

Shrinkage at the Urban Fringe: Crisis or Opportunity?

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Abstract

Shrinkage in suburbia has not been widely researched yet. This paper examines communities and towns in Berlin's suburbs undergoing processes of shrinkage and regeneration after the fall of the Wall. The communities which experienced population decline in 1992-2008 were concentrated in the eastern suburbs. In two thirds of 63 communities, employment declined (1994-2006). Selective population in- and out-migration, lack of land demand and investments, increasing competition, accompanying shock-like transformation and globalisation, plus disadvantageous location factors all tend to cause shrinkage. The Berlin-Brandenburg Metropolitan Region is a unique urban laboratory where growth and shrinkage occur side by side and de-centralization and centralisation occur simultaneously, all in a heterogeneous, polycentric urban region. Hence, a patchwork pattern appears on every scale. The paper concludes that shrinkage is not "abnormal" nor is it always negative and needing to be concealed. Rather, suburban shrinkage is an integral, indeed inevitable, part of every city's life, and it often presents interesting and valuable positive planning opportunities. A major future challenge for urban studies is to discuss how to shift paradigms from "perpetual linear growth" to "cycles that include shrinkage".

Keywords: Suburbanisation; shrinkage; urban fringes; regeneration/redevelopment; Berlin-Brandenburg metropolitan region

Introduction

Discussions about both urban and suburban shrinkage in Germany have been growing since the end of the 1990s and in the case of other countries such discussions began even earlier (Kabisch et al. 2004). Shrinkage is hard to study and think about. On one hand, a complex mixture of processes drives all forms of urban shrinking and on the other hand, the concept "suburban" involves many different variables as a spatial parameter (Howe et al. 1998). Suburban shrinkage combines in an unexpected way the two concepts of "urban" and "shrinkage": it is unusual because almost always urbanization means expansion, not shrinkage. Although this odd combination occurs widely, there has been little research on

it. More importantly, no clear-cut strategies have yet been proposed or implemented to deal with the “problems” (or advantages) of shrinkage.

Shrinkage is often seen as a major socio-economic problem, especially in the view of those cities affected by it. During shrinkage formerly used land is abandoned and subsequently tax bases and incomes shrink. This has a negative impact in the provision social services and the sustainability of existing infrastructure, affecting economies at a city and national level. At the local level, almost every social group has interests that are affected by city shrinkage: politicians (votes); communities (declining tax bases and incomes = less attractive cities from citizens’ viewpoints); urban planners (negative growth is seldom discussed and usually regarded as a failure although it can open up new options); residents (lower quality of life—e.g., fewer jobs, infrastructure problems, out-migration); businesses (out-right failure, smaller customer base); scientists (interesting problems and uncompleted studies); environmentalists (opportunity for restructuring land and policies). This research topic is multidimensional and hence significant (1) from different stakeholders’ viewpoints (e.g., communities, urban management, real estate/city marketing, joint regional planning etc.) and (2) in the field of urban planning, urban sociology, and urban studies in general, as well as human geography.

Suburbanization has long been associated with a process of constant growth of the entire urban region and with a loss of population and jobs within the inner city (van den Berg et al. 1982). However, today many urban regions of Germany and Europe are faced with dynamic situations in which shrinkage—of population, income base, jobs, manufacturing, et cetera—is an ongoing urban process. This is also true for those suburbs that for a long acted as the “spatial growth scene” of cities. They are now becoming part of heterogeneous, polycentric urban regions that have replaced the model of a traditional core city and surrounding suburban satellites (Kloosterman and Musterd 2001). Moreover, suburban and core-city areas differ in spatial development; growth and shrinking can simultaneously occur in the same urban region and produce the commonly found fragmentation of urban regions (Burdack and Hesse 2007).

In today’s era of streamlining and world-wide intercity competition, we see a distinction between areas which could be called “losers” and “winners”, with dynamics becoming increasingly different at a local and global level. Entering the global market causes increasing competition, strengthens regional disparities and speeds up product life cycles (Oswalt and Rienits 2006). Similarly, growth and shrinkage can co-exist; this becomes evident when we compare different cities, different districts within one city, or diverse socio-economic indicators (e.g., growth of employment, decline of population, economic growth) (Doehler-Behzadi et al. 2005).

In the Berlin-Brandenburg Metropolitan Region¹ both shrinking and growth are occurring within the core city area and beyond. This study focuses on areas in the urban fringe beyond Berlin's boundaries—specifically areas that are facing shrinking processes in both demographic and economic development. The case studies—shrinking suburban communities—will be selected from beyond Berlin's city boundaries but within the formerly so-called sphere of mutual influence (or immediate sphere of influence = "engerer Verflechtungsraum") of Berlin and the Federal State of Brandenburg². To define shrinkage is a difficult task because the term includes multi-dimensional and complex processes; this work will measure it by including population decline, decrease on economic dynamics (indicator: decline of employment) as well as deterioration of urban functions (indicator: increase in number and size of site, their use and potential to be redeveloped).

This work addresses three questions:

1. Which areas in the suburbs of the Berlin-Brandenburg Metropolitan Region have been most strongly affected by shrinkage since 1990?
2. Why are these areas shrinking, while other surrounding areas on the urban fringe are developing? Which factors and circumstances play a decisive role in this process?
3. How do shrinking processes in core city areas and on the urban fringe interrelate?

The Berlin-Brandenburg Metropolitan Region³ was chosen because the Region has characteristics associated with both eastern and western patterns of urban development, and it is feasible to compare urban fringe dynamics from the Western world (cities such as London, Pittsburgh, Philadelphia, or Chicago) with typical developments in

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1. This is older Berlin-Brandenburg Metropolitan Region which is City Berlin with its suburban area. Since June 2005, entire State Brandenburg and State Berlin joined into Capital Region Berlin-Brandenburg.
 2. The criteria for defining the sphere of mutual influence Berlin-Brandenburg were (1) the economic activities in this sphere (the common job market, exchange of goods and services); (2) daily commuter influence of employees and companies (rather longer commuting distances); (3) issues for greenbelt recreation area and cultural landscape (e.g., UNESCO city Potsdam), and (4) re-establishing shared identity (=togetherness) of inhabitants (MLUR 1998: 7-8).
 3. The Berlin-Brandenburg Region is already the case study area of the Graduate Research Program in Urban Ecology, to which this research is closely related. Researching shrinkage on the urban fringe correlated nicely with other project in that programme, which investigate areas in the core city. Joint examination of areas inside and beyond Berlin enables making proper comparisons and drawing conclusions out of the various research materials. Thus, we hope (collectively) to obtain a comprehensive "synergistic" picture of the entire Berlin-Brandenburg Metropolitan Region.

