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Chapter 19: 欧米諸国における都市縮小事情と国際的な比較研究の必要性

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Translation: **Circumstances of urban shrinkage in the West and the need for international comparative research**

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## **Circumstances of urban shrinkage in the West and the need for international comparative research**

[Original title: Urban shrinkage: the phenomenon, its impact, and future challenges]

### *Abstract*

This chapter reports on an international debate on urban shrinkage by bringing together several national strands of research across the West. It conceptualizes “urban shrinkage” as a specific trajectory of cities, with population loss being its main indicator. Firstly, the chapter deals with bridging the core national debates, before aligning these with local concerns. It then turns to a comparison of governance responses across wider Europe and the USA, highlighting a huge potential for eliciting cross-national knowledge, which needs to be exploited. The chapter aims to augment and sharpen the international research agenda on urban shrinkage by critically reflecting upon governance and policy. Last but not least, this chapter seeks to align the research on urban shrinkage with general challenges and strands of research in urban and regional studies, human geography, and spatial planning by linking it with other debates in urban studies, e.g. urban inequalities, economic resilience, and resource efficiency.

### *Introduction*

Over the last decade, an international debate on urban shrinkage has brought together national strands of research on those cities that have experienced considerable population loss over a prolonged period. The prominence of urban shrinkage has been highlighted by special issues in *Built Environment*, *European Planning Studies*, *Géocarrefour*, and *The International Journal of Urban and Regional Research* (Bontje & Musterd, 2012; Martinez-Fernandez et. al., 2012; Roth, 2011; Wiechmann & Bontje, 2015). In addition to large-scale quantitative research on urban shrinkage, single case studies have provided further evidence that urban shrinkage is neither a marginal pattern of urban development nor a short-term divergence from the ‘usual’ growth path (Constantinescu, 2012; Farrant, 2012; Haase et. al., 2012; McGuinness et. al., 2012; Rink et al., 2012; Silverman et. al., 2013). In our understanding, urban shrinkage is a specific trajectory of cities that in many respect follows different logics of development than growing or stable cities, e.g. due to changed economic and population structures or a decline in demand for housing and services. Population loss is the indicator of urban shrinkage, the tip of the iceberg which results from underlying complex sets of causes propelling specific problems for urban development, typically listed as economic decline, demographic stagnation, decay, or abandonment (e.g., see Elzerman & Bontje, 2015; Hoekveld & Bontje, 2016). The short chapter aims at augmenting and sharpening the international research agenda on urban shrinkage by

aligning the research agenda on urban shrinkage with general strands of research in urban and regional studies.

### *Bridging national debates, aligning local concerns*

Discussing urban shrinkage in the Western context is not as novel as it may seem. With terms like 'urban decline', 'urban decay', or 'depopulation', the causes and consequences of urban population loss in the Northern Hemisphere have been studied and discussed for many decades. The diversity of local experiences of shrinkage in European, North American, and East Asian cities has been reflected in the variety of topical points of departure for the respective national conversations (for a review of global trends, see Audirac, 2009; Martinez-Fernandez et. al., 2012; Oswalt & Rieniets, 2006; Wiechmann & Pallagst, 2012). For instance, in eastern Germany, it was a vast oversupply of housing stock resulting from combined effects of low fertility rates, outmigration and a building and renovation boom encouraged by tax incentives which in the 1990s brought together urban scholars, planners, policy-makers, and demographers to engage with urban shrinkage and demolitions to rebalance the market (e.g. Bernt, 2009; Kühn & Liebmann, 2009). In the UK, the issues of urban decline, brown-field land, and abandoned housing have typically been discussed in the context of 'urban regeneration' and 'neighbourhood revitalisation' strategies. Most of the town and country planning profession in Western Europe as well as its academia across Human Geography, Urban and Regional Studies, and Urban Sociology, are built upon the ethos of public good and state intervention. Hence, the emphasis amongst urban scholarship and practice has always been on urban regeneration as a euphemism for tackling and reversing shrinkage (e.g. Carmon, 1999; Roberts & Sykes, 2000). Simply 'accepting' shrinkage and 'managing' decline has hardly been an option until very recently.

