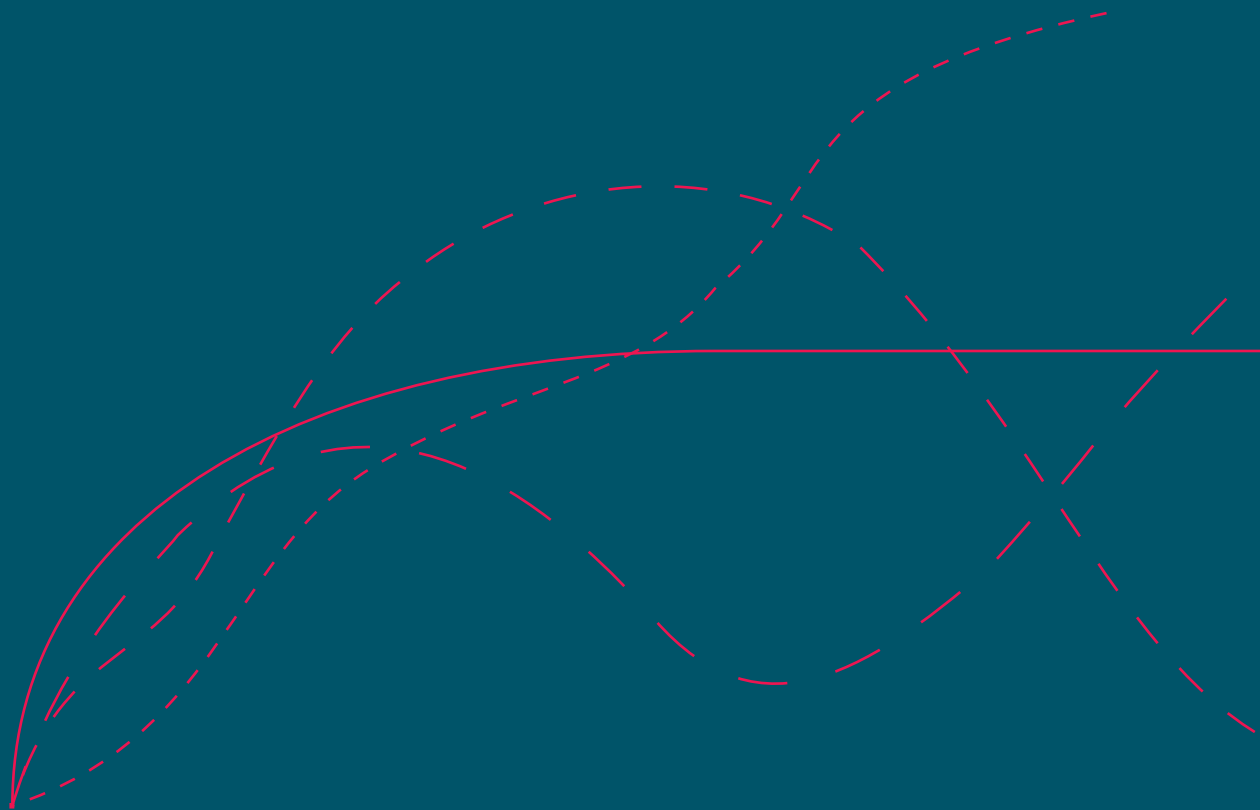


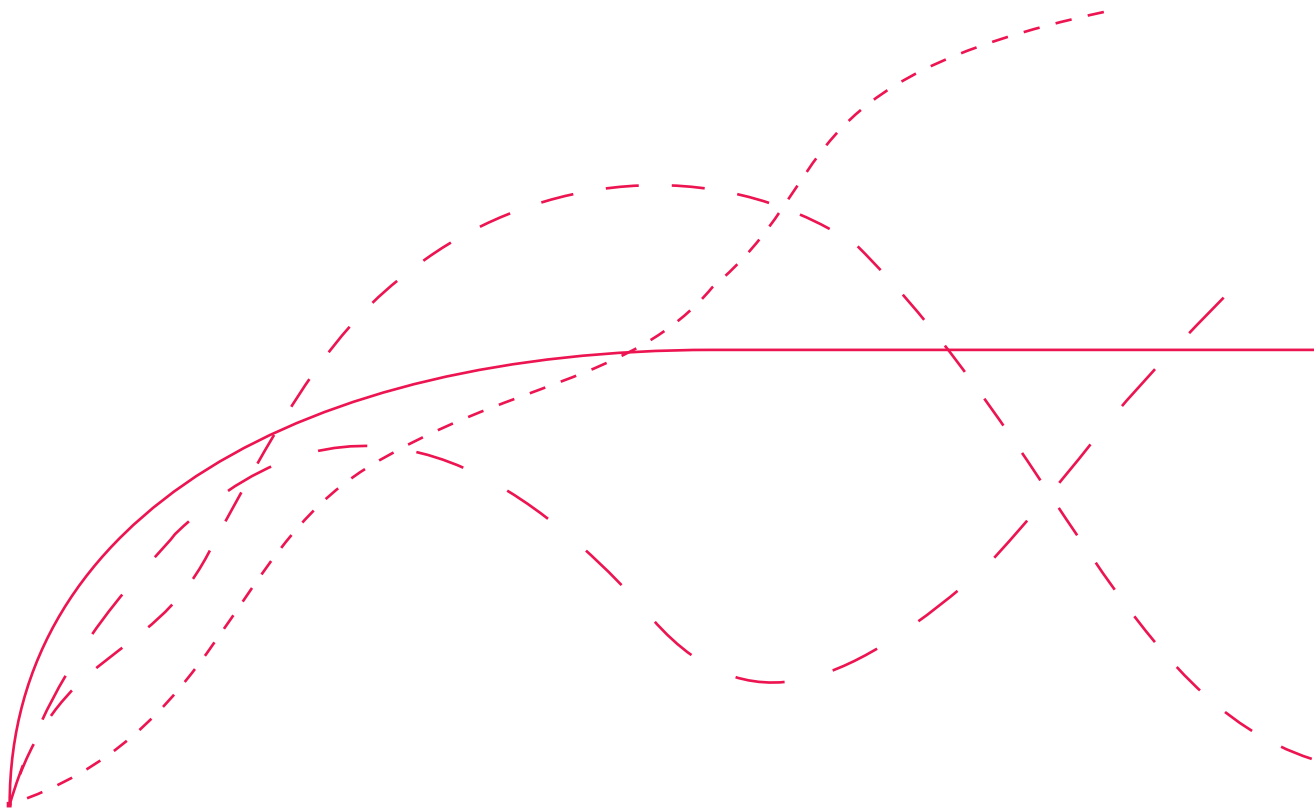
# MATURITY, RESILIENCE & LIFECYCLES IN SUBURBAN RESIDENTIAL AREAS



Jan Polívka

**Cover illustration:** Stylized alternatives of evolutionary paths (adapted from Martin 2010, 10)

**MATURITY, RESILIENCE & LIFECYCLES**  
IN SUBURBAN RESIDENTIAL AREAS



**Submitted As Dissertation  
to the Faculty of Spatial Planning  
at TU Dortmund University**

Supervised by:  
Prof. Christa Reicher, TU Dortmund University  
Prof. Dr. Markus Hesse, Université du Luxembourg

Examiner:  
PD Dr.-Ing. Frank Roost, Research Institute for  
Regional and Urban Development

city @ region, Dortmund 2016



*“Most change occurs outside of (...) critical junctures, in gradual and incremental but nonetheless potentially transformative processes in which endogenous factors may be just as important as exogenous ones.”*

*(Thelen 2004, paraphrased by Sorensen 2011, 716)*



## **ABSTRACT**

Most of the suburban residential areas in Germany have been built during the second half of the 20<sup>th</sup> century. Growing interest among practitioners and scientists is thus paid to the future development of maturing settlement areas characterized by old housing stock and aging inhabitants. This dissertation analyzes processes of change and adaption of suburban residential areas under the conditions of the maturation process. The analysis aims on contributing to the systemic notion of processes changing maturing systems within their natural lifecycle and its interdependence with deliberate adaption under particular stakeholders' constellations. On the theoretically conceptual level it seeks to explore the key attributes of the development path for evolutionary lifecycles within the context of resilience, discussing the phenomena of stable maturity and continuous adjustment and on the concept of settlement space.

By deconstructing the lifecycle concept, the book analyzes the canonical view on mature suburbia based in the traditional growth-maturity-decline pattern and introduces a pluralistic concept of path dependent evolution based on a multi-levelled interdependence between particular levels of space, stakeholders' panarchy and adaptive action. On behalf of outcomes based in theory and the results from two empirical studies conducted in German mature suburban residential areas, a concept of multi-levelled 'systemic space' as both interpretative and analytic tool for understanding development paths of mature suburban systems is introduced. The results of its application on the case studies show that, especially in terms of homogeneity and diversity, lifecycles of suburban residential areas underlie different conditions for change and adaption during the early and the maturity phases, and defines interpretative frames for conceptualizing both theoretical and research approaches. Hereby, it issues the locally based stakeholders' panarchy as the central adaption-steering potential, putting it at the core of strategic planning interest in mature suburban residential areas.





## ACKNOWLEDGEMENTS

This text would have never been accomplished without the help and support of several people. My thanks and deepest gratitude goes to my advisors, Prof. Christa Reicher and Prof. Dr. Markus Hesse, for the repeated encouragement, patience, advises and constructive critics and discussions on my thoughts and drafts. A special thank is due to Christa Reicher also for keeping me away from many other duties at the university department and thus enabling me to concentrate on this text. To Markus Hesse I especially thank for the extremely valuable advices on literature and for the help of sorting it. I also owe deep thanks to Dr. Frank Roost for critical suggestions and advices to the draft.

During the survey and writing process of my thesis I have been privileged by the support of several colleagues through common discussions on the topic. These motivating talks enabled me to draw contours of my arguments and gave me the access to a variety of fresh views on suburban maturity, based on rich and nourishing experiences and knowledge. For this support I would especially like to thank Prof. Dr. Tomokazu Arita, Prof. Dr. Ludger Basten, Andreas Beilein, Prof. Dr. Yukihiko Kadono, Frank Osterhage, Prof. Thomas Sieverts, Petra Soika-Bracht, Jutta Vetterlein and many others for highly valuable insights. A special and extraordinary thanks I owe to all interview partners in the case study areas as well as to related experts for their precious time taken for answering my questions and for providing me with additional information as well as the credits of trust I have been honored with by getting insights into their professional and partly also private lives.

My deepest thanks go to all my colleagues in the Department of Urban Design and Land use planning for helping me to manage time and tasks during the everyday work in order to enable me to work on this thesis. My special thanks I owe to my colleague Andrea Wagner for critical reviews and questions and to Dr. Mais Jafari for the technical support. Kenneth Gildner and Claudia Becker I owe very special thanks for the intensive, attentive and quick review of my English. Many thanks go to Thomas Wucherpennig and Laura Born from Labor b designbüro for the final graphical support.

My family, especially Saori, and my friends I would like to thank for having patience and giving me the necessary support which enabled me to start and finally also to finish this task.