Central and Eastern European cities that are now in transformation (e.g., Prague, Moscow, Ljubljana). Berlin's city region regards its own recent developments as a unique and "young" research laboratory.

Overall, we see a complex mixture of two major patterns of development since the 1990s: a transformation from socialism to capitalism, and a change from stability to a fragmented pattern of shrinkage mixed with growth in metropolitan regions. Both can be seen in metropolitan areas in transition countries (e.g., in newer EU members). In the case of the Berlin-Brandenburg Metropolitan Region, this unique transformation, restructuring, and suburbanization processes have happened very rapidly since 1989's destruction of the Berlin Wall. In the previous era, industry, development, and planning were all strongly controlled or subsidized by the states and blocs of countries in both eastern and western Berlin. During the GDR era cities were strongly industrialized and the manufacturing industry was the main source of employment for most of the population, what produced artificial levels of employment of one hundred percent. Hence, the restructuring problems and accompanying processes are expected to be particularly significant in the Berlin city region. The western surroundings of Berlin were preserved in their early suburban forms of the 1920s and 1930s due to physical barriers, whereas suburbanization in the eastern outskirts was limited due to political reasons (such as restrictions on homeownership). This special situation and development gives another strong argument for choosing this Region for study: the phenomena of transformation and urban change, as well as a merging of eastern and western city with its surroundings, which is likely to be especially strong in such a place.

Methods

This paper deals with shrinking areas on the urban fringe beyond Berlin's boundaries. The criteria for choosing case studies were as follows: declining population or employment from 1994-2005 and the presence of a manufacturing industry as a prevailing sector before 1990. Statistical and geographical spatial analyses on socio-economic and demographic indicators were done using SPSS, MS Excel and ArcGIS/ ArcView. Thus, we will be able to explore the causes and consequences for suburban shrinkage from three viewpoints (developments regarding population, jobs and potential sites) and on three spatial levels (regional, communal, site-specific).

Having conducted quantitative analyses for the identification of case studies, qualitative interviews with local and regional stakeholders and experts were carried out (from developers, planners, and other sectors such as private and public real estate, research institutes, registered

associations, and other initiators of redevelopment: see Figure 1). Over forty interviews totalling over sixty hours were conducted in these suburban areas during the first eight months of 2007. These interviews explore the reasons for shrinkage, the major factors involved in redevelopment, planning strategies, and measures for further development. First data on potential redevelopment sites was also collected.

Theoretical Background

Theory of Urban Life Cycles and Its Criticism

The description of development dynamics, to which this work subscribes, is the theory of urban life cycles. The main argument presented here is that cities develop in cycles and not in some linear fashion. Throughout history, cities have sometimes shrunk⁴: in fact, shrinkage seems to be a normal part of every city's overall history. This suggests that "perpetual growth" is not real—prolonged growth during industrialization and modernity is only one phase of the evolutionary history of a city (Benke 2005; Wessman 2007). We do not understand how and why city shrinkage happens, although cities both large and small have shrunk on occasion (and they usually did not disappear—they kept on after shrinkage). Urban development has complex stages of growth, stagnation and decline, all of which are due to changes in economic, social and political conditions.

The dynamics of growth and shrinkage are well described in the theory of urban life cycle (van den Berg's et al. 1982). This theory describes four stages of urban development: urbanization, suburbanization, de-urbanization, and re-urbanization through the processes of concentration/ de-concentration and growth/ decline of entire functional urban regions. Nowadays, this theory is applied more widely than just to the whole functional urban region. For instance, many of today's cities have developed a complex polycentric structure with no clear boundaries within their built-up environment, and this theory is used to deal with individual city districts (as opposed to the entire functional urban region as a unit). Since the metropolitan region has become diverse in its structure and processes, it seems appropriate to take a look on smaller spatial scale. This enables us to analyze and understand real developments more clearly, taking as a case study the Berlin-Brandenburg Metropolitan Region.

The model of van den Berg et al. (1982) has often been criticized for being deterministic, which means that changes in urban systems are provoked by individuals', households' and industries' rational behaviour. Some authors deny that all cities go through the same life cycles stages: they object mostly to the idea of inevitable de-urbanization. The causes for

4. For example think about middle-age decline of cities.

cities' development—various global and local social (e.g., migration), political (e.g., system), and economic (e.g., disinvestments) forces—are complex and therefore, it is difficult to either explain or predict urban development. The critics assert that each city's development is individual and no general rules can explain a particular city's formation—making each one unique (Bathlet and Glückler 2002). Moreover, cycle theory cannot explain the simultaneous emergence of growth and shrinkage or of different stages like deurbanization and re-urbanization in individual urban regions. An important limitation of this theory is that it cannot account for suburban growth resulting from processes of population redistribution in shrinking regions (Nuissl and Rink 2005). However the concept by van den Berg et al. (1982) is a model for European cities, which excludes intervention by policy and planning. Since the political and planning forces actually do matter, the reality of particular cities always varies from the models' extremely generalized conclusions.

Hall and Hay (1980) researched European urban systems and described stages of urban development in a way quite similar to van den Berg et al. (1982). The latter authors made a step forward in formalizing and extending the stages and in stressing decline. In their view, decline and growth go hand in hand, and therefore decline is something normal in regional or sectoral development. Hall and Hay define "functional urban region" more broadly than van den Berg et al., by including contiguous non-metropolitan areas—thus, they find the cities going through (progressive) suburbanization and not declining (Kontuly 1982). Hall and Hay identified decline only in Great Britain and in some old coal-producing regions of Belgium, France, and the German Ruhr, using data from 1975. In contrast, van den Berg et al. (1982) identified decline ("self-sustained contraction") as being spread through the whole of Western Europe. This shows us how important the definition of spatial scale is if we are to obtain a more realistic picture of urban shrinkage and make a clear distinction between redistribution of population vs. shrinkage in a region.