In eastern Europe, most of the discussion has centred on 'depopulation' and de-industrialisation; at the same time, the demand for housing has remained high, given the historical legacy of chronic under-supply in centrally-planned economies. Instead of housing demolitions, many cities have experienced a housing construction boom; increasing population densities in city centres (see Figure 1). Under post-socialism, urban and regional policy in eastern Europe has been geared almost exclusively towards attracting foreign direct investment and increasing the competitiveness of individual cities. In Japan, as many contributions to this volume testify, the phenomenon of shrinking cities has touched upon a host of determinants, including low fertility, ageing, out-migration from the peripheral areas into the leading metropolitan regions, widening economic inequalities between different parts of the country, and disintegrating local identities and social ties (e.g. Buhnik, 2010; Matanle & Rausch, 2011).



Figure 1: “A penthouse – the city at your feet”. A newly-built high rise block of flats squeezed in between the 1950s and 1960s Soviet-style housing, central Donetsk, eastern Ukraine, 2009.

Source: Vlad Mykhnenko

In the United States, the challenges of economic restructuring, inner-city decay and urban sprawl have been the focus of attention of many authors at least since the 1970s (e.g. Bradbury et al., 1982; Finkler et. al., 1976). Yet given the prevailing free market ideology in the US, and the (perceived) lack of any coherent federal urban or regional policy, academic and policy studies there have primarily focussed on the causes and consequences of urban decline. It is only recently that an open, explicit, and practical discussion has begun in North American urban studies as to how cities can be stabilised, reinvented, and re-imagined with a smaller population (see Beauregard, 1993, 2009; Dewar & Thomas, 2012; Hollander, 2011; Schilling & Logan, 2008). Even in countries with no immediate experience of the issue e.g. China, where opportunities for urbanisation and economic growth seem almost boundless, shrinkage could well materialise in the near future, since the underlying factors like ageing, real estate oversupply, and property speculation shall sooner or later generate urban problems there, too.

Such a diversity of experiences, however, has often resulted in rather fruitless international debates when individual local stories are being told, with no agreement being reached even on the most basic, commonly agreed definition of a shrinking city, let alone a joint research strategy. It appears that until now European, North American, and Asian debates on urban shrinkage have been conducted separately, in parallel, rather than being intertwined. In order to synchronise these various discussions, we suggest the following engagement strategy, with a focus on:

- Uncovering blind spots by contrasting experiences

Inter-urban and cross-national comparisons also provide an opportunity to broaden the attention and thus discover phenomena and drivers at work in shrinking cities that have been overlooked locally. By learning about, for instance, the impact of demographic change in one place, the role of demography can be reflected in the trajectories of other cities, where, perhaps, deindustrialisation and economic decline used to dominate the debate and policy response. Furthermore, comparative research should allow one to better isolate the influence of local conditions, e.g. when national policy frameworks prevent importing policy solutions from the outside, and when various path-dependencies result in fairly unique dynamics of shrinkage. We have already mentioned the housing construction booms that have been experienced by many post-Soviet shrinking cities following the collapse of the centrally planned economy. In other contexts, economic decline in the course of a crisis of traditional industries might play the dominant role in a particular setting, as witnessed by the demise of many coal-mining urban centres across Europe and North America. However, in other settings de-industrialisation could lose much of its explanatory power. Urban shrinkage therefore evolves when the place-specific interplay of economic transformation, suburbanisation and demographic change leads to population decline. Thus, instead of asking how to counteract a specific urban problem such as decay, more general questions would focus on how to develop with no realistic growth prospects, under the conditions of low and falling demand? And how to keep a city liveable, maintaining the quality of life for the remaining residents?

- Discovering what lies behind the plurality of shrinking cities

Many discussions about planning approaches for shrinking cities suffer from hasty comparisons and premature conclusions: for example, when chronic unemployment and economic decline, a typical characteristic for a shrinking city in eastern Germany, is also assumed to be typical for, say, Lithuanian or Polish cities. Too often, this builds a procrustean bed for understanding the specifics of shrinkage in a variety of contexts and leads to an ill-founded transfer of 'best practices'. Particular practices may, indeed, make a lot of sense in a particular context, but may not always be compatible with other contexts. A comparative approach offers an instrument for planners and decision makers to think about their own case of shrinkage in a more specific way. Indeed, recent comparative research has revealed an astonishing plurality of shrinking cities' pathways (Haase et. al., 2016). Even

within Europe, urban shrinkage is a highly diverse and multifaceted phenomenon. To us, this is a point of interest in its own right, not a reason to withdraw from attempts to link the debates and find commonalities. If the drivers leading to shrinkage are rather similar and few in number, why do various facets of shrinkage emerge? Should we not pay (more) attention to the interplay between these drivers, and complex interdependencies between the local and the national in terms of multiple scales of public policy (Bontje & Musterd, 2012; Martin & Sunley, 2006)?