Dortmund, March 2016

## CONTENTS

<b>1.</b>	<b>INTRODUCTION</b>	<b>14</b>
1.1	Development of suburban residential areas in the context of maturation	14
1.2	Paths of adaption within mature suburban settlements	22
1.3	Structure of the dissertation	26
<b>2.</b>	<b>SUBURBANIZATION DISCOURSE</b>	<b>30</b>
2.1	Conceptualizing suburbia within an urban-suburban dichotomy	30
2.2	Suburbia and the urbanization cycles within a diversifying metropolitan development	38
<b>3.</b>	<b>SUBURBAN MATURATION AND LIFECYCLES</b>	<b>52</b>
3.1	The growth-maturity-decline pattern in the maturation context	52
3.2	Components of a canonical view on suburban maturation	54
3.3	Approaches to neighborhood change	63
3.4	Critique of the suburban maturation discourse	68
3.5	Life-cycles in ecological and social-ecological systems	70
3.6	Path dependence— Approaching maturity and adaption within evolutionary concept	76
3.7	Adaptive cycles, hierararchy and panarchy	87
3.8	Implications of the pluralistic concept of lifecycles and the path dependent evolution	88

<b>4.</b>	<b>EMPIRICAL APPROACH</b>	<b>96</b>
4.1	Methodology and method	96
4.2	Pre-study reflections	109
4.3	Grimma Süd and Gelsenkirchen Resser Mark mature residential areas	124
<b>5.</b>	<b>INTERPRETING THE CASE-STUDY FINDINGS</b>	<b>138</b>
5.1	Diversification and path-dependent development	138
5.2	Shock or 'break', lock-in and equilibrium in the context of a diversification process	153
5.3	Human agency and human intent	160
5.4	Leadership and hierarchy within the stakeholder panarchy	176
5.5	Panarchy networks	182
5.6	Systemic space and adaption-making	185
5.7	Conclusive remarks on the case studies	190
<b>6.</b>	<b>LIFECYCLES AND ADAPTION: DISCUSSION, CONCLUSIONS AND PERSPECTIVES</b>	<b>198</b>
6.1	Approaching mature suburban residential areas	198
6.2	Towards adaptive strategies	210
	<b>REFERENCES</b>	<b>218</b>
	<b>LIST OF FIGURES</b>	<b>240</b>



INTRODUCTION

1

## 1. INTRODUCTION

### 1.1 Development of suburban residential areas in the context of maturation

#### Mature suburbia and its connotations

Most suburban residential areas of both family houses<sup>1</sup> as well as suburban apartment multi-storey housing that exist today in Germany were constructed between the 1950s and the 1980s. They accommodated both the population growth of the post-war era and the grown demands of living space per capita, at the same time being stimulated by the growing mobility, economic wealth and state subsidy programs (Brake et al. 2001; Burdack & Hesse 2007). Economic development, societal trends and post-industrial demographic change influence the conditions not only of further suburban residential growth, but also of the existence and perspectives for the further development of the areas that already exist. On the one hand, demographic change accounts for the general drop in population numbers, the aging of the society as well as its internationalization (Deutscher Bundestag 2002; Kröhnert et al. 2004). The demographic effects and the lower share of families together with changed lifestyles and circumstances (Brake 2012) are most likely to be responsible for a slow but steady decline in demand for both detached family houses and suburban apartment housing (Dransfeld 2010). The spatially uneven development in Germany is leading to diversified simultaneous development of economic and demographic growth or shrinkage in particular cities and regions in Germany<sup>2</sup>. On the other hand, the existing suburban residential quarters established during the extensive post-war development period are gradually coming into a phase of need for physical renovation and a new demand for demographic rejuvenation. The effects of a 'double aging', 'double maturity' or 'double homogeneity' (BMVBS/BBR 2008; Nierhoff 2008; Berndgen-Kaiser et al. 2013; Aring 2012) in terms of physical and demographic alterations include shrinking and aging households.

Even though demographic and social homogeneity have by far never been as pronounced as generally assumed, suburban residential areas are coping with general demographic trends and are becoming socially, culturally, demographically and ethnically more diverse (Aring 2012; Kötter 2013; de Temple 2005), and therefore, in a certain way, more 'urban'. Similar to cities and, in part, to rural areas, households within suburban settlement areas are becoming older, smaller and more diversified as well as more susceptible to change (Kötter 2013; Zakrzewski 2011). Accordingly, suburbia is becoming increasingly functionally mixed and self-sufficient within the metropolitan context. Its development dynamics are thus becoming less of a derivation of the development of urban cores. To a large extent, an autonomous post-suburban landscape is coming into being (cf. Lange 2000; Phelps et al. 2010).

---

<sup>1</sup> The term 'family houses' universally refers to single and double row, semi-detached and detached family houses (cf. Zanfi 2014).

<sup>2</sup> See data of the National Spatial Survey ('Laufende Raumbewachung'), e.g. as quoted in Hesse et al. 2013.

Parallel to the maturation and post-suburbanization of suburbia, a slight but reinforcing trend of reurbanization has become evident in Germany (Herfert & Osterhage 2012). It stands in contradiction to the urban-suburban discourse of the 1990s, when the expansion of settlement space, suburbanization and partly even desurbanization dominated (cf. BMBau/empirica 1998), but in consensus with the general urbanization theory (van den Berg 1982). Even though a consensus regarding the absolute and temporal extent of the reurbanization trend has not yet been reached (Hesse 2012), it has already become evident that it is causing a “*neo-structuring of urban regions in favor of the—mostly inner—city*” (Brake & Herfert 2012a, 417)<sup>3</sup>. This competition is, among others, often based on location and accessibility (Kadono 2013).

Still not yet statistically evaluated, but nonetheless evident in case studies—are the differentiated phenomena of reurbanization according to the size of the city: while both rural areas and small cities are losing especially young and educated population in favor of large cities mostly due to better educational, employment and career chances, many smaller cities are gaining elderly inhabitants from rural areas (Beißwenger & Weck 2011; Bernt & Liebmann 2013; Naumann & Fischer-Tahir 2012; Kühn & Weck 2013). In some locations, this trend is contributing to a growing demand for rental housing, not only in central, but to a large extent also in suburban residential estates and especially with regard to apartment housing. These areas are also profiting from single-person and start-up households. At the same time, these are competing with integrated locations as well as with other suburbs, some of them doing better, some other worse. Together with the advancing statistical knowledge about maturing suburban residential areas it becomes evident that not only the location, demography and the morphology are pivotal for future development perspectives. Such further measures include the community and stakeholder networks, which in late maturity phase may generate juvenile powers both to steer an overmatured system against its putative fate of decline into an adaptional development path. Unfortunately, most of the theory and case research on mature residential areas in the suburban context trying to understand their adaption is still focussing on the (hi)story of growth and maturity rather than the adaptional phase and its background itself. Even though yet not sufficiently emphasized, the ‘Back loop’ (Holling et al. 1986) of development careers may carry important aspects for understanding mature suburban residential areas as systems own-shaping their development paths in a non-circular and more perspectivist point of view, than the traditional decline-based concepts can offer.

---

<sup>3</sup> Cited passages of references in German language have been translated from the originals by the author.

### **Mature Suburban residential areas in research focus**

A general challenge in conceptualizing maturity and adaptation research in Germany is the limited theoretical background. Research is built on conceptualistic approaches based on particular suburban discourses as well as on interpretations of statistical analyses and their conceptual interpretations. These rather rare works oppose a relatively broad field of descriptive empirical studies, which however remain partly not sufficiently conceptualized in a broader context and disconnected from general theoretical frames. Based on what Reimer (2012, 53f) calls a discursive production of particular images rather than methodological rigor, they remain partly anecdotic. Also characteristic remains the limitation of interpretation of lifecycles according to the urban ecology approaches without a broader view towards other disciplines and their concepts of cyclic change. Especially further broad discourse of development and change in urban sociology, the development path discourse in economical geography or the concepts based on system theory remain widely disregarded.

Maybe the most evident consequence of this limitation for suburban residential areas in research is its spatially undefined and thematically limited debate. Even though the current discourse on mature suburban housing in Germany merely addresses 'suburban residential areas', the recent discussion and research is mostly focused on family houses and conducted within particular distinguishable morphologies (cf. Wüstenrot-Stiftung 2012). The large housing estates issue, connected with the suburban issue by their location at the city outskirts, has been prevalently addressed within the national urban redevelopment program "Stadtumbau".<sup>4</sup> Especially since the turn of the millennium as well as in the present discussion on the termination of the Eastern German part of the program in 2016 large housing estates are a topic. This issue is generally seen as mainly solved, but as not taking the on-going adjustment of and interactive connections to other parts of metropolitan area development into account (Kabisch 2014, 178f). Aring (2012, 80) emphasizes one of these interconnections by presuming the competition between rental apartments and family houses within suburban locations. However, until now, only few authors have emphasized the need to regard the issue of suburban housing within a broader morphological typology, pointing to the importance of the interaction between the morphologies for maturation process strategies (Beilein 2012 & Beilein et al. 2016).

---

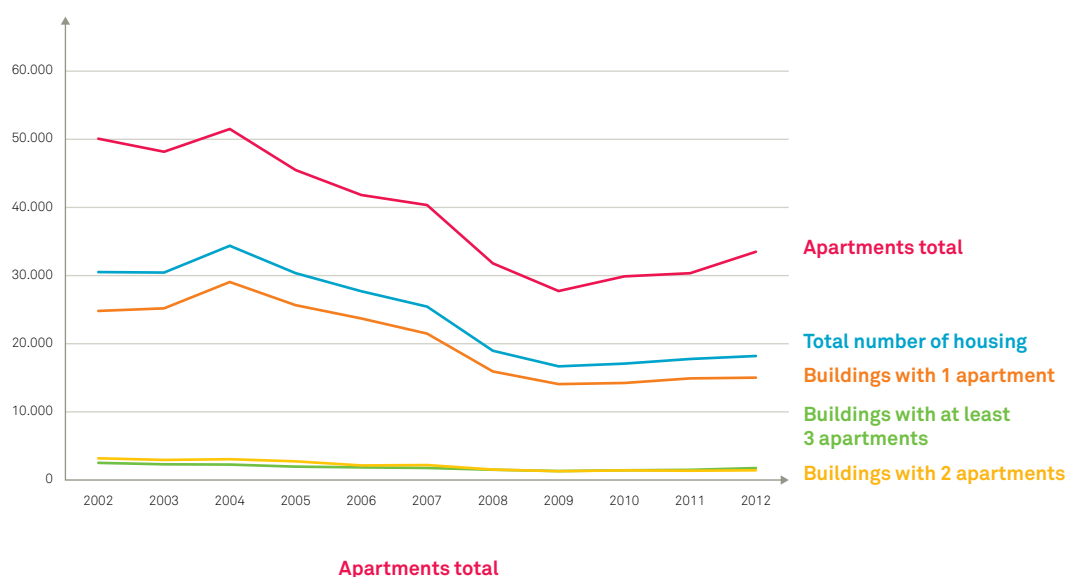
<sup>4</sup> 'Stadtumbau' (Urban Restructuring in East and West Germany) is a financial support program for cities run by the German Federal Government and the federal states since the year 2002 resp. 2004. The program is targeting on cities under economic and demographic structural changes and aims to support urban restructuring projects in order to adjust the physical and functional urban character to the changing situation. In East Germany, the program targets merely on reduction of apartment housing units on the city outskirts. In West Germany, mostly physical and functional adjustments of existing structures are being targeted (cf. web BBSR 2010).



Research focusing on family housing estates is based on the assumption that demographic trends and reurbanization will result in a significant loss in the attractiveness of the existing suburban family housing stock, similar to what has already been experienced in the case of suburban apartments within large housing estates and new towns. Several reasons for this assumption are evident. The traditionally dominant group of young family households demanding housing is becoming less significant on the real estate market. At least for family houses, a decline in demand, a consequent reduction in real estate prices as well as rising vacancy numbers during the coming years have been assumed (Nierhoff 2008; Kötter 2010 & 2013; Berndgen-Kaiser et al. 2012). This decline is mostly being predicted for quarters with 'homogenous cohorts': once becoming over-mature, these may break down, causing a shock which would leave the neighborhood virtually dilapidated (Schnur & Drilling 2011a; Zakrzewski 2011). Especially areas of a 'double maturity' of both aging housing stock and inhabitants are at the center of such scenarios. As such, these are especially to be found in the suburban housing areas of the second half of the 20<sup>th</sup> century (Dransfeld et al. 2010). Today, in large areas of suburban space created during the second half of the 20<sup>th</sup> century, a maturation process becomes significant. As for North Rhine-Westphalia, the most populated German federal state, since 2013 the supply of housing units in existing family houses for sale surpasses the demand on this kind of housing. Still, a continuously stable 20% of the demand is also perspective going to be directed exclusively towards new constructed family houses. Together with the forecasted demographic decline and societal changes, a long-term oversupply of existing houses within 'bad locations' is to be awaited (Dransfeld 2010 & 2014 I).