The last of phase in the urban life cycle theory—re-urbanization—is a hypothesis and not a thesis. Some recent investigations have tried to address the questions posed by van den Berg et al. (1982; e.g., Haase et al. 2005). If re-urbanization is more likely to happen in the present and future, then suburban areas might lose population and economic activity. Resurgence of European cities, that is, new growth after decline has been partly demonstrated recently (Cheshire 2006; Turok and Mykhnenko 2007). Trajectories of 310 European cities (1960-2005) suggest that core cities gained more population than smaller cities or towns outside the metropolitan regions (Turok and Mykhnenko 2007). In other words, the processes of centralization were prevailing and forces of counter or ex-urbanization were diminishing. Besides, more than half of all studied cities have declined since 1990 or 2000.

The urban life cycle theory does not imply that re-urbanization will happen by itself—an active approach by city officials and politicians can be influential. Local authorities try to turn the tide in their central cities by restoring their image, redeveloping the existing housing stock as well as introducing urban renewal programs. Moreover, they tend to upgrade social infrastructure and improve traffic conditions (e.g., by creating pedestrian or bicycle zones). Cheshire (2006) thinks that even though we do not understand how cities work, political and planning strategies have been developed. In his view, cities develop their own inertia, hence it takes a long time before politicians influence on urban revitalization and planners contribute effectively to “sustainable” development (Cheshire 2006: 1234-1235) or help to improve cities and the well-being of their inhabitants. The main problems are the short time scale which planners use for making changes in the urban areas and the slowness with which they acknowledge and deal with changes.

Differences have increased not only between regions, but also between generations (Bucher and Gatzweiler 2004). Due to demographic changes in Western Europe since 1965 and in Central and Eastern Europe since the Fall of Iron Curtain, many scientists argue that population decline will be long-lasting process, which will prevent cities from growing again. Population shrinkage is caused by (1) selective emigration of the well-educated, young, and mobile (often females), and (2) demographic changes⁵ and ageing. The reasons for decreases in birth rates include: a new, strongly career-oriented society; social and economic instabilities (i.e., life’s insecurity); and adoption of “western-like” behaviours (i.e., change of life style and values; Lang and Tenz 2003: 77-78). Kaufmann (2005) argues that the low birth rates in Germany are due to specific cultural perceptions: having children is seen as giving up personal consumption and not as investing in human capital.

Population emigration from East to West Germany after 1990 occurred at first because of political motives and later because of economic motives. All in all, the dramatic post-reunification changes in population, which resulted from transformation processes, have calmed down since 1997 (BBR 2005). However, increased in-migration from foreign countries can be a future opportunity for diversification and thus stabilization of populations. Since it is virtually impossible that all urban regions will lose population at the same time, growth and shrinkage are likely to appear side by side (BBR 2005). I argue that resurgence of cities is more probable than their disappearance, despite the general pattern of (native) population decline. Since the global human population will continue to grow at least for many decades, the international flows of population will undoubtedly continue and will probably increase.

5 Birth rates decreased by 60 percent in East Germany between 1988-94.

The underlying theoretical point of this paper is to explain shrinkage as part of any urban development and to try to explain which forces matter for occurrence of shrinkage, if at all. If there is no destruction, there is no need to look for innovative solutions in the rather chaotic urban system (Schumpeter 1987). Although there might be no statistical evidence of cycles in the last 50 years (Turok and Myhnenko 2007), we assume that such a time scale is too short for demonstrating—much less understanding—the thousand-year-old development of cities. Causes for shrinkage in suburbia might be also the back-to-the-cities movements. However, it remains a question whether growth or shrinkage appears by chance or whether there are any specific forces driving those processes.

Shrinkage on the Urban Fringe

Since the 1970s, population decline in Western European core city areas has been caused by deindustrialization, demographic change, and suburbanization. Although suburbanization may cause shrinkage in the city core (i.e., inner city) or entire core city (i.e., the whole central city within its city's boundaries but excluding suburban areas), the city's overall urban region may be experiencing growth, stagnation or decline (Häußermann and Siebel 1987). Today, shrinking processes can be also seen in suburban areas, particularly older ones (Hesse 2006), due to a strong downturn in birth rate and to re-urbanization (BBR 2005). Population growth rates are negative, which is why the demand for new housing, accompanying social services and amenities as well as taxes all eventually decrease. If there is a lack of young population, the entire tax-payment system might collapse, especially for the elderly whose incomes cannot support complex infrastructure and young tax payers who cannot cover retirement pensions for elderly. Moreover, inhabitants might prefer to live in inner cities because of better assets (central business district, tourist attractions), urban amenities (parks, museums, theatre), benefits from public transportation system, and short distances between daily activities. These factors are beneficial during time of increasing energy costs.

On one hand, lower birth rates provoke no population pressure or regeneration in the suburbs, while the prevailing in-migration back to inner cities might cause loss of population in suburbia. On the other hand, Smith et al. (2001) call upon disinvestments, i.e., lack of (or not at all) investments in housing and land markets as an underlying explanation for decline in the first (inner) ring of suburbia. They claim that invisible forces are much more significant for decline than the visible one: that is, population migration.

The disappearance of suburbs is unlikely. An essential argument in favour of sustainable endurance of suburbs is that suburbanization happened

not only because of population growth and overcrowding in the core cities, but also because of flight from disadvantages and “disamenities” of the inner city. Instead of suburbs becoming redundant sub-regions in the city’s area, the perforated, fragmented city landscape—including core city and its suburbia—will probably remain the city’s pattern under conditions of shrinkage (Burdack and Hesse 2006).

However, some scientists (Rink and Nuissl 2004) argue against the possibility of sustainable developments between the numerous suburban entities during shrinking processes. In their studies of eastern Germany, they found more severe competition for population, jobs, and development between the suburban communities during shrinkage than growth. During shrinkage, potential external investors or developers can bargain with (neighboring) communities, seeking to get the best deal because there is an oversupply of development sites. This business reality speaks against the common wishful desires for regional cooperation between communities, or suburban communities and the core city. Several recent economic crises had negative effects on the sustainability of suburbs, causing what has been called “suburban crises” by U.S. scholars. Recently, suburbanization has slowed down in the Berlin suburbs as well and distinct shrinkage has emerged in some areas.

Questions of particular interest include: (1) How well the existing theoretical framework can be fitted to real-world data from our empirical study; (2) What are the flaws or errors in “general” explanations; and (3) If the statistical micro-analyses are consistent with the meta-level data.