### *Enhancing the scholarly understanding of urban shrinkage*

By now, a good deal of knowledge (and mountains of data) about the scope, the causes, and effects of the phenomenon of urban shrinkage have been accumulated. A number of broad international comparative studies have helped to underline the relevance of the phenomenon (Kabisch & Haase, 2011; Martinez-Fernandez et. al., 2012b; Martinez-Fernandez et. al., 2012; Turok & Mykhnenko, 2007) and now need to be followed by more integrated, mixed-methods research, digging deeper into the local contexts and consequences of shrinkage. Overall, in the post-war European and North American context, the three main causes of such slow-burn shrinkage include: (i) deindustrialisation, generally leading to net out-migration from the city region (e.g. Friedrichs, 1994; Galster, 2012); (ii) suburbanisation or urban sprawl, when local residents disperse from the core city towards more peripheral locations within the city region (e.g. Beauregard, 2006; Couch et. al., 2005); and (iii) natural demographic change, whereby mortality levels exceed fertility rates and population naturally declines (Kabisch et al., 2008). Statements about the overlap between these three causes of shrinkage and their combined impact are of common occurrence (e.g. Haase et al., 2016; Hoekveld, 2012), with some scholars trying to towards develop explanatory heuristics which go beyond causality, towards more complex and non-linear explanations and interpretations. To this end, we propose to:

- Utilise urban and social theory to explain the global geographies of shrinkage

To explain population loss in a certain locality is one thing, but do global patterns of shrinkage exist? To understand this, one must explore the global interplay of factors driving urban shrinkage. In addition to demographic factors having impact across national borders, globalisation, in particular, international and place-based competition, influences the geographies of shrinkage. As described by Bernt and Rink (2010), shrinking cities have become the 'backyards of globalization', places left behind by the global shifts of capital. Lang (2012) suggests understanding shrinkage as another manifestation of the core-periphery relationship, with peripheralization and marginalization processes occurring in close connection to the expansion of global cities and capital metropolitan regions. Here, we might draw from the now classical works in urban political economy which revealed how the flow and accumulation of capital tend to produce temporary 'fixes' in space and time

(Harvey, 2006; Smith, 2010) and how geographical inequalities are shaped by the ownership and control of the means of production and of the built environment as well as by corporate decisions (Massey, 1995).

- Shift attention from causes to the context and dynamics of shrinkage

To explore the interdependencies between the causes and effects of shrinkage, and the operating feedback mechanisms, academic interest should shift from the rather linear, static analyses of causes of population loss to dynamic influences of the local (and global) context. Future trajectories of cities are uncertain. Cities hardly ever get locked into continuous downward spirals of decline. Intermittent and surprising upswings and downturns in population development are frequently reported and need an explanation. We assume that intervening contextual factors such as changes in the administrative-political system as well as national, regional, and local policies play a role. Also, the morphological structure of the city, its ecology, and culture might impact upon the diversity of urban trajectories.

If one wishes to understand shrinkage in a specific location, one needs to integrate theoretical explanations with historical trajectories, as well as to combine these with a study of the specific impacts caused by shrinkage and to analyse the policy environment in which these processes take place. For example, Haase and others (2014) has recently suggested an integrative model of urban shrinkage (see Figure 2) which maps the entire process across different contexts and independently of local and national specifics:

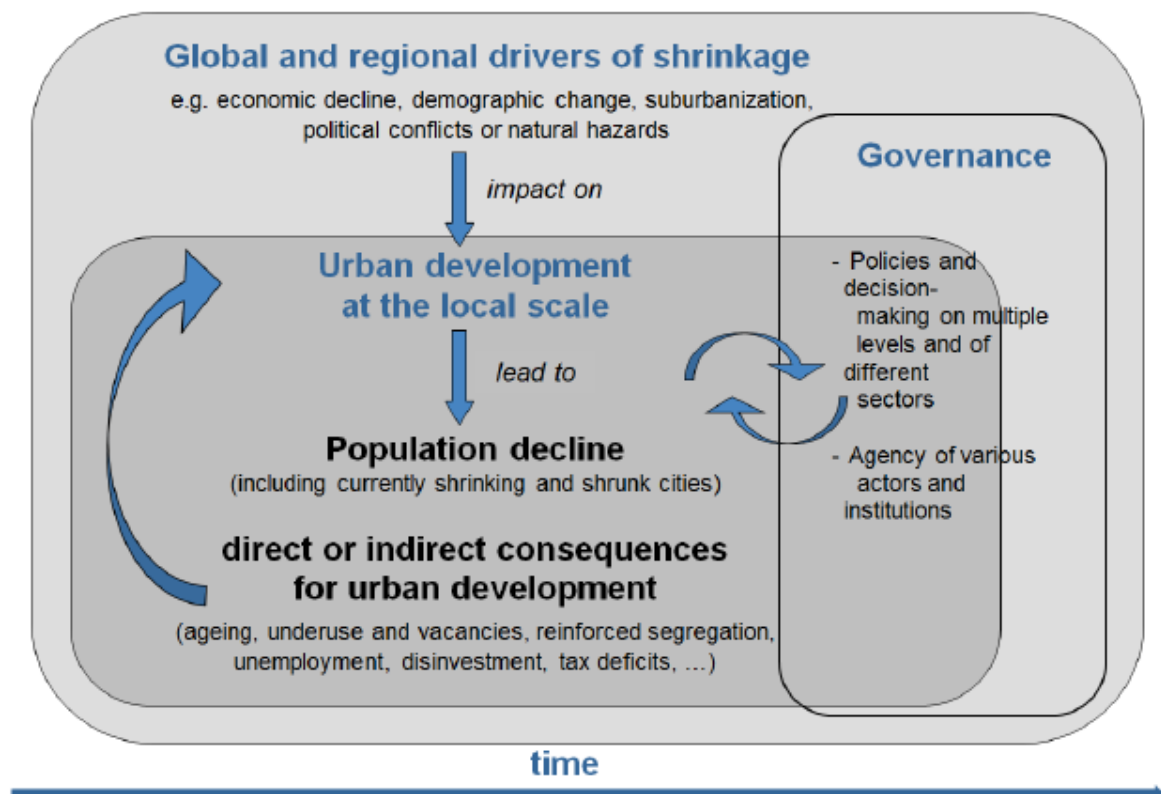


Figure 2: Urban shrinkage - a heuristic model.

Source: Haase et al., 2014: 1525.

This heuristic covers causes, impacts, responses, and feedback loops, and the interrelations between these aspects. Whilst not 'explaining' shrinkage in every case, it builds a framework into which place-specific and time-specific explanations can be embedded. It is thus a heuristics that enables communication across different contexts. It is contended that in which shrinkage can be studied both in a conceptually rigorous and in an historically specific way. Instead of an invariant 'process of shrinkage', they portray a 'pluralist world of shrinkages'. Let us consider the following example of one of the fastest shrinking cities in Europe by applying and discussing the model in the case of Makiivka.

The city of Makiivka is situated in eastern Ukraine, in Donetska *oblast* (province), the core of the industrial Donbas region that has been affected by population and economic decline since the late 1980s (see Mykhnenko, 2011). Makiivka, Donetsk's poorer and more troubled neighbour, lost 21.3% of its population (or residents), having started to shrink half a decade earlier than the rest of Ukraine. Before the Russian invasion of Ukraine in February 2014, and the consequent spread of a brutal armed conflict across Ukraine's easternmost regions, Makiivka was subjected to two major *global and regional drivers of shrinkage* conceptualized above: namely demographic change, affecting most of the European continent, and regional economic decline. Firstly, the city's population structure was influenced by a gradual decline in fertility, which had fallen below the replacement rate in the mid-1970s, in the European part of the Soviet Union. As forecast at the time, without significant inward migration from elsewhere, further economic and social development of the western USSR was going to be seriously compromised. By the 1990s overall fertility in Ukraine had reached one of the world's 'lowest low' levels—under 2 live births per 1000 women. Secondly, Makiivka was hit hard by several waves of deindustrialization. Starting as a 'slow-burn' decline of the krainian Donbas coalfields in the 1970s, the city's economic decline was propelled by the 'sudden shock' of the collapse of the USSR, and 'the shock therapy' of the postcommunist economic transition (see Figure 3).



Figure 3: Death of a steel mill: Makiivka Kirov Iron and Steel Works at the time of closure, Makiivka, autumn 2009.