However, there has not yet been sufficiently addressed the question of what a good or bad location for family houses actually is. On the national level, the dynamics of economic and demographic development divert strongly between regions, and they partly correlate with the risks for mature housing. As a bad location for housing generally and the family houses in particular are being seen peripheral locations, merely as Beißwenger & Weck (2011) as well as Bernt & Liebmann (2013) are referring to them. They include rural and outside-metropolitan areas with low economic dynamics and negative demographic trends. Outside of such areas and inside the metropolitan and urban context, the question of location as a key indicator for their sustainable perspective becomes quite complex. Referring to the oversupply on existing housing stock, the combination of location and age of the estates is being seen as an unfavorable combination indicating future development hazards, and the age of the estates is being connected with the age of the inhabitants (cf. Berndgen-Kaiser et al. 2012 & 2013).

## INTRODUCTION



**Figure 1:** The construction of housing in the state of North Rhine-Westphalia (own illustration)  
(Source: Landesamt für Datenverarbeitung und Statistik NRW 2013. Data since 1995: Dransfeld et al. 2010, S.19)

As elder households do not grow and tend to shrink, such maturity perspective interpolated and combined with physical maturity of the housing stock leads to the assumption that decline is inevitable when no new demand is evident. Regarding the time of construction, areas homogenous by age and morphology are seen as those most threatened by potential decline, which would then eventually come as a sudden 'shock', leaving a very limited window of possibilities to react (Nierhoff 2008; Zakrzewski 2011; cf. Aring 2012). The risk further seems even higher as the demand for action related to mature suburbia is often not being estimated accordingly. Especially among municipal stakeholders, many of them do not (yet) see the necessity or clear possibility to act. (Wüstenrot-Stiftung 2012)

At the same time, empirical studies based on assumptions shortly summarized above show a potential risk, but only a very limited evidence of a real fatal dilapidation. Such seem rather to appear only in extreme rare cases of oversupply to an extent which would cause market failure<sup>5</sup>.

<sup>5</sup> Regarding such failures, authors and experts mostly refer to the fundamental shifts in population development due to the political and subsequent economical changes in former East Germany or to the abolition of large military housing estates in both the eastern and western parts of Germany after the reunification in 1990. In East Germany, they accounted for the consequences of structural changes connected to the fall of the socialist system. In West Germany, they accounted for closures of large production sites or military grounds, which caused an immediate influx of superfluous building stock. Regarding economic shifts, the downfall of locally or regionally dominant economic production, such as textile industry or mining, is often highlighted. As will be shown in chapter 5, experts however, point out that these market failures are rare. Here, the immediate 'absorption potential' of the market in place becomes crucial. Rather than immediate shocks, a 'slow change' of long-term reinforced development trends such as demographic and economic shrinkage is normal.

Partly, this may be caused by a long-lasting internalization of shrinking processes' effects among private households. Elderly households, after children have moved out, are automatically forced to internalize a part of the oversupply of living space in case of remanence within their own properties. This 'hidden shrinkage' also leads into enhancement of the per capita living space. Secondary effects of maturity, however, reach far beyond particular households and affect both social and technical infrastructure as well as the spatial and economic development of municipalities. The persistence of the existing households leads to a thinning out within existing areas as well as the necessity for the further expansion of the settlement area in order to accommodate existing housing demand. Especially in (but not limited to) municipalities in stagnating or shrinking areas, such development stands against a stated planning interest to consciously moderate the development. Nevertheless, the housing market trends in suburban housing areas appear to be quite dynamic and reactive to economic and financial market conditions.<sup>6</sup> Insights show, for example, that low interest rates lead to increased development among new family housing even in stagnating markets, and that this consequently influences the demand for suburban apartments<sup>7</sup>. The complexity of the housing market thus surmounts the complexity of the limited set of location, maturity and morphology concept, used as a base for conceptualizing studies. In studies on spatial risk assessment for problematic areas among single-family and double-family housing such as Fina et al. (2009) a measurement for the risk of dilapidation is being proposed. This includes the indicators of housing, demography and spatial use<sup>8</sup>. Alternatively, a study by Hesse et al. (2013) shows that, in spite of the changing statistical picture of the suburban areas in Germany in regard to demography and physical conditions as the most evident consequences, by far not every mature area in a demographically and/or economically stagnating or declining periphery, even in shrinking regions, is actually dilapidating or under a fundamental threat.

---

<sup>6</sup> Hesse (2014, 155) understands "suburbanization as a part of the bigger picture of urban and metropolitan transformation, of the deflation and contraction of urban space, and its continuous differentiation. This may occur in periodic loops and ups and downs, depending on factors such as income, space reserves and large-scale household mobility. Some time ago, Hoover and Vernon (1959) discussed such cyclical development dynamics in their model of neighborhood change. Whereas it seems to be far too simplistic to assume a general urban renaissance and an associated suburban demise, ongoing trends such as those named above can be and are indeed shaped by unexpected eruptions. Shocks like the credit crunch have the potential to trigger fundamental ruptures."

<sup>7</sup> Low bank interest rates caused by the monetary policy of the central banks in Germany and the EU in reaction to the Lehman Brothers crisis of 2008/2009, for example, markedly increased demand for suburban family houses even under circumstances of stagnation or shrinkage by lowering demand for rental apartments at the same time. This fact reveals that solely focusing on the semi-detached or detached family housing issue when talking about residential neighborhoods in maturity conceals the complex view on the issue as a whole. Thus, demography and morphology should in any case be seen as the exclusive drivers of the residential development pattern. Housing remains strongly interrelated, not only on the macro and meso levels, but also in regard to different typologies between which inhabitants choose. (SH3, 99)

<sup>8</sup> Indicators used—Housing data: share of single-family or double-family housing, occupancy rate, change in numbers of household members. Demographic change data: total change in number of inhabitants, share of seniors, share of people aged 20-50 in migration. Land use data: density and centrality (for details, see Fina et al. 2009, 6ff).

This leads to a focus on how and how far stagnating or shrinking settlement areas may follow a strategy to adjust, maintain and internally keep themselves stabilized. Despite the plea for a municipally led and 'demand-oriented' adjustment (Nierhoff 2008) and correspondingly recommended actions (ibid. Wüstenrot-Stiftung 2012), no strong evidence has yet been given for significant municipal concepts or even for action beyond data monitoring in suburban residential sites. One reason for this may lie in the fact that, as stated above, a certain portion of suburban housing research arguing for such action is focusing on homogenous types of housing areas, often tackled by a specific morphology and age as well as demography (often mature single family houses), instead of seeing the housing issue in the context of urban settlements or functional quarters. On the contrary, municipal stakeholders, together with others, may deal with the issue of individual perspective of a particular area within a broader context of the whole settlement and individual life perspectives and the interaction within them, including the issue of canalizing housing demand for different social and demographic groups. From such a point of view, maturing suburban housing is including not only a certain type of family housing at a certain maturity stage, but also apartments, senior residences and homes as well as social and technical infrastructure and services in its context. These are interconnected with general municipal development strategies, including strategic plans for long-term social and technical infrastructure measures, but also much more concrete and immediate plans, such as for designating new residential areas and thus expanding settlement area. Furthermore, they include the individual targets, strategies and activities of owners and other stakeholders at place. Inhabitants may act contextually to their very individual life perspectives, thus further diversifying the development perspectives of even morphologically and demographically homogenous areas. Still further, also local citizen networks or external stakeholders may influence the acting of both inhabitants and municipalities, thus co-shaping the development path of a suburban area.

Based on the definitional problem of 'location' for such complex interdependencies, there is uncertainty regarding the definition of an interconnected settlement area as a base for analysis. Even though Aring (2012), Schnur and Drilling (2011a) propose concepts based on 'suburban neighborhoods'<sup>9</sup>, they again argue that, regarding the urgent need for planning action, morphologically homogenous neighborhoods of detached family houses are to be focused on. This remains in accordance with the common understanding of the suburban housing approach mentioned above, where morphological-physical issues remain the significant attribute of the neighborhood-based approach. Here, the neighborhood approach seems to struggle with a certain tentativeness regarding normative and conceptual issues. Primarily, as Schnur (2010 & 2014) defines it, the physical as well as functional demarcation of a 'neighborhood' proves to be a quite complex task and includes no less than eight particular alternatives (cf. Warren 1975 & 1977, Olson 1982). Even though a homogenous neighborhood might be morphologically and spatially easy to define (Keller 1968), its functional definition might reach quite

---

<sup>9</sup> In German, 'Wohnquartier' (Aring 2012, 81).

beyond these borders. Furthermore, it remains to be seen to which extent the physical homogeneity of a neighborhood reflects an internal demography, and also to which extent the life-perspective homogeneity of individual households develops after some 40 years changes according to particular individual personal fates.<sup>10</sup> The question to be addressed further includes the analytic understanding of space. The current approach towards maturing suburbia is merely tackled on a morphology and age based container space (cf. Löw 2000). However, relevant for the analysis of adaptive potentials and strategies are also the powers shaping the individual development paths.

Finally, it also remains unclear whether there is any *irreversible* border, ‘shock’ or ‘tipping point’ (Temkin & Rohe 1996; Pitkin 2001; Gladwell 2001; Schnur & Drilling 2011) for change or even decline and where an imaginative threshold is actually positioned within the system’s development path to become a relevant risk to stagnate, decline or shrink.<sup>11</sup> Even though decline is a general driver for conceptualizing the effects of shrinkage (cf. Beauregard 2009), in theoretical and empirical studies on the suburban housing settlements only little evidence for shocks has been found in the Western European context, even in physically and morphologically homogenous areas. In contrast to the American context, Beckhoven et al. (2005) attribute this to the specific welfare state system and its related planning and social programs. But usually, it is seen in connection with the general broad variety in change variables influencing the fate of neighborhoods (cf. Ahlbrandt & Brophy 1975). Growth and shrinkage might thus be a part of a natural ‘breathing’ (Hesse 2014), creating a non-linear, flexible and individual development path (cf. Temkin & Rohe 1996; cf. Martin 2010 & 2012; cf. Martin & Sunley 2010) and in turn overcoming the classic development lifecycle concept of homogenous growth, maturity and final decline sequences conceptualized in the ecological approach (cf. Burgess 1925; Hoyt 1933; Alonso 1960; Hoover and Vernon 1962). If we follow the idea of differentiation surpassing the alternative of a decline, it leads us to the notion that suburban residential neighborhoods may possess and utilize both intrinsic and resilient capacities to adjust to both slow and sudden changes, and that these capacities yet not have been sufficiently concerned when conceptualizing the interconnection between maturity and decline. Exploring the adaptive patterns of suburban residential areas may finally question not only the clearly linear development along a given trajectory evoked by structuralistic theories and consequent analytic approaches. It may also question consequently the perception of suburbia as a ‘patient’ passively enduring its maturation ‘illness’, resulting in its decline in dependence on internal and overall circumstances. This might show suburbia generally as more intrinsically resilient and adaptable than usually assumed.

---

<sup>10</sup> These facts are usually hard to identify through standardized surveys. Due to its complexity, only a limited number of qualitative studies of inhabitants/owners focus on their perspectives and the circumstances of action for their property in the future. These include de Temple (2005), Beilein (2013) and Koura (2016).

<sup>11</sup> Uncertainty about thresholds is repeatedly expressed, e.g. by Aring (2012, 81). Hesse et al. (2013, 9) state that “a critical point remains in the partly controversial discussion on cyclic models regarding the emergence of the so called ‘tipping points’. This question remains a part of the broad research under the context of resilience.”