Findings: Shrinkage in Berlin’s Suburbs How and Why Are Berlin’s Suburbs Shrinking?

In Berlin’s surrounding region, suburbanization took place only recently, having been hindered before 1989 by the political situation and also by physical containment (the Berlin Wall). In the Berlin suburbs, growth occurred fast and at very high rates after the “Wende”. Lack of early regulations, pre-1998 funding of state for purchasing home ownership, low land prices, and rather rural, low-density suburban areas were all beneficial factors for housing and economic development. The first wave of so-called enhanced “catch-up” suburbanization has decreased since 1998. However, it seems inappropriate to call this suburbanization “catch-up” in terms of comparing Berlin (or cities in East Germany) with western European patterns of suburbanization.

Nuissl and Rink (2005) pose five arguments for specifying East German suburbanization which are partly true for Berlin as well: (1) Berlin’s suburbanization is caused by a shift of population and an intra-regional

redistribution, because the population is stagnating in the core city yet is declining on above-regional levels; (2) demographic structure in suburban areas is similar to that in the core city, and home ownership is still at relatively low rates; (3) morphology of suburbia seems to be more dense and compact (e.g., multi-storey houses, wild, unplanned developments of greenfield sites etc.) compared to western suburbs; (4) de-concentration processes (over the city's entire region) are not as extensive as in western countries; and (5) the unique rapid "break-up" of suburbanization at the end of 1990s and job suburbanization prior to population suburbanization are not comparable to existing urban models. The uniqueness of Berlin suburbs lies in its diversity—there is no dominance of monotonous, typical suburbanisation in sense of building construction (variable housing stock, higher density of development) and population structure of suburbanites (regarding life cycles and social groups). Suburbanisation in Berlin happened 30 years after that of West German cities—therefore it occurred under very different conditions, including demographic changes, high physical mobility, transformation processes and increased competition between growth and shrinkage, which show up in dense and variegated patchwork patterns on each spatial scale.

What has taken place since the fall of the Wall is actually more of a relocation of population from the core city and from outside the urban region to the suburbs rather than suburbanization in the typical sense of the word—this is so because Berlin as a whole experienced stagnation until about 2004. One interesting phenomenon is that in Berlin's urban region (as in Germany as a whole), shrinkage and growth are appearing side by side (in the same suburbs and in the same community) simultaneously, leading to a fragmented and patchwork pattern of the two processes. This differentiated distribution of growth and decline corresponds with Matthiesen's (2002) observation that the surrounding region of Berlin is not a continuously suburbanized commuter belt ("Speckgürtel") but rather a space characterized by suburbanized squares ("Speckwürfel"). Similarly, Herfert (2006) states "poles of economic growth" in Berlin's suburbs are actually "poles of stability" (excepting the international Berlin-Brandenburg airport now being developed) in the regional "landscape of shrinkage". Even more, partial shrinkage in the suburbs and re-urbanization are taking place at the same time.

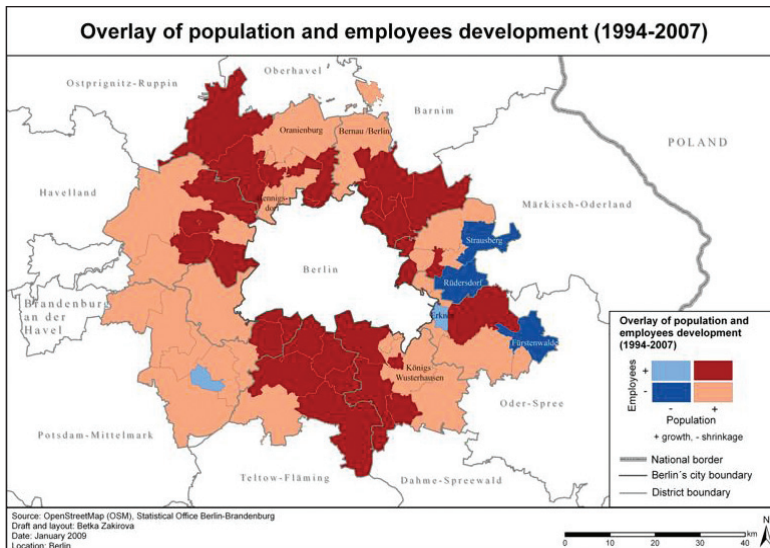
The model of van den Berg et al. could not adequately explain the driving forces for development dynamics in my case study; hence we needed supplemental explanations. Significant driving forces are globalization, transformation, and deindustrialization. Transformation processes are profound changes in the structural system, observed in the administrative, social-political, economical, and spatial sphere in a state, and which refer mainly to former socialist countries after breakdown or abandonment of planned economies and transition to open markets. For instance, lack

of regulations around Berlin in early 1990s allowed wide speculation on sites and businesses. At the same time, competition for developments increased between the suburban communities, and consequently an oversupply of developed sites occurred.

Deindustrialization happened suddenly and had the greatest effect on economic decline of urban regions in Brandenburg and Berlin. A very specific characteristic of Berlin was that industry was subsidized by the state before 1990. Closing down the old industries, which were not competitive in global markets and had low levels of automation (hence very high labor costs), resulted in many brownfields. Moreover, demilitarization caused a significant (but mostly indirect) loss of jobs, and it also caused changes in land use (for example 100.000 hectares of potential ex-military sites emerged in Brandenburg after 1990). Hence the brownfields and urban deterioration are one of the most visible indicators of urban shrinkage.

The reasons for shrinking of communities in the Berlin suburbs are not only the loss of industrial, military, and agricultural land uses and accompanying jobs, but also include “negative images” (i.e., negative public perceptions from outside) of the communities, disadvantageous locations relative to modern social needs, selective in- and out-migration of population, lack of investments and demand. Oftentimes the soft location factors (e.g., social structures etc.) have a stronger influence on local development than hard factors (e.g., terrain etc.). In addition, in the Berlin suburbs the suburbanization of population occurred in a reduced geography; that is, more prosperous residents from western Berlin moved to western suburbs and those from the eastern part to the eastern outskirts. Furthermore, industrial and other investments in the north-eastern and eastern surroundings of the city were rare since the Polish border is located in this direction and in general, border areas are more likely to experience strong restructuring problems and decline. These dynamics explain why the shrinkage concentrated in the eastern suburbs.