Source: Vlad Mykhnenko

During the tumultuous 1990s Makiivka lost 73% of its industrial production; even after almost a decade of growth in the 2000s, at the beginning of the 2008 financial and economic crisis, Makiivka's industrial output was still two thirds below its pretransition level of 1990 (Swain and Mykhnenko, 2007). The city's deindustrialization and negative demographic development have been more profound than in the wider Donbas region. The two main drivers of shrinkage started to manifest themselves in Makiivka well before the collapse of state socialism. Between 1987 and 2012 the city's population shrank by almost 100 000 inhabitants, from its peak of 455 000 to 356 000, corresponding to a 22% decline over fifteen years. Several major *direct and indirect consequences of population decline* soon followed. Firstly, Makiivka, along with the entire Donbas region, was profoundly affected by ageing: between 1995 and 2009, the number of under-15-year-olds declined by 46%; the number of 15–24-year-olds declined by 9%, whilst the third youngest population category (25–44-year-olds) declined by 17%. In the meantime, the population aged 65 and over aged 9 increased by 12%. The average age of Makiivka residents rose to 41.8 years. Secondly, urban shrinkage has led to a decline in the number of children attending preschool daycare facilities, with the overall number dropping by 12 000 (57%) between 1990 and 2008. During

this period, the number of primary and secondary school pupils declined by 28 000, a fall of 51%. Nurseries, kindergartens, and schools became underused as a result. The increase in the number of vacant residential properties in Makiivka has not been as dramatic or visible as that in Halle (and eastern Germany generally). Nevertheless, the availability of housing in the city increased by 19.3%, growing from 16.1 m<sup>2</sup> to 19.2 m<sup>2</sup> per capita in twenty years. In addition, 582 000 m<sup>2</sup> (around 7%) of Makiivka's overall housing stock was demolished or rendered uninhabitable during this period. Furthermore, the closure of many of Makiivka's unprofitable factories, plants, coal mines, and steel works since the early 1990s was a result of significant public and private sector disinvestment. About one third of all jobs in the city were lost as a consequence, generating unemployment. By 2010 35% of all households in the city had fallen into arrears with utilities payments: the sum of unsettled energy, heating, and water bills had grown to €40 million. Finally, impoverishment and payment arrears have added to the city's fiscal burden, increasing its tax deficit and making Makiivka almost entirely dependent on external sources of public funding. Consequently, Makiivka's economic decline has created a powerful feedback loop between ageing, unemployment, out-migration, and (further) population loss. In the 2000s, the highest rate of unemployment in Makiivka was amongst 15–25-year-olds and women; at the same time, the largest proportion of out-migrants from the city consisted of young people and women of childbearing age, thus reinforcing the city's negative demographic growth trajectory.

The *governance response* of the local government actors in Makiivka was channelled through two main strategies. Firstly, the city engaged in a series of attempts to 'rationalize' and 'optimize', involving a dramatic reduction of public services and infrastructure provision. As a result of urban austerity, one in five medical practitioners lost his or her job between 1990 and 2010; the number of nursing staff declined by around 40%, whilst the number of hospital beds was cut by half. In 2010 yet another ward of the city's central hospital was closed down. Social and cultural amenities have also faced a steep decline: one third of all local libraries have been shut, and the number of social clubs in the city has fallen by 39%. Before the announcement of a new wave of school closures in 2011–12 (eight in total), Makiivka had already lost eighteen (or one in five) of its primary and secondary schools. In addition, 107 nurseries and kindergartens were closed down (a decline of 57% in total). The length of the central heating pipelines in the city was reduced by 119.8 km (27.4%); the provision of central heating itself declined by 62.2%. Public administration was also reduced in size: in 2001, as a measure to increase efficiency, the city council of Makiivka pioneered the abolition of inner-city borough councils, amalgamating all the financial resources under its control. By 2010 the share of spending on 'public administration' in the city budget had declined by at least one percentage point to 5.0%. Secondly, the local authorities sought external finance and assistance. In 2008 the city managed to attract over €20 million for the clearance and redevelopment of a major brownfield site as a retail outlet by METRO Cash & Carry, the world's third-largest retailer. However, the city's greatest success has been in lobbying for a larger budgetary share in the process of national income

redistribution. By 2010 the share of central government transfers in the budget of Makiivka had tripled, covering 54.2% of the council's expenditure. Ukraine's system of territorial redistribution of income was designed in the early 2000s to mitigate localized hotspots of economic depression (Mykhnenko and Swain, 2010). Being a stronghold of Ukraine's then ruling Party of the Regions and a loyal supporter of President Yanukovich during the 2004 and 2010 electoral campaigns, Makiivka had enjoyed a fair share of attention from the central government and its agencies. The subsequent Russo-Ukrainian *political conflict*, war, and the occupation of Makiivka by the Russian armed forces and Moscow-backed militants in 2014 have added yet another geopolitical driver (see Figure 2) to the city's downfall.