## 1.2 Paths of adaption within mature suburban settlements

The general discussion of maturation and change within urban settlements touches several discursive fields related to suburban development. Despite a long-lasting and rich tradition of scientific reflection on suburban development in the Global North, and especially in the US, the German theoretical discourse intensified during the 1990s, together with attempts to redefine the relation between suburbia and suburban development with the urban cores and thus to develop a self-standing framework for a deeper understanding of suburbanization as a part of the metropolitan development process independent of the urban core-based trajectory (Sieverts 1997; Aring 1999; Aring & Herfert 2001; Jessen 2001; Harlander 2001; Hesse & Kaltenbrunner 2005; Siebel 2005). By that time, the suburban discourse was among others driven by the issue of land consumption related to settlement growth (Nuisl 2005; Siedentop 2005; Wiedemann & Preußner 2008), partly also encouraged by the booming suburbanization after the German reunification in 1990, especially in the east of Germany<sup>12</sup>. Since then, the suburban discourse in Germany has further partly experienced both internationalization and discursive enlargement regarding thematic, theoretical and empirical approaches (Hesse 1999; Kuhn 2006; Burdack & Hesse 2007; Hesse 2012a; Schenk 2012).<sup>13</sup> Together with the end of the expansive growth of suburban areas in stagnating regions in Germany (both rural and urban), and seeing a large portion of suburban areas established after World War II in Germany gradually coming into a higher age, discussions on maturation and lifecycles of residential areas have intensified since the beginning of the millennium. Particular the maturation 'of and in' family houses dominates the suburban maturation discourse (Kötter & Schollän 2010; Kötter 2013; Zakrzewski 2011) and lifecycle discourse (Bizer et al. 2009; Dransfeld 2010; Aring 2012; Beilein 2013; Hesse et al. 2013), including an increasing fundus on empirical studies on older and aging suburban family housing quarters (de Temple 2005, BMVBS/BBR 2008; Schumann 2008; Drews 2013; Berndgen-Kaiser et. al 2012; Hofer & Simon-Philipp 2013; Berndgen-Kaiser 2014 and others). In the context of these contributions, this dissertation seeks to reflect on the maturation process within suburban residential areas and its related theoretical, empirical and conceptual approaches on behalf of the resilience and path dependence theories in order to understand their influence on adaption trajectories within these areas.

---

<sup>12</sup> The unification of East and West Germany in 1990 ended an era of more than forty years of two German states and re-established a unified German federal state for the first time after WWII. The change was a consequence of the fall of the so-called Iron Curtain, which divided Europe into the influence areas of the socialist-based eastern and the capitalist western part. The border between the two blocks also divided Germany into western and eastern parts. By the time of the re-unification, the economic system of East Germany was significantly weaker than that of West Germany. This situation led to a massive investment of West German capital into the former East Germany. A significant part of the accumulated needs in East Germany was the lack of housing and the accordingly urgent demand for more and better dwellings. Being faster in planning and realization, greenfield developments outpaced the renovation of housing stock within integrated urban areas, which led to rapid sprawl around East German cities during the 1990s.

<sup>13</sup> Parallel to the general suburbia discourse, an ongoing reflection on large housing areas or new towns in connection with the 'Stadtumbau' process took place; even though thematically similar, it remained independent from the suburbia discourse.

Following this target, this dissertation aims to contribute to the base of knowledge of processes enabling and leading particular mature suburban residential neighborhoods disadvantaged by negative economic and demographic situation to adapt instead of decline. Consequently, it asks how and how far suburban neighborhoods are able to react on lifecyclic change and changes in outer circumstances. At the core of the discourse there lies the assumption that under certain conditions mature suburban residential areas as specific social ecological systems are, in reaction to outer and inner conditions, able to generate their own specific intrinsic strategy and power to adapt to changing internal and external circumstances. As theorizing on perspectives on the future of maturing residential settlement is having difficulties with general above mentioned suppositions, it is maybe time to undertake an attempt of an alternative conceptual view on maturation, especially when thinking about the future development and the possibility to influence the fate of particular residential areas by planning measures.

The central cognitive interest thus aims on understanding development paths of social ecological systems within mature suburban residential areas as a result of the internal local and external trajectories in order to evaluate and conceptualize the adjustment processes along particular lifecycle trajectories. To do so, this book aims to connect three particular theoretical lines under the maturation discourse.

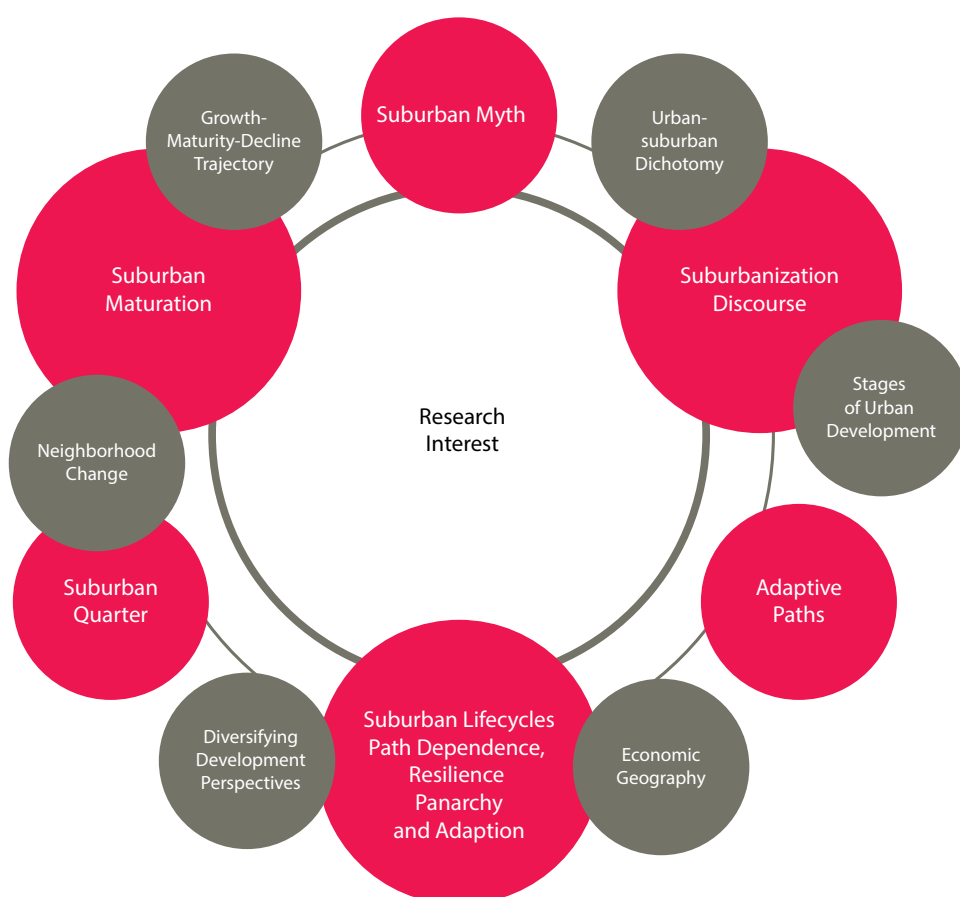
---

see Figure 2

First, it aims on reflecting the urbanization discourse regarding the diversifying development perspectives of suburbia. Repeated attempts have been undertaken to reinterpretate the basic cycles of urbanization or stages of urban development, among others in order to accomodate development diversity of particular settlement types of the model (e.g. Bizer et al. 2008; Geyer & Kontuly 1993; Tammaru 2001; Fisher 2003; Ourednicek 2004; Sykora & Posova 2011 and others). Regarding suburbia, it prevealingly focusses on a re-positioning of the suburban development trajectory within the urbanization concept as developed by van den Berg (1982) in order to open argumentative space for a broader discourse apart from a growth and decline trajectory, which has been interpreted into this model.

## INTRODUCTION

It then aims to explore and reflect the concept of maturation itself, particularly within the growth-maturity-decline trajectory. The emphasis is being laid on what is called the 'suburban myth' or 'suburban cliché' (e.g. Masotti 1972; Kramer 1972; Wunsch 1995; McManus & Ethington 2007). Again, the analysis aims on mapping its argumentative consequences for conceptualizing maturation trajectories in the suburbia. Due to a lack of a comparable basic theoretical discourse in Germany and Europe, it initially refers to the American discourse and partly attempts to contextualize it within the West-European reality by defining its specific components of a canonical view. In order to explore a multi-layered spatial concept and at the same time to refer to existing studies on suburban maturation in particular residential areas, it refers to discourses on space and neighborhood change as a way to explore difficulties to grasp diversifying local development.



**Figure 2:** Cognitive interest defined by its basic theoretical and discursive framings (own illustration)

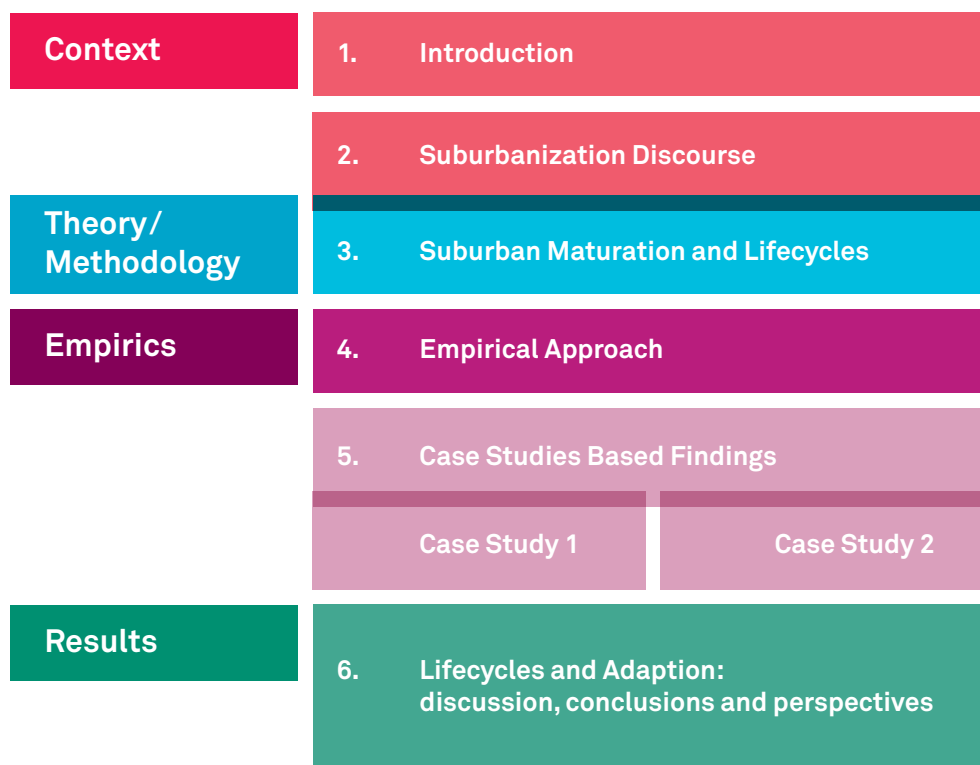


Taking on the first two thematic lines, the third step then introduces the lifecycle model into the development of mature suburban residential areas within the path dependence, resilience and adaption. In the centre of the interest is a concept able to accommodate also non-linear development paths within particular settlement systems. Taking the critical discourse on change in social ecological systems as a base, it attempts to contribute to a re-interpretation of the established development trajectories based on alternating threshold reactions and equilibrium states towards a more pluralistic and open adaption concept. To do so, it mainly incurs the open model of path dependent evolution from the context of economic geography (Martin 2010 & 2012; Martin & Sunley 2010) and applies it to the mature suburban neighborhood development. This concept allows to regard adaption as a part of continuous maturation occurring along the whole lifecycle outside the growth-maturity-decline trajectory.