The pattern of shrinkage in the Berlin suburbs from 1994-2007 is presented by using statistical data on population and jobs change in the communities. The strongest shrinkage of population and employees are in the eastern surrounding region (Figure 1). Shrinking of employment occurred in 42 of 63 communities, missing only the southern part. Eight communities chosen as case studies are in the northern to the south-eastern surrounding region: Hennigsdorf, Oranienburg, Bernau, Strausberg, Rüdersdorf, Erkner, Fürstenwalde/Spree, and Königs Wusterhausen. The criteria for choosing case studies were based on a decline in population and jobs and the presence of a manufacturing industry as a main job provider in the GDR era. The next findings will be drawn from research done on these communities.



Source: Brandenburg Regional Statistical Office; Statistics of Federal Employment Office

All shrinking communities (1992-2008) experienced some short-term cycles in the population trajectories. An interesting finding showed that population shrinkage stopped in these case studies for a short time after 1998, the time when widespread high-pace growth in suburbs lowered (see Figure 2). Whereas growth decreased on larger scales, many shrinking communities went through short-term waves of growth, which with decline again. It seems that the shrinking communities are instable and van den Berg et al's cyclicity is indeed relevant theoretical background.

Population developments were statistically predictable and the relative population change average could be estimated since 1992 (see Figure 3). This means that there is continuity in the trajectories of communities: communities with strong population growth until 1998 kept on growing afterwards, and vice-versa, and communities with small population growth continued to do so or started to shrink or stagnate after the turn of century. The development dynamics of communities have some persistence.

The two basic parameters do not correlate. This means that population suburbanisation happened independently from, and has been stronger than, job suburbanisation in the surrounding region. Moreover, most of new suburbanites who moved from the core city kept their jobs in the core city or companies that shifted from the core city to the suburbs kept their old employees from Berlin. Still, rising population can influence the growth of jobs: for example, by increasing demand for services (i.e.,

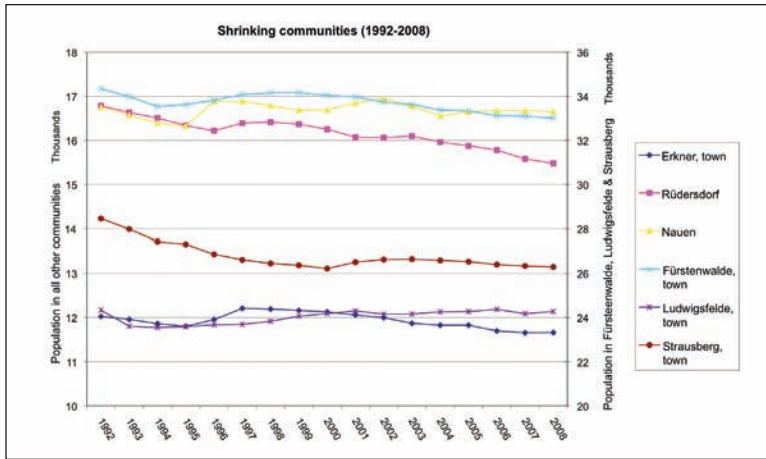


Figure 2: Short-term upwards and downwards population developments in the Berlin shrinking suburbs are clear evidence for small cyclicality.
Source: Berlin-Brandenburg Statistical Office 2008

moderate correlation coefficient), which means lack of development pressure in shrinking communities. Yet, concentration of areas with job growth is more distinct than regarding population (see Fig. 1).

Development of jobs (1994-2007) could be less predictable than development of population. There was prevailing drastic decline in shrinking suburbs after the Wende– the so-called economic break (Hannemann 2003). Yet, conjecture appeared in 2005-2007, which is evidence for stabilization after the economic “break” and conclusively confirms the cycle theory. Even the global financial or economic crises since the autumn of 2008 have not deeply influenced the job decline in eastern suburbs, with the exception of short-time jobs (Standortentwicklungskonzeption 2009). Moreover, the influence of the world-wide economic crises is less on similar shrinking middle-sized regional centres than on the essential knots in the network of global financial and economic flows. Hence, this indicates: (1) that two spatial levels are disconnected and function differently, (2) that shrinking suburbs are badly networked regarding the modern spatial and time flows, and (3) there is a great variety of transformation processes through time and space that conclusively makes them particular and special.

Many communities unleashed waves of land speculation and growth that was expected, which decreased after the first half of 1990s. The communities, which could attract the waves of developments in the first half of the 1990s, were prosperous. In contrast most of (re)developments in the second half of the 1990s could not be sold successfully since the market demand and investments shifted to Poland and consequently declined.

An oversupply on the real estate market makes the communities try to plan according to market needs—and that in turn endangers any sustainable, unique and innovative development (that is “unique selling point”). That is why the realisation of the model of concentrated development failed with the exception of the community Fürstenwalde. A consequence is the enhanced perforation of an already patchy urban structure. This shows us that the van den Berg et al’s strategy of concentrated development failed in our case studies. His study showed that during the phase of shrinkage or de-urbanization, inner (re)developments occur before new developments beyond the settlement fringe.

Communities’ Self-Perception

One surprising result is a description of how shrinking communities “perceive themselves”. Communities do not see their condition as either shrinking or stagnated, instead, they identify themselves as being involved in “city restructuring”, “urban redevelopment”, or “city centre/neighbourhood redevelopment”. Self-perception by communities and towns is in general positive, and often contrasts strongly with the perceptions of people *outside* the community, who often have a very negative image of shrinking areas. However, some level of optimistic

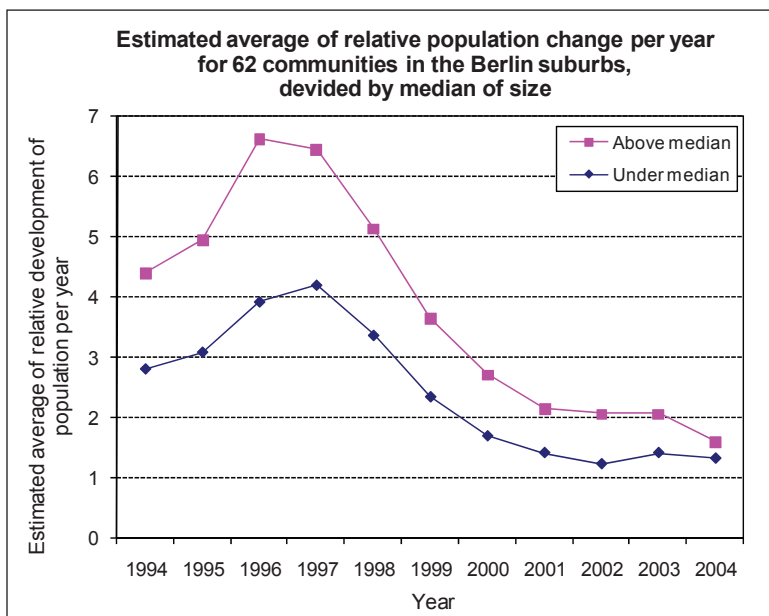


Figure 3: Population development is statistically predictable but not correlated with the size of a community. Note the decelerated growth after 1998.

