

Structural Change versus Sustainability in Medium-Sized Cities: complementary or conflicting drivers?

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Objective & Contribution

A multitude of different factors might be responsible for urban decline but in any case it causes the necessity of transformation processes. Literature shows that the analysis of these transformation processes is one of the main fields of research in urban and regional science. But until recently the analyses of these transformation processes had been solely focussed on economic transformation – the trajectory of structural economic change. This is somehow surprising because “sustainable transformation” has gained an increasing awareness as a policy objective and as a field of research – the purely economic sight has changed to a wider perspective including then two other basic dimensions of sustainability, namely ecological and social aspects.

The proposed paper wants to contribute in closing this research gap by analysing the relationship between the paradigms of a purely economic sight and a sustainability viewpoint within the scope of urban transformation processes in medium-sized cities. The main question of the paper is, whether economic and sustainable transformation are competing policy objectives or whether a complementarity exists between them (Menzel 2004). Does the necessity for economic transformation offer a chance to implement sustainable strategies, since everything must be changed anyway? Or does the bundling of resources in order to adapt to economic structural change impede sustainable urban transition strategies?

In the scientific debate the idea of endless growth is seen critically by some scientists, who demand rethinking (Wiechmann, Pallagst 2012; Pallagst 2009; Hollander et al. 2009; Milbert 2015). In fact, at a certain point, besides many positive aspects, growth can create additional problems for a city, such as more noise exposure, traffic and congestion, pollution and bottlenecks in supply (Wessmann 2014). Therefore it is not surprising that urban regions produce indeed the highest amount of waste and CO² emissions (Schubert, Altröck 2004).

With the release of the Brundtland Reports in 1987, the importance of cities for the design of a sustainable development came into the focus for the first time and concepts regarding “sustainable cities” and “urban sustainability” gained in significance. With the formation of “Local Agenda 21” groups, as promoted by the United Nations Conference on Sustainable Development in Rio de Janeiro in 1992, cities gained further in importance in the fight for a sustainable development (Bulkeley, Betsill 2005). Also the „New Urban Agenda“, released at

the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) in Quito, Ecuador in October 2016, setting the global urbanization strategy for the next two decades, stresses the importance of the sustainability transition of cities.

Simultaneously, the European Union makes it clear, that cities are expected to be Europe's engines of future economic growth (Europäische Kommission 2011).

Bearing all this in mind, the analysis of medium-sized cities, which grow only slowly or even shrink, is thrilling for several reasons:

- First, this type of cities received little attention in literature and politics compared to the so-called mega-cities or rural regions, even though it can be assumed that findings from investigating these types of regions can only partially be transferred to medium-sized cities, as they have their own specific (Milbert 2015; European Smart Cities 2016).
- Second, 40 per cent of the European population live in cities with 100,000 to 500,000 inhabitants (Giffinger et al. 2007) – therefore this group of cities has a remarkable weight measured in population. The same applies to economic output (Parkinson et al. 2014), employment, supply of goods, centrality functions as well as cultural and architectural heritage. Hence it is important to include also shrinking or slowly growing cities when thinking about the process of sustainable transition (BMUB/BMZ 2015; Habitat III 2016).
- Third, for this type of cities the economic, ecological and social problems are already quiet clear. However the financial resources to fight them are often insufficient or unavailable. Accordingly, the conflict potential is being intensified additionally. Hence the sustainable solutions found in this context are especially forward-looking, since they already embrace a shortage of resources.
- Fourth, medium-sized cities are better suited for the analysis since they are less path dependent than so-called mega-cities. That makes them more amenable towards sustainable transition, since they can react faster and more efficiently (Allen et al. 2016). Besides, shrinking does not necessarily mean a worsening of life quality (Hollander 2011). On the contrary, shrinkage can also mean new chances for sustainable transition.

Overall, to date relatively little literature could be found that applies findings on sustainability or sustainability transition explicitly to slowly-growing or shrinking cities (Schilling, Logan 2008; Herrmann et al. 2016; Allen et al. 2016; Wiechmann, Pallagst 2012; Bauer 2003; Langner, Endlicher 2014). However further research in this field seems relevant, in view of

the current demographic development in Western industrial nations and the expectation towards cities to function as growth engines.

Theoretical framework

In order to answer the research question several fields of research need to be taken into account.

First, the theoretical approaches trying to explain structural change need to be considered. Hamm and Wienert offer a good first overview regarding these approaches and could be used as a starting point (Hamm, Wienert 1990). But of course it will be necessary to supplement it with more recent theoretical approaches like research dealing with path dependence and path plasticity. Ground-breaking in this field is the work of Grabher (Grabher 1994). Concerning the path dependence and path plasticity of shrinking medium-sized cities especially the paper of Vissers and Dankbaar should be taken into consideration. They apply path-dependency approaches to the decline of textile cities in the Netherlands and elaborate on several causes leading the cities towards decline (Vissers, Dankbaar 2013). According to the findings of Craig R. Allen et al. medium-sized cities are less path dependent than so-called mega-cities and therefore better suited for the analysis of sustainable transformation processes (Allen et al. 2016).

Additionally, the theoretical approaches regarding transformation research should be accounted for (Kollmorgen et al. 2015). A related field of research, “urban transition”, should also be included in the research. Another relevant line of research, “geography of sustainability transformation“, is comparably young (since 2011) and focuses strongly on the spatial aspect. A good overview is offered by the authors Hansen and Coenen (Hansen, Coenen 2015). With regard to “urban sustainability” and the development of cities towards a sustainable future the model of Childers et al. should also be discussed (Childers et al. 2014).

Empirical approach

Two case studies are planned in order to answer the research question. To date the German city of Mönchengladbach and the French city of Mulhouse are selected for this purpose on the basis of several criteria, i.a. a shared history of textile industry and similar size and population.

A longitudinal approach needs to be adopted so that the structural change can be tracked over several decades, ideally since the 1960s. A mainly qualitative research design is being chosen, supplemented by a quantitative part.

The research question will be answered in three steps:

- First, the historical background of the cities and their textile history is to be studied via literature review and document analysis in order to get a better understanding of their individual trajectory of structural change, possible path dependencies, sustainability movements, etc.
- Second, a quantitative analyse of economic indicators should help to describe and comprehend the economic trajectory respectively the structural change of these cities. Furthermore, indicators describing the sustainability of these cities, ideally the economic, ecologic as well as social dimension should be analysed as well, so that connections and dependences between the different indicators can be investigated.
- Third, a qualitative analysis on the basis of narrative interviews and literature review is to be conducted. The economic trajectory as well as the sustainability transition of each city can be illustrated with the help of important events similar to the Regional Transition Paths to Sustainability (RTPS) method developed by Strambach and Pflitsch (Strambach, Pflitsch 2016), in order to shed light on potential interdependencies. Furthermore, for each defining event the stakeholders involved must be identified and given impulses must be categorised into impulses for economic or sustainable transformation. The focus is on the identification of complementary and conflicting parameters.

First results

A draft paper with first results will be submitted in June 2017.

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