As a case study reference, the dissertation takes on two different suburban mature residential areas. The city of Grimma (case one) is situated in East Germany in the broader Leipzig region and represents an area of industrially constructed apartment houses from the last quarter of the 20<sup>th</sup> century with different kind of ownership. The Resser Mark case is an area with low density, with family houses but also apartment building areas with some suburban settings of the city of Gelsenkirchen in previous West Germany. Both of the micro locations are situated within municipal and regional areas, which have been shrinking at least during the last two decades, thus dealing with significant consequences of demographic change and physical maturity. Within the theoretical frame of nested analysis (Liebermann 2005) the case studies aim on a model testing in order to reflect the theoretical findings in the light of the lifecycle discussion towards the open adaption concept mentioned above. One of the central questions is to which extent the systems tend to a state of stable maturity which they would remain in or keep adapting along an ever changing development path. Finally, besides the target of understanding mechanisms of adjustment within social ecological systems of mature suburban residential areas, the aim of the dissertation is to reflect existing analytical approaches towards maturation processes, which would deliver a broader basic knowledge as a base for practical strategic planning.

### **1.3 Structure of the dissertation**

The dissertation consists of six chapters. The introduction is followed by the second chapter on maturation and adjustment. It includes general assumptions on the concept of suburbia in maturity and its connections to the canonical urban-suburban dichotomy, homogeneity assumption and the canonical view. As a base, van den Berg's et al. (1982) stages of urban development and its alternatives are discussed in relation to the diversifying metropolitan, and especially suburban development. Aiming on both general macro and local micro level approach, the merely general discourse is enlarged by a reflexion of the concepts of the neighborhood change. The third chapter introduces the lifecycle theory. It hereby focuses on the approach based in social ecology and its further derivations and highlights the path dependency, leaving other general concepts aside. It, however, discusses fundamental components which are co-constituting or specify the lifecycle concept, including thresholds, equilibrium and intent as the main influentants on the development path. Picking up the critical reflection in Martin's (2010) polemic Roepke lecture dedicated to rethinking of regional path dependence, it identifies a basic frame of a system-oriented analytic approach. In the fourth chapter, the methodological approach to the case studies based on previous conceptual findings is explained and the two case studies on mature suburban residential areas are carried out. In the fifth chapter interpretations on adjustment strategies derivated from the case studies within the context of maturation process are undertaken. Chapter six delivers a summary on findings on the maturation of suburban residential areas regarding the system adjustment strategies, and outlines the requirements on an equivalent analytic concept.



**Figure 3:** Structure of the dissertation (own illustration)



SUBURBANIZATION DISCOURSE

2

## **2. SUBURBANIZATION DISCOURSE**

### **2.1 Conceptualizing suburbia within an urban-suburban dichotomy**

Conceptualizing suburbia has been a continuous process throughout the ongoing development of the urban settlement area (Park et al. 1925; Mumford 1961; Farley 1964; Fishman 1987; Teaford 1997; Hayden 2004; Harris 2010, and many others). Even though suburbia has been widely accepted as a part of both the metropolitan settlement pattern and of urban life, a consistent definition in terms of its spatial character and societal embeddedness has been continuously discussed, even in the German context, where conclusions have been made about the difficulty of a simple, self-standing descriptive definition of the phenomena without any relational topic (c.f. Sieverts 1997; Aring 1999; Jessen 2001; BBR 2004; Hesse 2012)<sup>14</sup>.

Since the beginning of the suburban growth phase, the suburban discourse has been dominated by the concept of urban-suburban opposition (Beauregard 2009)<sup>15</sup>. Comparing the core city with the perception of suburban development: in the middle and the beginning of the suburbanization process, suburbia was classically defined as a core-dependent, detached settlement type beyond the administrative borders of the city (cf. Siebel 2005; cf. Hesse & Kaltenbrunner 2005; c.f. McManus & Ethington 2007), and planning challenges were thus defined accordingly. Conceptualized evolutionary and historically through its sprawl-oriented growth pattern (Fishman 1987), suburbia has long been seen as a spatially indifferent and socially selective contrast to the compact, urban, socially mixed and spatially well-organized core city. Furthermore, during the prevailing suburbanization phase, and especially during the second half of the 20<sup>th</sup> century, it was seen as the winner of spatial, functional and social tensions with the urban core. The concepts of density and distance had been mostly used to distinguish suburban contexts from the core city, with a number of derived dimensions, such as evolutionary phases and commuting distance, playing a fundamental role in defining suburbanization processes (Siebel 2005). Such definitions may have distinguished suburbia from the compact and central location of the settlement area. However, it did not explain what suburbia itself actually was.

Another topic in understanding suburbia is the development of its internal structure. A broadly compiled spatial, functional and social definition of suburbia, which would be self-standing and thus non-relationistic e.g. to the core city has not yet been established (Hesse & Kaltenbrunner 2005; Forsyth 2012). Existing attempts to do so rather define it as an intermediary space of peculiar and atomized interests and uses (cf. Sieverts, 1997). Analyzing definitional approaches to suburbia,

---

<sup>14</sup> For information on the general context of suburbia as a relational term, refer to Vaughan et al. 2009.

<sup>15</sup> Even though North American literature offers a significantly broader base for theorizing suburban development than that of other continents, the situation in other parts of the world, especially Western Europe and Germany, to which this text refers in case studies, may vary significantly. Where necessary, this is explicitly mentioned in the text. Other statements with a general meaning are used more broadly. Here, even though Beauregard addresses American cities, as we will see later, the urban-suburban opposition is a quite generally rooted phenomenon.

Forsyth (2012) identifies a set of relational dimensions, including location, morphology, transport, function, social, socio-cultural, processual, temporal and analytical measures as well as several criteria-oriented indices.<sup>16</sup> She further draws attention towards two basic challenges of an unclearly defined suburbia. On the theoretical level, the first is the challenge of empirical research and theory, which requires “adequate definitions of features and concepts being measured” (Forsyth 2012, 271). The second is the issue of action, as expressed by Caplan and Nelson (1973, 200): “*What can be done about a problem depends on how it is defined*”<sup>17</sup>. Thus, due to the prevailing contrary relation to the core city, planning strategies regarding suburbia were often taken from the urban point of view, defining planning tasks mainly as aiming on limiting sprawl and protecting the core city. Despite its relevance in many cases, they often were based on a monotypical understanding of the suburbia in spatial, morphological and societal contexts. Such concepts included more than a substantial urban-suburban connection: suburbia relatively soon became an alternative concept for most of the aspects of the city, such as multifunctional and networked environments for living, work and recreation for a large portion of society within the core city (cf. Masotti 1972; Geyer 2002).

### **Core-centric view on suburbia and the suburban(ization) discourse**

The difficulty of a core-centric view on suburbia today can be seen in two main objections. First, as already mentioned above, quantitatively and institutionally, in its most narrow understanding suburbia has been defined as the result of suburbanization. Again, the trend of suburbanization is mostly understood as an out-migration of inhabitants from the core city (Siebel 2005)<sup>18</sup>. The same understanding remains prevalent for the functions of industry, trade or recreation (cf. Hesse 2012).

Second, suburbia—including surrounding cities within the metropolitan area of its main core—has already been developing ‘urban’ functions for some time. This has occurred not only as a contradiction to and an outsourcing from the core city, but also within a functional logic of a regional metropolitan space, in which both the core and the suburbs as well as other areas such as older and newly established ‘urban’ centers and/or functional centralities have been included (Czok 1979; Wunsch 1995). Consequently, many current suburban attributes, such as qualitative and functional diversification or selective growth and shrinkage, are not clearly contradictory to those of the core city, but rather increasingly similar. Suburbia’s development process into a post-suburbia (Lange 2000; Phelps et al. 2010) derives from substantial developments at the edge of major metropolitan areas, making

---

<sup>16</sup> Forsyth concludes that suburbia could either be abandoned as a term and replaced by particular and more specific environmental types (such as ‘edge city’, ‘office park’, ‘detached residential area’, etc.), or it may be kept, but qualified by adjectives (e.g., ‘ethnoburb’).

<sup>17</sup> Cited by Forsyth 2012, 271.

<sup>18</sup> Though urban-suburban borders may be defined according to either administrative or real physical-morphological factors, data for statistic analysis of the settlement area mostly correspond with administrative borders (ibid.). This creates a further discrepancy between these two definitional aspects.

particular suburban areas to a certain extent comparable to urban areas (cf. Roost & Folgmann 2013). Other convergence between urban and suburban is also evident in the 'social urbanization' of suburbia (Dittrich-Wesbuer & Osterhage 2014). Differently to this, Frank (2014) argues that the 'suburbanization of the city' is currently occurring through the reurbanization of the core city by the middle class, which is in fact oriented to the 'suburban lifestyle'. This is resulting not only in suburban physical morphologies in central locations, but also in suburban-like social patterns. This may mark the convergence of the metropolitanization processes in (sub)urban areas—manifested in an increasing proliferation of generational social and demographic characteristics—and a subsequent fragmentation of once clearly defined spatial boundaries between these areas. This is supported by growing evidence of parallel degradation or gentrification processes, which until now have been mostly discussed in the context of cities (even regarding resilience and adjustment capacity), but not necessarily as a suburban issue (cf. Altrock et al. 2014).

The increasing criticism of the classic view on suburbia as a core-dependent urban system is strongly related to the challenges of the conceptual view of its development in narratives and discourses (Beuka 2004; Beauregard 2009). Historically, suburbia has been juxtaposed with the compact city (Jackson 1985; Fishman 1987; Stilgoe 1988), although it might have also existed throughout the history of the city—and not necessarily as its opposite, which always has been the countryside (cf. Harris & Vorms 2014; Scott 2013; Wunsch 1995). Burgess (1925) understands urbanization and suburbanization as a consequence of the same urban expansion, caused by the shift of inhabitants from rural towards urban areas, stating that this tendency can be observed in most cities that have experienced a 'classic' industrial growth. The consequences of this include the relocation of wealthy residents to selected areas surrounding the compact city and situated beyond the existing suburbs, followed in turn by the middle class. Widespread suburbanization included the outsourcing of additional functions that had until then been situated within the core (Fishman 1987; Kadono 2010).

The point of suburbia's subordination to the city is double-sided and anchored in both city and suburb, similar to the way in which they are interwoven. In times of urban expansion during industrialization, suburbia served as a foundation for urban development, which the growing city incorporated before pushing the suburban fringe out even further to the outskirts. To a certain extent, and especially in the industrialized global North (Harris 2010), suburban growth together with urban expansion took on the role of a 'relief valve' for extremely dense city cores. Within the Garden City movement and modernism, urban development extensively took place on the basis of strategies and plans, especially within industrial cities (cf. Howard 1902). Here, development has partly taken place more liberally and independently as a private measure (cf. Walker and Lewis 2001). Politically, in the North American conservative understanding suburbanization is still often seen from the perspective of the colonial freedom to settle, which to a certain degree may originate from the understanding of freedom of the individual according to societal issues, including segregation (Harrell 2011, 247).