Source: Berlin-Brandenburg Statistical Office 2008

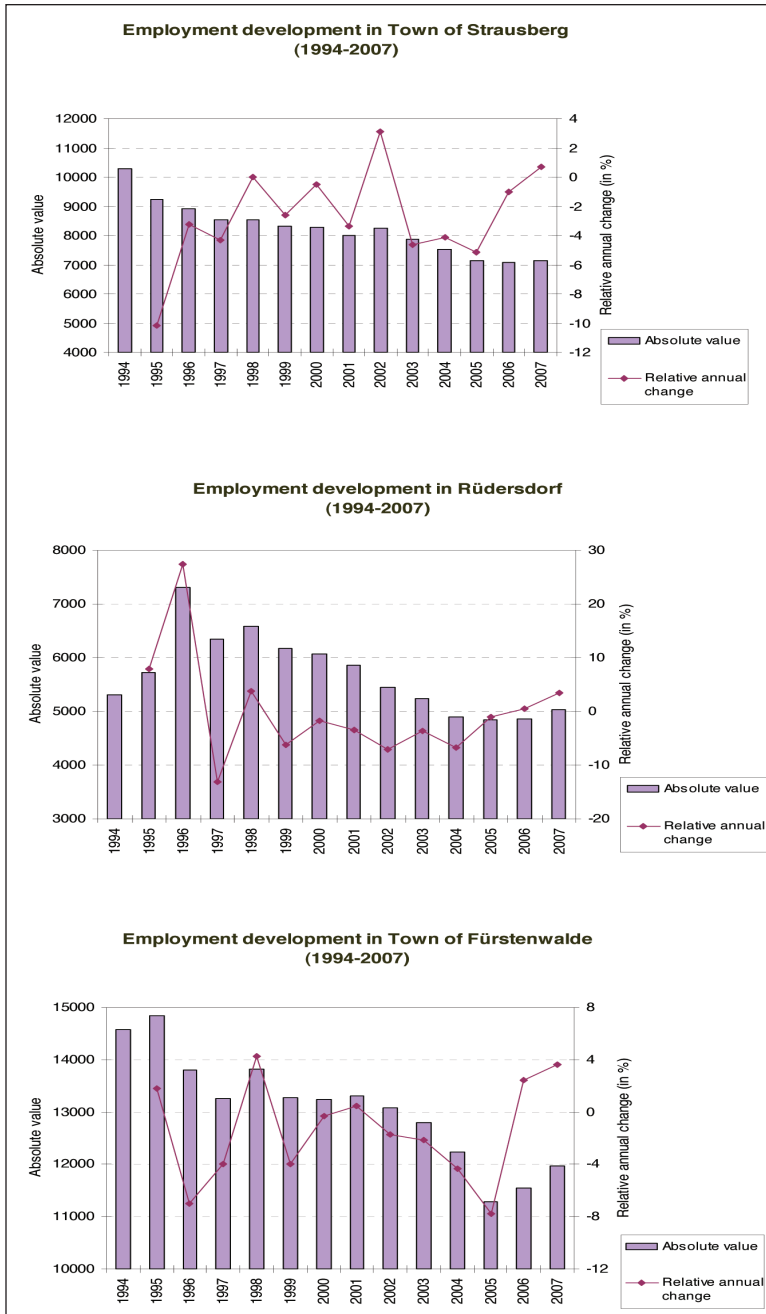


Figure 4: Employment development in Strausberg, Rüdersdorf, Fürstenwalde, 1994-2007. All shrinking communities show “economic break” after the Wende and stabilization appeared after 2005.

Source: Federal Employment Office

(but not delusional) self-perception by local stakeholders is essential for future redevelopment prospects. People in shrinking cities or areas say that “negative image” was an important factor in shrinking of the communities and in preventing redevelopment. Many communities are simply biding their time (i.e., doing nothing actively to deal with shrinkage), waiting for “better times”, or in other words, waiting for the return of growth as one phase in the whole development cycle. A common opinion is that shrinking is just another urban problem waiting for the next generation to deal with it.

This “blind spot” for shrinkage is particularly evident among local politicians. Local politicians often have a defensive attitude about shrinkage: they are afraid that talking about shrinkage might worsen their already-negative image and that this might well enhance the shrinking processes (e.g., inducing more inhabitants to move out; Interviews 21&23, researchers). They seldom admit that their town or community is experiencing “urban restructuring” or is a participant in the state funding program “Stadtumbau Ost” (Urban Restructuring East) for coping with high rates of vacancy in large housing estates. In general, the rise of the idea of “Stadtumbau Ost” has made shrinkage no longer “taboo” on state and regional levels—and sometimes even at local levels outside suburbs. Suburban communities oftentimes do not fit the criteria for applying for this housing vacancy programme. Those public grants exclude Berlin’s own suburbia except for two towns (Velten, Fürstenwalde/Spree; IRS 2009). The state funding program has forced communities in the outer periphery of Brandenburg to accept the reality of their shrinkage. On the one hand, the public grants could be a crucial eye-opener for acknowledging shrinkage. On the other hand, the funding can also strongly influence local stakeholders’ views: they prefer to apply for federal financial support despite the fact that shrinkage might be just an excuse for receiving financial support rather than a real attempt to deal with shrinkage.

