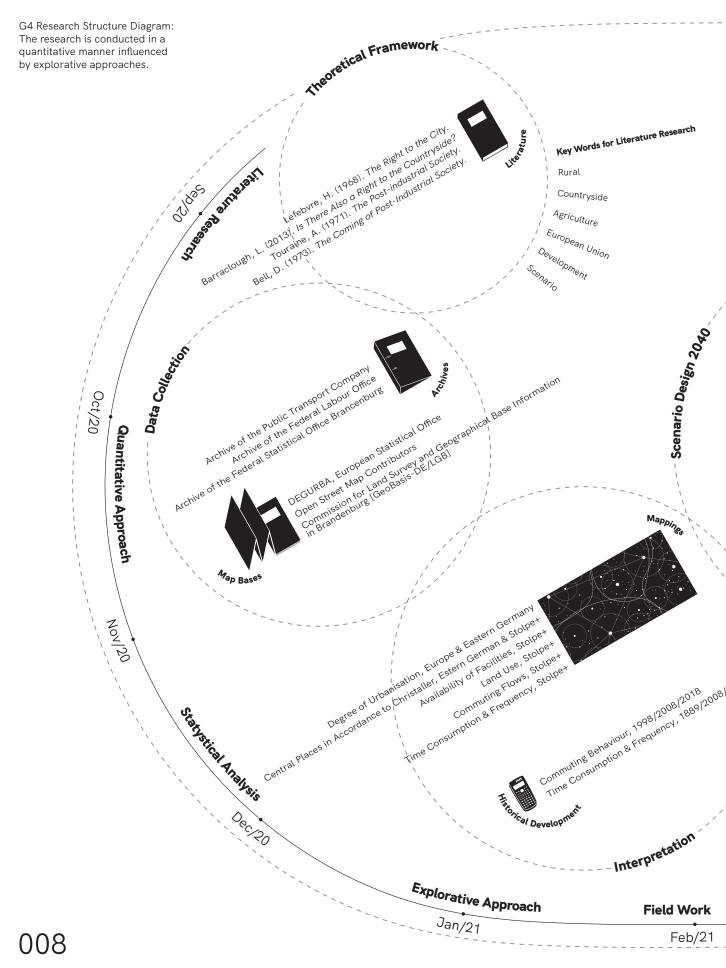
In the following period, one of these scenarios will be used as the basis for an architectural intervention in the designated region. With the idea of an alternative rural future, a facility will be planned to promote commonly as urban associated live qualities in the countryside.

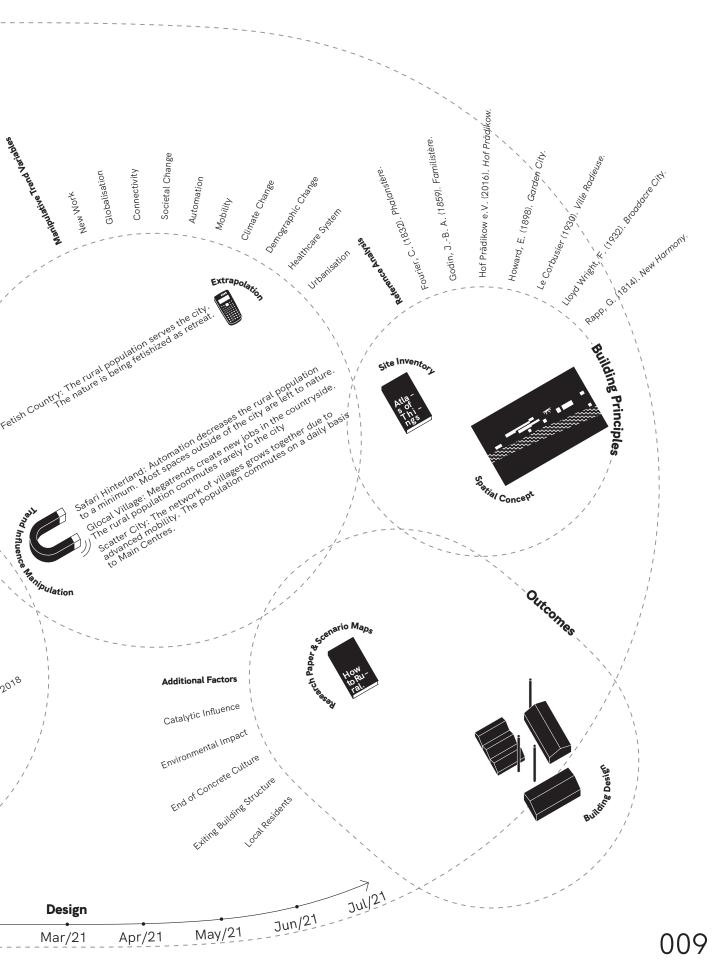
17 Kosow and Gaßner, Methods of Future and Scenario Analysis: Overview, Assessment, and Selection Criteria.





G3 Scope Variety: How the analytical mappings relate to each other.





#### \_Reflection on Relevance

To answer the research question, a quantitative approach with an explorative component was chosen. The consideration of a data-driven research was based on the extent of the topic. A qualitative investigation based on interviews would only take specific actors in the countryside into account, rather than the population as a whole. Therefore, the quantitative approach followed by a statistical analysis is the better choice to assure an extended validity.

The explorative approach of the scenario building process is, further, driven by problems and trends which occur on a global scale. Therefore, similar scenarios are expectable in other regions throughout the Global North with comparable rural conditions.

However, every rural region is characterized by its history and dynamics as well as local circumstances. The state of development of rural space is dependent on its' location and the time of observation<sup>18</sup>. Strategies have to be conducted with close consideration of the context. Therefore, the findings of this research will not apply to other regions. Nevertheless, the presented methodology can be the basis of research in other contexts.

The outcome of this research will not be an agenda or set of rules which has to be followed. Therefore, the title has to be understood more ironically and as a critique of past and current top-down measures in rural developments.

The purpose of this research is the investigation of alternative life patterns in the countryside apart from the current trend. The thesis does not claim correctness or to be a most likeable forecast. It is not possible to give a general answer to the future of the complex dynamics of the countryside.

With the help of the scenarios, it is rather possible to plan a strategy for the designated region to influence its development with small scale measures. Architectural interventions could be a driving force and catalyse the region's potential. Such bottom-up approaches seem promising in rural development strategies<sup>19</sup>.

Although this is an academical work and the subsequent design will remain theoretical and not change the countryside, this research is still part of a wider discourse. Therefore, additional attention has to be paid to the present circumstances of the selected region and the population. A tabula rasa strategy would not take the current dynamics of the countryside into account.

While the selected region in Eastern German functions as a representative for other regions due to the early population decline, the context has a historical background with adapted top-down measures. The local population is pessimistic towards changes in the countryside. Developments and strategies have to be considered with the local interests in mind.

18 Marsden et al., Constructing the Countryside; Murdoch et al., The Differentiated Countryside.
19 Berkhout, Hart, and Kuhmonen, "EU Rural Development Policies: Present and Future." G5 Concrete Factory Stolpe: The transformation of the vacant building to a facility with catalytic function will be the target of the design work.



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