At the same time, as Sykora & Stanilov (2014, 22) point out in a study on suburbanization in post-socialist Europe, suburbanization is generally to be seen as “*not just a matter of personal choice, but a one of societal choice*”. Historically seen it is likely that sub-urban (non-urban) settlement patterns developed simultaneously to most urban cores. One reason for this might lie in the rigid social system that banned functions at its social periphery to the physical periphery of the city. Additionally, the scarce historical urban space meant that some functions necessary for urban life were haphazardly or non-optimally located within a clearly defined urban environment. As such, suburbia has always been positioned as an alternative to the city (Wunsch 1995; Musil 2002). Some scholars, above all Walker and Lewis (2001) and Harris (2010 & 2014), emphasize the core independent development, fed by growth in suburban locations. Harris (2010) similarly states that even though suburbanization might have been a matter of higher social classes in its modern-day beginning, the mass of suburban development in the Global North and even more so in the Global South instead developed at locations where residence in the core was for many spatially and/or economically impossible: a significant amount of suburban development might not have been voluntarily chosen as an ideal, but rather as a possible or rational alternative. Additionally, suburbanization was seen as a new form of (post)industrial settlement, overcoming the compact city together with its spatial-functional limitations and societal challenges (Gilham 2002). Often, however, both of these patterns were mixed. (Nishikawa et al. 1989, Gilham 2002)

### **Suburban expansion as a basis for the narrative of decline**

The urban-suburban interaction and logic are seen as generally symbiotic along the trajectory or narrative of parallel expansion at both the core and the suburbia. The interpreted end of the symbiosis between the core city and suburbia and its turn into complementary opposite roles arose when the city was no longer expanding or was even losing net population to the suburbs, and thus declining while suburbia was still growing. By that time suburbia to a certain extent still seemed to promise a better standard of living than the city (Madden 2000). Opposing positions towards suburbia already evolved during the 1950s and 1960s, as the consequences of the demographic and functional shift to the suburbs became evident in Northern America, in part due to the effects of harsh social and racial segregation and consequent dilapidation within many inner-city areas. At the same time, suburbanization had begun to fundamentally reshape the compact cities in Western Europe as a consequence of the post-war lack of housing both in terms of quantity and quality, the baby boom and the combination of individual car ownership and spreading wealth (cf. Beckhoven et al. 2005). A critical view on suburbanization was often given from the neo-Marxist point of view (Harvey 1978; Walker 1981). Ourednicek & Spackova (2013) suggest on this that Marxist authors emphasized *push* factors, resulting from the malfunctioning of the capitalist city, whereas neoeological approaches, such as that represented by Aalbers et al. (2004), were rather concerned with *pull*

factors of suburbia in particular.<sup>19</sup> They further conclude that macro-oriented societal views, such as those of Harvey (1978), Wirth (1996), Giddens (1997) or Putnam (2000), only negatively value the suburbanization phenomenon, whereas the empirically-based ‘inside view’, represented among others by Gans (1968) or Lupi & Musterd (2006) came to more favorable conclusions.

The urban movement represented by Jacobs (1961), Fogelson (2001) and others began to address the decline of the urban core as a societal issue related to suburbanization. The criticism of suburban development merely targeted suburbia itself—the monotony of its settlement environment, its dependence on private car ownership and central city functions and its lack of social interaction. This definition of a monoschematic space beyond the city limits—relationally subordinated to the city in terms of traffic flows and selective functional transfers (Mumford 1961; Whyte 2002; Siebel 2005), with uncontrolled sprawl in the direction of the outer periphery as well as the integration into the compact city towards the urban core as the main development trajectory—has meanwhile been repeatedly criticized as insufficient (e.g. Dobriner 1972; Gans 1959 & 1962; Berger 1961; Kramer 1972; Wiese 2003; Hesse & Kaltenbruner 2005; Harris 2010; Forsyth 2012). McManus & Ethington (2007) have summarized this criticism into three basic points. First, it is the final acceptance of considerable diversity within and among suburbs, which stands in contrast to the monoschematic suburb. Above all, it challenges the understanding of suburbia as a merely ‘non-ethnic’ middle-class area, instead showing it as a mixed settlement space that is also characterized by the working class and overall ethnic differentiation. Furthermore, it shows that functionally diverse suburban space is not a recent phenomenon, but rather that ‘post-suburbanization’ has been going on since the beginning of suburbia. A second fundamental point is the questioning of the distinction between city and suburb, regarding major variables in the American context analyzed by Harris & Lewis (2001). They come to the conclusion that “*in terms of social geographic patterns including residential patterns, jobs, transportation, journey-to-work and the home as a place-dependent worksite; land development and house building and the political fragmentation (...) characteristics attributed to either central cities or to suburbs were widely found in both locations.*” (McManus & Ethington 2007, 325)<sup>20</sup>. Dittrich-Wesbuer and Osterhage (2013) come to a similar conclusion regarding lifestyles in a study comparing particular urban and suburban areas in Dortmund, Germany. Third, the definition and questioning of the ‘suburban myth’ is based on the notion that the dystopian societal narrative of suburbia has been entangled with a declining convergence of middle-class culture, which, however, is “*more about the middle-class society than the suburbs per se*” (McManus & Ethington 2007, 325).

---

<sup>19</sup> According to Beckhoven et al. (2005), emphasizing the pull or push factors was already a distinction within the discourse of Burgess (1925), who was more driven by the human ecology approach, and Hoyt (1939), who argued that not only income, but several other factors influence the location of individual housing choices within the metropolitan area.

<sup>20</sup> Menzl (2007, 400f) however sees a distinct difference in values of suburbanites, based on focussing on children, sublocal orientation, place of residence as a retreat, and a physical, life cyclic, social and normative homogeneity.

Not only suburbanization itself made suburbia hostile, but also the increasing spatial, functional and economic independence of suburbia from the core city. Here, the *diversification* of suburban space is increasingly becoming a central issue of the discourse (cf. Dittrich-Wesbuer et al. 2010; Phelps et al. 2010; Hirohara et al. 2010; Keil 2011). A significant diversity of suburban settlement types, forms and social contexts is being acknowledged, together with retrospective linkages to suburbia's own diverse evolutionary history (Dyos 1961; Warner 1968; Jackson 1985; Hayden 2004). Along with the ethnic, social and functional variety of both suburban and urban realities, the evidence that suburbia absorbs urban functions and is becoming a multifunctional post-suburbia is beginning to promote such diversity on functional and spatial levels (Zimmer 1975 in Choldin et al., 1980; Teaford, 1997). In a densification process, the compact and multifunctional urban cityscape partly spreads over the inner suburban fringe and turns this area urban (Kadono 2009).

Within the metropolitan context, which similar to 'new regionalism' is taking a unifying view onto the otherwise distinct 'urban' and 'suburban' (Pastor 2001), the physical and functional typologies of suburban settlements, interactions among them and with the urban core are taken as a basis for defining distinct entities within mostly undefined spaces and their physical typologies.<sup>21</sup> As a generic term, the differentiated settlement space is deemed post-suburban (Hayden 2009). With post-suburbanization, interconnections within the diversifying metropolitan suburban space are being further defined. Post-suburbia as a phenomenon beyond functional clustering and morphological differentiation opposes the classic understanding of suburbanization as a one-way expansion process from the core city to the outskirts. This was based on core-fringe migration as well as on dependency on the core in terms of employment, mainly defined by commuting (cf. Siebel 2005). Apart from the well-known fact that administrative borders in metropolitan areas are becoming increasingly incompatible with the spatial development of settlements, this further relativizes the basic definitions of the suburban space as a target area for migration from the core city. During post-suburbanization, the tangential migration of inhabitants, employment and other functions within the post-suburban space gains in significance as the existing metropolitan area's network system grows. Being spatially selective, it may not regard certain parts of cores and fringes. It moreover strengthens the regional metropolitan network of centralities and functional clusters and reshapes it according to hierarchies and functions (Todokoro 2000; Polívka et al. 2012). Vaughan et al. (2009) go further and argue that a non-centric metropolitan area settlement model offers an alternative to a balanced concept of the relationship between suburbia and urban cores for two main

---

<sup>21</sup> These settlement types include, for example, technoburbs (Fishman 1987), outtowns (Goldberger 1987) or edge cities (Garreau 1991), superburbs (Bourne 1996), ethnoburbs (Li 1998), Zwischenstadt (Sieverts 1997), exopolis (Soja 2000), edgeless cities (Lang 2003), zoomburbs (Hayden 2004a), boomburbs (Lang/LeFurgy 2007) and in-between spaces (Keil/Young 2010), or beyond this as a phenomenon of the rural-urban fringe (Scott 2013). Other areas are gradually maturing as generational settlement typologies that need to be physically and functionally re-qualified (Sieverts, 1997, Dunham-Jones & Williamson 2011; Kadono 2010, Aring 2012 and others).

reasons. First, a non-centric model acknowledges the simultaneous emergence of settlements, centralities and functions. It also includes the differentiated typology of suburbia, which, for example, Connell (1974) calls 'metropolitan villages', with outlasting village elements, or Griffiths (2009) deemed 'urbanized historical main roads or centralities'. More importantly, Castells (1989, 156ff) postulated from an Euro-Atlantic point of view that post-war decentralization was connected to mass car ownership, deindustrialization and new communication media and produced relatively dense commercial sub-centers, which slowly transform metropolitan areas into multinuclear, multifunctional spatial structures organized around new urban villages. Studies by Todokoro (2002) and Polívka et al. (2012) show that, while a development focus exist on both larger central urban and multi-connected functional metropolitan cores, the peripherization of other areas progresses, whereas some specific functional clusters remain untouched by these trends and create their own—albeit not necessarily contrary—hierarchies in space.

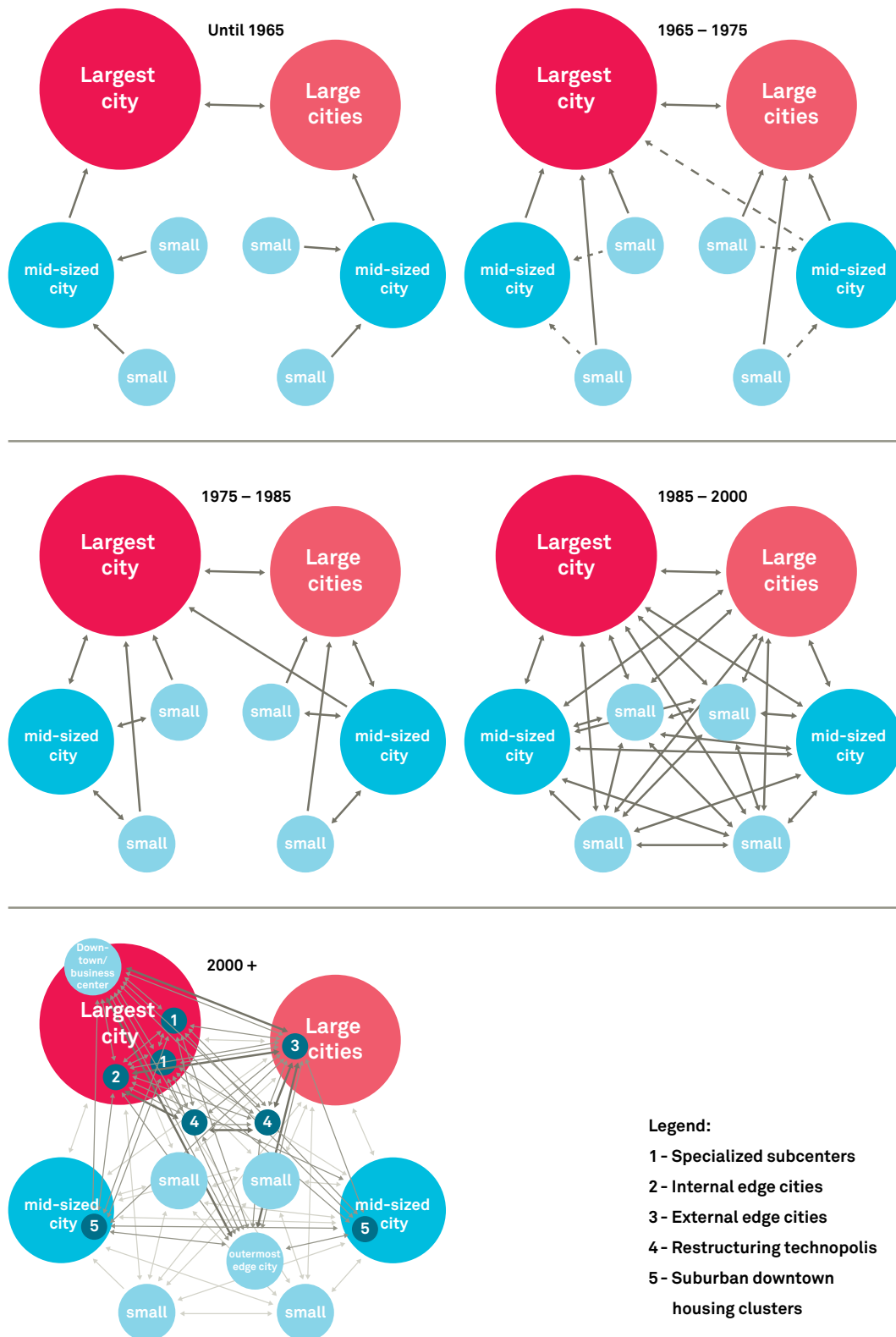
---

see Figure 4

Second, Vaughan et al. (2009) state that a non-centric metropolitan area settlement model also corresponds with the multifaceted metropolitan demographic and functional development dynamics. Beyond the polycentricity system, certain other scholars argue for a non-hierarchical view of suburban centers, "*since the urban gravitational pull is more truly said to be from everywhere to everywhere else*" (Marshall 2006, 274 in Vaughan et al. 2009, 480/481). Sievert's (1997) concept of the *Zwischenstadt*<sup>22</sup> criticizes the notion that urban centrality is inappropriate for understanding the character and interactions of the settlement landscape. In order to define the multi-nucleated metropolitan system, he proposes the term 'semi-urban' rather than suburban. A similar discussion is presently being held regarding the term 'post-suburban'. The spatial concept of polycentricity is then seen as one of a fragmented mega-city region (Hall & Pain 2006), with 'archipelagos of globality' located across the region (Hall 2001; Kunzmann 2011). Even though a completely non-hierarchical point of view disregards functional differentiation as well as population barycenters, it seems likely that centrality within the metropolitan system is something beyond the historical reminiscence of the 'European City' and its subsequent outskirts. Further it is not just differentiated in terms of a hierarchy of space and function, but rather in functional or thematic clusters that create their own regional centrality network.