This all is easily understood: since local and suburban stakeholders are personally involved in shrinking processes, they are directly affected by shrinkage (because of the fact that the relative rate of shrinkage is high at this level, though the absolute number might not be), and can accept “growth” as the only option for future development. Moreover, at the local level, only small numbers of stakeholders are acting, hence the “personal responsibility” for real developments and for stakeholders’ own actions might be higher since both “who made the decisions” and the effects of those decisions are quite obvious. Shrinking communities are surrounded by suburbs, which as a whole experienced growth until 1998 and are (in the general public’s perception) supposed to grow. It is particularly difficult to admit that a community is losing “prosperity” if the surrounding communities continue their development. Since the

officials neglect and still more importantly do not cope with shrinkage, there is a risk that the shrinking processes will be enhanced –which is exactly what one does not want to happen. The “blind spot” for shrinkage might lead to extremely poor local city planning.

Role(s) of the Core City

In the view of local planners and developers, Berlin is seen as playing different roles in the shrinking of its suburban towns and communities. In their view, City Berlin has a dominant role, often being a strong rival of the suburbs in their development of commercial facilities, light industries and retail. The investigated communities feel that their development depends on development of the core city. If the core would boom, the surrounding shrinking communities would benefit. The future of shrinking suburbs might lie in becoming more independent from the core city (e.g., by introducing convergent functions) which might improve the local fiscal situation.

Although one common State Development Plan (2009) has been drafted for Berlin and Brandenburg as a single unit, local interviewees see deficiencies in cooperation between both States *regarding the redevelopment of potential sites and of shrinking areas* in particular. The problem is that core city and numerous suburban communities—which number downsized from around 300 to 63 entities—create an oversupply of potential sites. Hence, as the resources are limited a competition for achieving development between core city and suburbs is strong. For example, a common pool of all potential sites in both regions is missing, and developments of (light) industrial and commercial areas have been allowed in the scattered locations of the Berlin suburbs, which makes a dispersed pattern of built-up areas more likely than before. The merging of the core city’s boundary may happen in the near future, but it will take some time—at least when considering land management and related competition between both States.

The significant difference between Berlin and its suburban areas is that the core city can rather afford to maintain reserve potential sites, which might be reused one day, whereas the suburban communities are pretty interested in fast redevelopment or re-naturalisation. The reasons are that shrinking communities in suburbia neither dispose of the population nor the tax basis to retain and cover the costs of having numerous potential sites “in stock” (e.g., costs for site security; Interview 18, regional planner and researcher) and they have a relatively small space for playing with a variety of possibilities regarding redevelopment, retention, or re-naturalisation compared to the core city.

“Collaboration of a shrinking community with other neighbouring communities is the result of widespread increased competition between the communities in, and outside, the Berlin suburbs,” (Interview 8, local town planner). Several communities’ representatives comment that integrated concepts of redevelopment between the communities have been a good solution for under-utilised social and other kinds of infrastructure. Since shrinking communities extend beyond their settlement’s fringe, and since the shrinking processes cause urban decline in the areas inside the settlement’s fringe, the costs for maintaining infrastructure increase. Thus, neighbouring communities will tend to share high costs of infrastructure. Since an oversupply of sites is partly a result of having a lot of small communities that compete with each other, cooperation might be a solution for the consequences of shrinkage.

In contrast, other suburban communities often mention the advantages of being located in the sphere of mutual influence of Berlin and the Federal State Brandenburg (i.e., proximity to the core city is a good thing for Erkner, Oranienburg or Hennigsdorf). For example, expectations that white collar workers will immigrate into Strausberg due to relocation of capital from Bonn to Berlin did not happen. Often the West German white collar workers complain that eastern suburban communities do not have a diverse housing supply and that local infrastructure (e.g., cobbled streets) does not meet modern social needs. Often the shrinking communities feel themselves to be so small as to be insignificant in comparison with the capital city. Although Berlin and Brandenburg have been “joined” since June 2005, both acknowledge that their own policy is, essentially, each side protecting its own interests and developments.

(Re)development Problems

Depending on basic conditions and land use patterns and policies, various areas for possible redevelopment present different opportunities in investigated case studies. Redevelopment potential sites in the city centres of the shrinking suburbs (e.g., Oranienburg) are unfavourable for retail and small industry: the urban fringe is favoured for such uses because the infrastructural adjustment (e.g., new roads, etc.) is more easily managed. The problem is that reuse of potential redevelopment sites or green areas for commercial, light industry and retail is difficult because it is very hard to get agreement on one course of action. Besides, incorrect predictions of growth in the early 1990s often led to large surpluses of developed/ accessed land and to expensive development efforts in anticipation of growth that either slowed down abruptly or never happened at all. The redevelopment potential of greenfield sites in scattered locations is usually seen mainly in terms of use for re-naturalization—for example, as new a

city forest (e.g., Bernau). If this is not possible (e.g., due to conservation of historic monuments), some initiatives for alternative uses are showing up, such as temporary use, educational use (e.g., in Oranienburg) by registered associations, and uses as sites for noisy manufacturing industry and logistics (shipping, e.g., in Bernau).

Two examples of communities which tried to implement the same approach to redevelopment, namely concentrated development, demonstrate implementation in different ways. Oranienburg with growing population but also declining employment (1994-2007) failed in redeveloping their core city since many new developments emerged on the fringe. Although the local town planners accepted a strategy of so-called reserved development or "wait and see", the local politicians - for the sake of staying popular - allowed new developments. The other example of shrinking (regarding population and jobs) community is Fürstenwalde which shows that redevelopment had a priority over new development and was successfully implemented. The town stakeholders realised in early 1990s that they will not grow and many sites will be abandoned. Consequently, they accepted a strategy to stabilise their population and jobs and implement redevelopment before a site becomes vacant, i.e., a so-called principle of "sliding" or "continuous redevelopment". Since in Oranienburg local politicians acted under the linear growth paradigm, redevelopment failed. On the contrary, Fürstenwalde is a typical example for realising strategy of inner prior to development, as proposed by van den Berg et al.