### *Comparing and contrasting governance response to urban shrinkage*

As early as the 1980s, academic research was dealing with strategies for coping with and reversing shrinkage in the old industrial cities in Western Europe and the United States. That research did not explicitly use the label "governance", yet its focus was on the evaluation of the local, regional, and national policies, on what had been done, and what needed to be done. Gradually, with the dispersion of authority to supranational and subnational institutions and horizontally to non-state actors across the West, urban scholarship has begun to refer to *governance* – a broader, more inclusive and encompassing process of coordination than the conventional view of government. Governance is typically defined as the process through which public *and private* actions and resources are steered and given a common direction and meaning (see Bache & Flinders, 2004). Given the stigma of failure and the lack of knowledge and experience in coping with the challenge of shrinkage, cities could greatly benefit from cross-national learning and knowledge transfer about new efficient governance mechanisms. However, one can identify a number of hurdles on the way. Within Europe, the new hotspots of shrinkage are mostly located in eastern Europe (Mykhnenko & Turok, 2008). These cities should be able to profit from learning from the experience of western European cities, which have dealt with the causes and consequences of shrinkage for decades. Yet, as we have witnessed, in the post-socialist realm there is a strong belief in the 'invisible hand' of free market forces as the main driver of development. Following the abject failure of state socialism, central government and a strong public sector are understandably distrusted in many parts of the former Soviet bloc. We found an aversion to state intervention, including urban and regional planning, and a strong preference for the private sector to solve urban regeneration problems, including a heavy reliance on foreign direct investment as a stimulant of economic growth (Couch et al., 2012). Yet *laissez-faire* approaches to urban governance have not been universally successful. The failure of such a strategy has manifested itself in the built environment across the region, littered with derelict architectural delights (see Figure 4)



Figure 4: An abandoned 1870s house, Bytom, Upper Silesia, Poland, 2011

Source: Vlad Mykhnenko

Similar barriers to policy exchange and learning exist in the U.S., where the state, too, is generally considered part of the problem rather than part of the solution. By contrast, the free market approach has been strongly rejected in western Europe, both in the scholarly and practical discourse. The ideal of a “European city”, with its dense structures and integrative powers, is celebrated in stark opposition to sprawling and highly segregated North American cities. Joint, collaborative research might act as an intermediary in overcoming such perception and knowledge barriers.

*Rethinking broader urban challenges against the contemporary background of shrinkage*

Finally, research on shrinking cities should feed into a more general discussion about urban development. Most of the knowledge and the overwhelming majority of concepts we use to study urban development have been developed through researching urban growth and expansion. But what is the added value of shrinking cities for urban theory? What difference

does shrinkage make for the new and old challenges of local and regional development? We trust that shrinking cities can also inspire a similarly fruitful engagement.

- Urban inequalities, residential segregation, and gentrification

Typically, housing markets of most cities are under a permanent pressure of housing shortage and restricted access of marginalized and low income households to good quality housing. However, preliminary studies of the effect of shrinkage on residential segregation have pointed to fast growing concentrations of disadvantaged households in the least attractive neighbourhoods with an oversupply of cheap housing stock (Fol, 2012; Grossmann et al., 2014). For example, after the beginning of the post-socialist transformation, the east German city of Leipzig underwent various changes within a short time span (Haase & Rink, 2015). These changes have been especially dynamic in its inner city. Whereas it was hit by the loss of large parts of its population and increasing housing vacancies in the 1990s, the 2000s brought about a revitalization and new attractiveness of many inner-city districts. Since then, reurbanization and – in some places – gentrification has become the predominant trends in a rising number of inner-city districts. This development has also reshaped patterns of socio-spatial differentiation in the city as a whole and its inner parts (see Figure 5).



Figure 5 An organic food corner shop in a 'gentrified' neighbourhood, Leipzig, eastern Germany, 2009.