---

<sup>22</sup> According to Hesse (2010, 25), the *Zwischenstadt* stands for: "(1) the classical suburban areas at the outskirts of agglomerations, but also (2) such parts of suburbia that lie in-between different central cities and exhibit rather hybrid settlement characters, and finally (3) rural areas where densification and urbanization tendencies are beginning to take place, and which have usually been referred to as the urban and semi-urban periphery. This particular discourse thus left behind substantial problems of definition, which can only partially be accounted for by the variety of suburban settlement structures." Hesse further remarks that, despite the fundamental importance of the book for the discursive shift on suburbia, fundamental problems remain: the "fuzzy term" of the still insufficiently defined *Zwischenstadt* or the generalization of the case study (Rhein-Main & Ruhr Area, Germany).



**Figure 4:** Development of centrality in metropolitan areas according to Todokoro (2000) (1 – 4), enlarged by Polivka et al. (2012) according to Hall's (2001) archipelagos of global city regions (5)

## 2.2 Suburbia and the urbanization cycles within a diversifying metropolitan development

The maturation process of suburbia has an impact on the interpretation of urbanization cycle theories<sup>23</sup>, which are interpreted regionally but also implemented locally. In most of these theories, the period of concentric urbanization alternates with a period of centrifugal expansion, showing that the rise of the one comes along with the decline of the other. Influenced by the post-war suburbanization wave, Hall (2001) presented four phases of urban development. These began with centralization at the core, followed by two decentralization periods (relative and absolute) and, finally, the absolute decline of the urban region due to inhabitant loss at the urban core. During the 1980s and 1990s, cycle-based urbanization theories were strongly influenced by the net inhabitant reconcentration in the core cities after a long phase of post-war deconcentration. In 1981, Klaasen and Seimeni introduced a 'recurring' cycle of reconcentration. One of the first phase-based deep analyzes of the urbanization process was conducted by Fielding (1982), who analyzed the phases of urbanization and counterurbanization on the basis of net migration and settlement size (cf. Champion 2001).

Van den Berg et al. (1982) used a circular urbanization pattern by defining urban development in the four phases of urbanization, suburbanization, counterurbanization or deurbanization and reurbanization based on population change in the urban core and at the periphery<sup>24</sup>. During the urbanization phase, large cities emerge and the population of the region grows, concentrating within the urban cores<sup>25</sup>. In a second phase, centripetal population development is replaced by suburbanization. It redistributes the highly concentrated population from urban cores to adjacent spaces, causing spatial expansion of the settlement area by means of a declining density. This phase is again supported by many factors, among which the spatial-functional conflicts in the core push, and individual wealth pull a significant part of the inner-city population to move out towards adjacent suburban areas.<sup>26</sup> This phase is then replaced by counterurbanization, which draws the population from the agglomeration core area further out to its outskirts and to the adjacent rural areas beyond. It is reliant, among other things, on ubiquitous infrastructure (Siedentop 2008), functional spread and diversification as well as a lack of favorable spatial alternatives closer to the agglomeration's already urbanized and suburbanized core (Kadono 2010). In this phase, both the core city and suburbia may lose population. Finally, within reurbanization, the urbanized area begins to gain inhabitants at its core(s) and, again, in adjacent suburbia, driven by a parallel decline in the growth of external areas.

---

see Figure 5

---

<sup>23</sup> Also referred to as "Study of growth and decline"(van den Berg et al. 1982).

<sup>24</sup> This includes suburban areas of the metropolitan settlement area.

<sup>25</sup> Tisdale (1942) defines urbanization as a process of population concentration in two ways: the multiplication of points of concentration and the increase in their size (cf. Champion 2001). In the modern age, such concentration—especially in the European context—was evoked by the urban industrialization era (Ourednicek 2004).

<sup>26</sup> See the previous argumentation on 'pulls' and 'pushes' by Ourednicek & Spackova (2013) and Beckhoven et al. (2005) in the previous chapters.

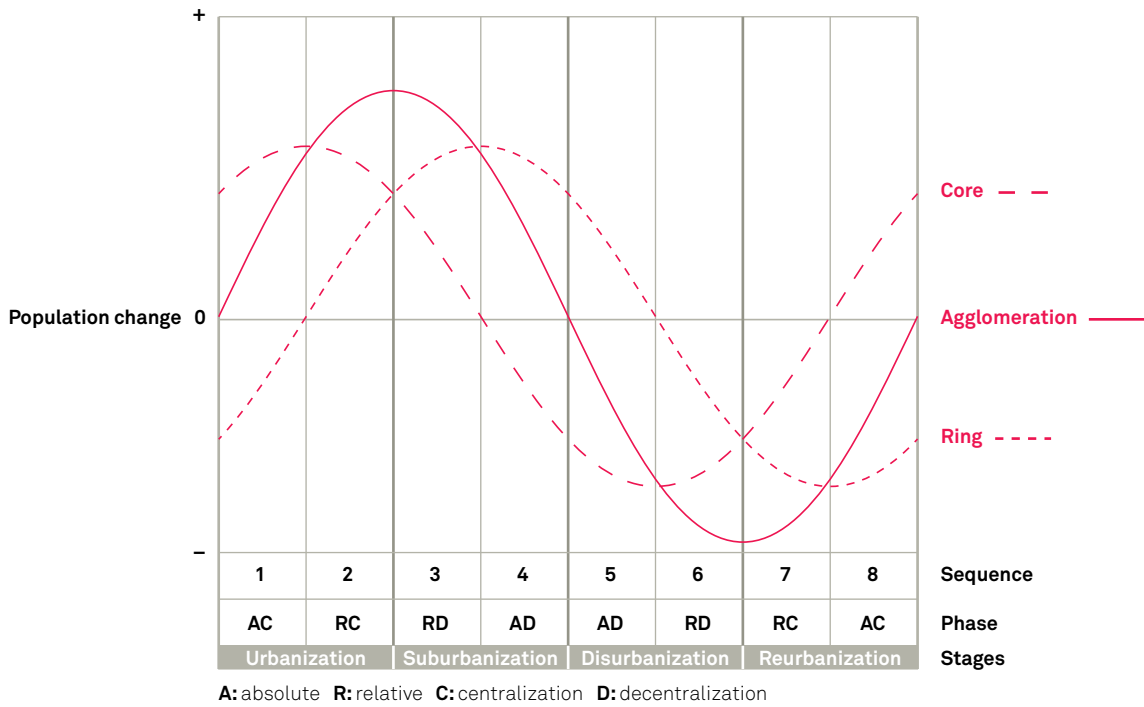
The universal urbanization model developed by van den Berg's team was widely influential in the interpretation of the dynamics of metropolitan area development, as it principally enabled scholars to describe the spatial attributes of the process of metropolitan growth and density change and considered the post-industrial re-growth of the cores after counterurbanization. However, the basic model of urbanization has been subject to several alterations, mainly due to its rigidity. Geyer and Kontuly (1993) proposed a model of 'differential urbanization' based on the relation of migration and settlement size to accommodate dynamics.<sup>27</sup> The analysis by Herfert and Osterhage (2012) further shows that regions may skip certain phases of the cycle and switch to others, and that different phases may run simultaneously.<sup>28</sup>

Based on the concepts of urban development cycles, some scholars have emphasized the correlation between a shrinking core and growing outskirts and vice versa. Accordingly, since a steady reurbanization trend has been observed in German cities since the turn of the millennium (Hertifert & Osterhage 2012), significant challenges caused by shrinkage have also been expected within suburban areas. These have been expected to especially affect the most prevalent function of housing—including both apartment buildings and detached family housing (Häußermann 2007; cf. Aring 2012).

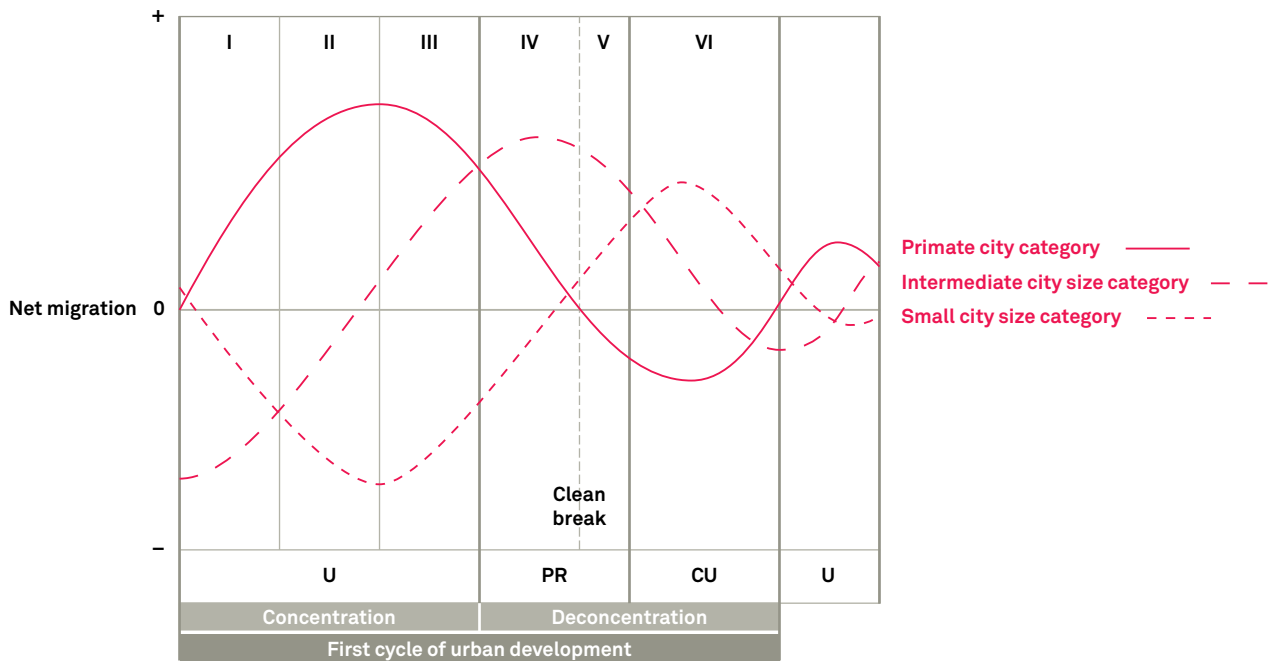
---

<sup>27</sup> Ourednicek (2004) remarks that even though the ideas of the models might be effective in principle, in addition to the fact that these merely apply to cities that have experienced a rapid industrial expansion, they have not yet been empirically proven—at least for Europe. He quotes, among others, Cheshire and Hay (Cheshire & Hay 1989; Cheshire 1995), who in studies on metropolitan areas found that none of 200 cases went through all phases and only 18 per cent went through at least the half of the cycle. Furthermore, he points out that, even in the research made by van den Berg et al. (1982), empirical affirmation could not be delivered.