Large government efforts at redevelopment contrast strongly with small-scale infill housing (by private initiative), which is much easier. An interesting finding (in communities like Oranienburg or Strausberg) is that good market opportunities are predicted for existing residential plots because these have pre-established advantages that appeal to buyers: for instance, big, old trees and mature, already developed neighbourhoods. This goes against part of the standard "urban myth" about suburbanization which has usually concentrated on newly built single-family households as the only development opportunity and as the sole origin and function of suburbs. Due to the low residential area per inhabitant before the "Wende", residents have eagerly moved out of "plattenbauten" (large housing estates) into single-family houses, leading to vacancy rates of 10 to 20 percent in the "plattenbauten". When new foreign residents with lower incomes move into these prefabricated multi-storey houses, they come into conflict with old residents, cause segregation, and weaken the local "community identity". The immigrants have weak local identities and want to move to the core city where they hope to improve their standard of living. This makes uncertain the future or stabilization of suburban communities and suggests that segregation

in the “plattentbauten” might also enhance local declining processes and (due to low rents in the core city) enhance partial re-urbanization.

Discussion and Conclusions

Is the Model of Linear Growth Wrong?

Society awaits and expects urban growth, usually seeing it as the only option for positive urban development. But all of urban history teaches us that cities grow, develop, and age in cycles, not in some monotonic linear fashion. Therefore we should shift to a cyclic model, where a phase of decline is followed by a phase of growth. This more realistic view might give us opportunities for developing innovative and improved approaches to understanding, planning and controlling urban development. Shrinking and growth are correlated. Both are part of the same problem, namely they are both causes and results of urban cycles (van den Berg et al. 1982) which result in heterogeneous, polycentric urban regions. However, wider understanding of this model is needed: different urban stages, and growth and shrinkage, can happen side by side simultaneously. Moreover, to understand urban areas and their development, it would be more reasonable to take a more comprehensive view (i.e., that there are innumerable forces at work) rather than stick to simplistic and deterministic cause-effect explanation. These forces act in concert with one another in seemingly chaotic (or at least presently inexplicable) ways in the urban system (Bruegmann 2005).

The patchwork pattern between growth and shrinkage has been evident in the Berlin suburbs—between different communities, districts within the same community and different social aspects. The short-term cyclicity was relevant for communities with population shrinkage. Here, continuous decline until 1998 has been interrupted with a short-lived growth until the turn of century. It seems that large-scale decelerated growth in the Berlin suburbs had positive effects on shrinking communities and their prosperity for short time. This shows us that growth and shrinkage are correlated. A further interesting finding is that Berlin suburbs start to shrink without achieving a mature phase, which contradicts the idea of regular phases (van den Berg et al). Conclusively, the cycle theory has become much more fragmented and the dynamics of developments are more chaotic in the modern urban region since the forces which drive development are different than those purposed by van den Berg (e.g., demographic change, increasing physical mobility, transformation processes).

However, if the local stakeholders would have accept the needed shift from a linear growth model to cycles that include growth and shrinkage

as normal parts of development, then potentials and opportunities in suburban shrinkage (such as moderate densities, strategic inter-communal alliances and production of renewable energy) could have been recognised as well. We do not know how to make that shift at the local level in suburbs.

The van den Berg's theory is to call upon planners to deal with shrinkage in an active way and start to infill the vacancies in the urban fabric. The idea is not to continue by developing new sites that is expecting linear growth, since by creating a competition between locations and sites, the demand for developments does not increase and consequently growth is solely wishful thinking.

There is a great challenge in case of the Berlin shrinking suburbs to recognise their potentials—which might be in other, softer dimensions (sufficient supply of land which is luxurious or improved environmental parameters which are a precondition for good living standards) and by concentrating development with moderate densities and perhaps provoke a new wave of growth. The idea is that neither too vigorous growth nor strong shrinkage bring any benefits to suburbs. Therefore, we should think about new concepts to balance both forces. Only during the growth phase should new developments appear in a cascade model of so-called sprawl, but during shrinkage, energy, resources and land consumption should be concentrated. Since the classical model of cascade affects of growth which spills over in the neighbouring areas and affects their growth does not exist, we need to think about the cycle model where different areas experience different stages of developments in the heterogenous, polycentric region such as Berlin-Brandenburg Metropolitan Region.

Shrinkage: Problem or Opportunity?

One major problem connected with “shrinkage” is the way it is usually perceived: as a strong negative factor that one would very much like not to have to deal with. This means that shrinkage is quite often barely acknowledged –or even completely overlooked– by politicians and planners at the local level in this work's case studies. The common attitude is: “That cannot be happening, not in my town!” The underlying paradigm causes this phenomenon—namely, the entrenched, firm belief that the only way a city can progress and develop is through continual positive growth. But cities simply do not grow continually –evidence is (1) the recent stagnation of the Berlin Region and (2) a patchwork pattern in the core city's suburbs. The existing, widespread paradigm is disconnected from both reality and history (compare Berlin's growth until 1930s, shrinkage during the Wall era, and post-1990 stabilisation), but it is very powerful and sets a negative tone despite the fact that shrinkage, properly viewed, contains also positive opportunities (Oswalt 2005; 2004).

This work argues that not only the process of shrinkage, but also suburbs themselves have been neglected and under-researched due to reasons such as their inefficiencies, dependency on the core city, and frequent monotony (Clapson 2003; Sieverts 1997). There is a great deficiency of knowledge about dealing with shrinkage in German suburbs as there has been no previous detailed investigation of those communities. Formation of suburbs and city shrinkage have both been viewed as some kind of temporary “illnesses” for which urban scientists and experts have been trying to discover remedies. However, to a large degree these processes are constant characteristics of urbanization and should be considered as “normal” (Hesse, in press). Aiming to enhance acceptance of processes, we need new terminology. Instead of calling a city “shrinking” we could use words such as “breathing, restructuring or transitional city”.

The challenge for future urban development will be to consciously develop the growing and shrinking components of the urban system in a way that leads towards sustainability in the sense of long-term survival of the city despite shrinkage and despite too vigorous growth. Since urban planners do not know how to cope with shrinkage—after all, modern city planning has existed only since the era of industrialisation and prevailing city growth—new planning strategies and instruments are needed. Those might help deal with shrinkage actively, in a way that understands shrinkage as a complex of multi-dimensional processes which vary in time and space and hence are difficult to study but yet present opportunities. This must include perspectives which have been long neglected, and “walking the talk”—making realistic long-term integral plans instead of narrow plans for 20-years time slots and manipulation of development by different interest groups. The recent crisis in planning is an opportunity to revise the control planning tools and goals and to enhance balanced and transformed development between the social, economic and environmental spheres simultaneously.

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