Source: Vlad Mykhnenko

Thus, one has to problematize the impact of housing oversupply on residential segregation. What could be an appropriate policy response to intra-city inequalities under shrinkage? Does shrinkage foster or hinder gentrification? Is gentrification an unavoidable cost of any attempts to re-urbanise shrunken inner city neighbourhoods? And, most importantly, can we speak at all of gentrification, when devastated neighbourhoods are redeveloped with hardly any (immediate) displacement?

- Land use and land consumption

As experience has demonstrated, some shrinking cities continue to 'grow': although the pressure on land consumption might decrease, physically and administratively, shrinking cities could still sprawl. U.S. cities experience continuous sprawl with growing suburban communities and declining inner city districts; the same holds true for many shrinking cities across eastern Europe. By contrast, in the UK and other west European states with a developed culture of spatial planning, public programmes and funding have fostered a reuse of vacant space for redevelopment in inner urban areas or as a way to introduce green structures, improve the quality of life and functioning of urban ecosystem services (see Figure 6). What are the new land use patterns that emerge in shrinking cities? How can one steer a shrinking city to reduce its land consumption and turn it into a compact, smaller urban settlement? What role do planners and planning cultures play in influencing relevant national policies?



Figure 6: Demolishing abandoned housing estates, creating green spaces. *Stadtbau Ost* - Urban Restructuring East: a federal programme for managing urban decline in the former communist East Germany, Dessau, 2010.

Source: Vlad Mykhnenko

- Resource efficiency and climate change mitigation

Intuitively, a reduction in population should lead to a reduction in the use of resources, energy, and green house gas emissions. Tumber (2012) argues that smaller, compact industrial cities in the U.S. (e.g. those built around motor car and steel production like Flint, Michigan, and Youngstown, Ohio) have a better capacity to adapt to a low-carbon world. These cities, so the argument goes, can adjust to a more dense settlement pattern, being surrounded by rich land assets ready for food and energy production, and profit from short transport connections. The contemporary reality of shrinkage can be fairly different, often resulting in a rise of emissions per capita. Shrunken, perforated urban structures require extra heating. Various networks of technical infrastructure, utilities, and transport become under-used and less efficient. On top, the fiscal stress of shrinkage hinders a compact city strategy. Given that political priorities are often geared towards stabilizing and re-growing the city as well as increasing competitiveness, what role do environmental and climate

change policies play? What priority does climate change mitigation have in shrinking cities? And how can shrinking cities increase energy efficiency of buildings, if private investment becomes riskier under the conditions of low and uncertain real estate demand?

- Urban resilience

Last but not least, urban resilience is a buzz-word highlighting the (in)ability of cities to adjust and 'bounce-back' from a number of shocks and challenges (Mykhnenko, 2016). In a rather classic field of responding to natural hazards, Kuhlicke et. al. (2012) raised the idea that shrinking cities are much more capable of withdrawing from endangered areas like river banks. By pursuing a greener, compact city strategy, shrinking cities could re-design their built environment more freely to make it fit the new challenges associated with climate change and extreme weather events. Yet can one extend this argument to other types of shocks and crises? Urban and regional economy is another aspect discussed within the resilience framework especially with respect to the post-2007 international financial crisis and its euro zone aftermath. Shrinking cities had already had quite a history of experiencing drastic fiscal austerity long before the Great Recession. In this chapter, we have described a few cases of urban adaptation to sharp economic downturns and fiscal crises (see the case of Makiivka above). What lessons can be drawn from that? Are there any models of 'best practice' that one could develop to help mitigate sudden economic decline and severe cuts in local public services? Or, alternatively, is the dependence on external (central government) fiscal transfers the only way for a shrinking city to recover?

### *Conclusion*

Urban shrinkage is a widespread phenomenon today. Many advanced capitalist countries face declining birth rates and an ageing population, whereas immigration might not balance the losses. History has shown that any city can fall into shrinkage, if even former leading economic hubs like Liverpool, Glasgow or Detroit could lose their importance. Advanced capitalist countries face declining birth rates and an ageing population, whereas immigration might not balance the losses. Numerous smaller towns fall into shrinkage due to migration to the bigger cities. Shrinkage will not "disappear" from Europe's urban picture; on the contrary, given the global demographic change and the local dynamics of the global economy (and of global crisis effects), it is very likely that urban shrinkage will become an even more widespread phenomenon in the near future. As in almost every other aspect of urban research, the list of intriguing new questions concerning shrinking cities continues to expand.

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