<sup>28</sup> Herfert and Osterhage (2012, 107ff) point out that reurbanization is a prevailing—though not the only—trend among German cities and metropolitan areas regardless of their actual population trend. At the same time, reurbanization might overlap with further centrifugal development, even though a clear deurbanization (counterurbanization) phase is not evident.



**Figure 5:** Urbanization model by van den Berg (Champion 2001, 147)



**I:** Early primate city stage **II:** Intermediate primate city stage **III:** Advanced primate city stage  
**IV:** Early intermediate city stage **V:** Advanced intermediate city stage **VI:** Small city stage  
**U:** Urbanization **PR:** Polarization reversal **CU:** Counterurbanization

**Figure 6:** Geyer & Kontuly differential urbanization model (Champion 2001, 146)



Theories on the basic lifecycle process of settlement development have also influenced the conceptualization of suburban development. After a growth phase, suburbia was to a certain extent expected to decline during the reurbanization phase. Scenarios of decline were fed by many different contexts, including the painful 20<sup>th</sup> century experience of urban decline (Jacobs 1961), peak oil<sup>29</sup>, discussions regarding transport and land use (Becker et al. 2011) as well as changes in lifestyle preferences (Brake 2012)<sup>30</sup>. Although they pick up on an important shift in societal history, empirical data show that such an approach is unable to provide a general explanation of urban-suburban development trends. Similar to what has been mentioned above, rather than 'pure' phases of reurbanization, a "complex restructuring process in the context of the urban regions" (Jessen & Siedentop 2010) is taking place. There, many outcomes are possible, including both growth and decline, but also adaption and transition<sup>31</sup>. As Aring (2012, 73) puts it by interpreting Jessen & Siedentop 2010: "*Current trends of stagnating or limited suburbanization alongside modest reurbanization do not (yet) mark fundamental change, but seem to be embedded into rather complex restructuring processes within urban regions, which as such have not yet been scientifically understood.*"

This demonstrates that the diversifying development within metropolitan areas to a certain extent refutes the regional urbanization model. Therefore, even though certain phases and their succession on the general regional level may be statistically identified, *within* certain parts of the region and their quarters or neighborhoods contradictory parallel development paths may exist. Similarly, there seems to be limited space for predictions of general cyclic development within suburbia. This especially regards the general growth, maturity, decline and regression of an entire existing settlement type—in this case, the decline of suburbia—during a reurbanization cycle, defined exclusively by the conditions<sup>32</sup> of location, demography and economy.

---

<sup>29</sup> Sieverts (2012) assumes that every historical revolution in an energy medium also has a fundamental impact on the settlement structure. Still, there is no evidence that this fatally affects the previous structures; rather, it modifies the existing structures and adds new ones due to fundamentally increased mobility of individuals and goods within them.

<sup>30</sup> Brake (2012) argues that many individuals tend to live in urbanized rather than suburbanized contexts due to interdependencies with structural change resulting from changed societal and economic backgrounds.

<sup>31</sup> Here, in part similar to basic resiliency theories, 'adaption' stands for the change of a system without its fundamental restructuring, and 'transition' stands for fundamental changes from one system to another (cf. Holling 1986; Walker et al. 2006 or Martin 2010).

<sup>32</sup> 'Conditions' refer to characteristics based on facts such as statistical data, stakeholder constellations as well as physical shapes and functional interrelations outside and inside the area.

### **Suburbanization versus suburban development**

There are two more views on the development path diversification assumption in the context of suburbia. The first and rather general is related to the question of whether and to which extent the whole metropolitan area undergoes one common lifecycle phase at a particular point in time. If we follow Siedentop (2008) in establishing an interconnection between reurbanization and intraregional population shifts in favor of larger cities, it becomes evident that within the intraregional post-suburban shifts including the wider metropolitan area, areas of centrality gain population and, at least in relative terms, also functions at the cost of peripheral areas. This can be recognized in both relative and absolute numbers, and may apply to both population and functions. However, reurbanization does not necessarily lead to a *laminar* decline of the suburban metropolitan area. Rather, it may keep drawing population selectively from some areas and especially weaken the position of peripheral areas. General urbanization models mostly distinguish between the core, suburban and extraurban areas and not necessarily between different places *within* these areas. Therefore, even though the urbanization theory and the methods of lifecycle phase analysis are mostly concerned with the macro view on interregional or intraregional shifts, the diverse differentiation trends in maturation indicate that phases of the lifecycle need also to be tackled on the level of local areas (Siedentop 2008, Hesse et al. 2013). This notion becomes crucial when seeing the diversification as a general attribute of a structural ability to adapt (Huning et al. 2014, 13).

The second issue, as Ourednicek (2004, 3) states it, is that *“the main disadvantage of proposed theoretical models is (the) narrow view on urbanization processes concerned only (with the) relation of population growth of core and periphery of metropolitan regions”*. The basic model disregards the fact that a more complex population development is characteristic of settlement regions. As already mentioned, an increasing influx of population into the urbanizing settlement areas does not target the core first, but immediately suburban space. According to Harris (2010) and Kadono (2013), this is one of the main reasons why agglomerations deurbanize, in addition to the usually mentioned fact that the population of the core seeks less dense settlement conditions and suburbanizes as a consequence of its own growing wealth. Further, as the metropolitan settlement region becomes more complex and post-suburbanization gains significance, tangential migration within the larger metropolitan area become evident. Siedentop (2008, 207) accordingly classifies these diverse migration trends as a “new complexity”. Focusing on the suburban space, Fisher (2003) defines four different resources of population migration: the processes of counter-urbanization and suburbanization mentioned above, direct migration from rural to suburban areas, and population retention due to limited out-migration from suburbia. Making reference to Tammaru (2001), Ourednicek (2004) suggests using ‘suburban development’ as an overarching term for migration and population development in post-suburbia instead of ‘suburbanization’, which is associated with the classic rural-urban-suburban migration of the urbanization model.

This short overview shows that the development within a metropolitan settlement area during the 'second circle of urban development' (cf. Geyer & Kontuly 1993, 165 in Fig. 6) overreaches any statically repetitive model of urbanization, and rather tends towards intraregional diversification. Regional expansion of the urbanized area is further connected to its inner diversification according to the pace of demographic and functional change. As post-suburbanization and reurbanization show, a return to a general state of the initial urbanization cycle is not probable, or at least by far not the main possibility.

Especially in regard to the relative time of the start of urbanization at a particular place and to its development history, certain areas of the urban region may stand coevally in a different phase, using a different pace and following a different development path (Kadono 2010). Here Ourednicek (2004) sees a fundamental limitation of the otherwise coherent urbanization models: *"There is no doubt that xy-urbanizations mentioned by van den Berg and others are still the most important processes of urban development in Europe. On the other hand it must be noted, that these processes are not consequent stages but rather kinds of urban development. Although we are aware these particular urbanization processes are mutually inter-related, two or more of them can (and they do) coexist within one urban system or urban region."* (Ourednicek 2004, 3).

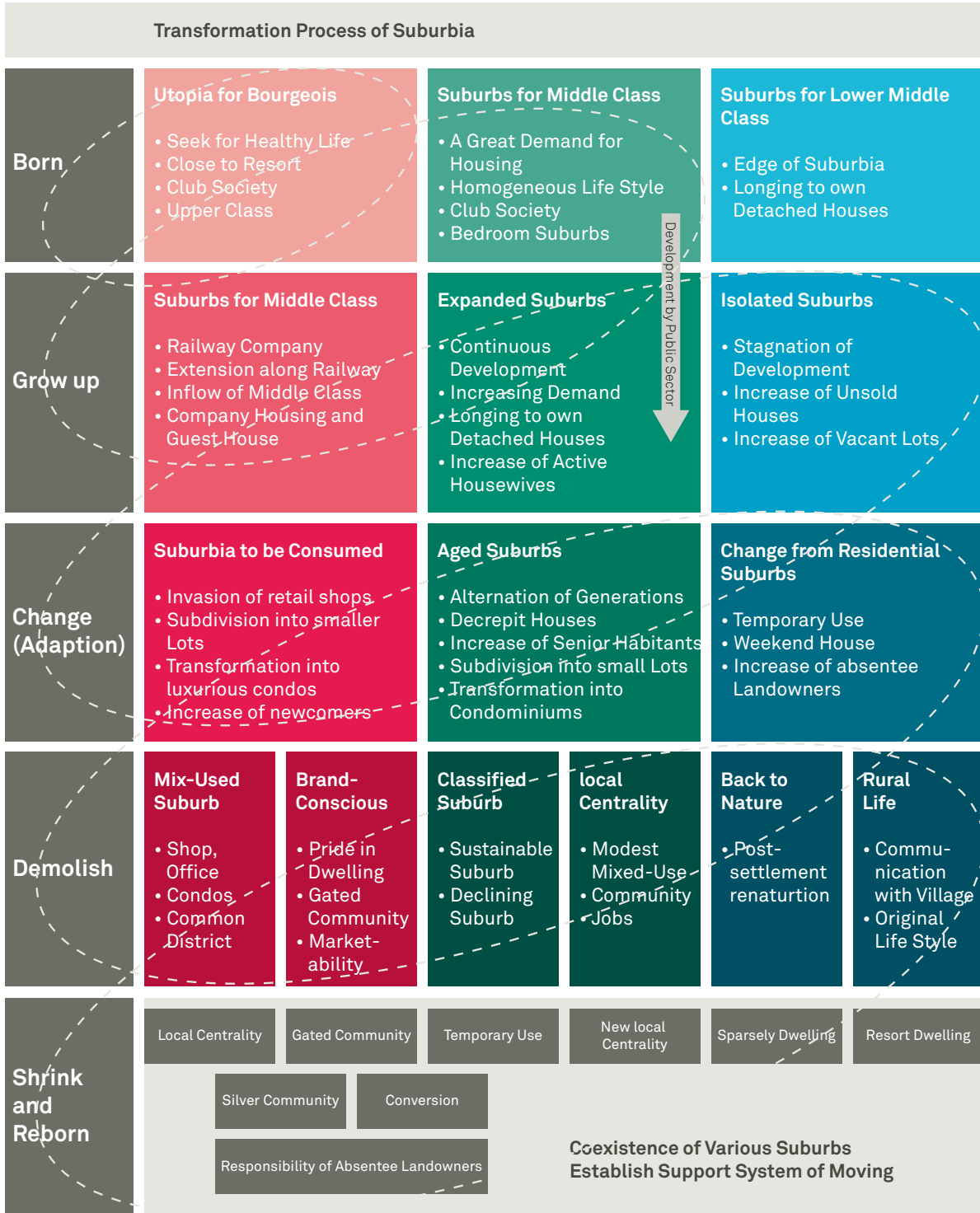
Environment		In-migration to		
		Urban	Suburban	Rural
Out-migration from	Urban	Intra-urban or Inter-city migration	Suburbanization (Suburbanization)	Deurbanization (Counterurbanization)
	Suburban	Reurbanization	Tangential migration (Population retention)	Deurbanization (Counterurbanization)
	Rural	Urbanization or reurbanization	Urbanization or reurbanization (Centripetal migration)	—

**Figure 7:** Types of migration processes according to Ourednicek (2004, 3), terms used by Fisher (2003) are shown in brackets

### **Contextualizing suburbanization careers and transformation process in suburbia**

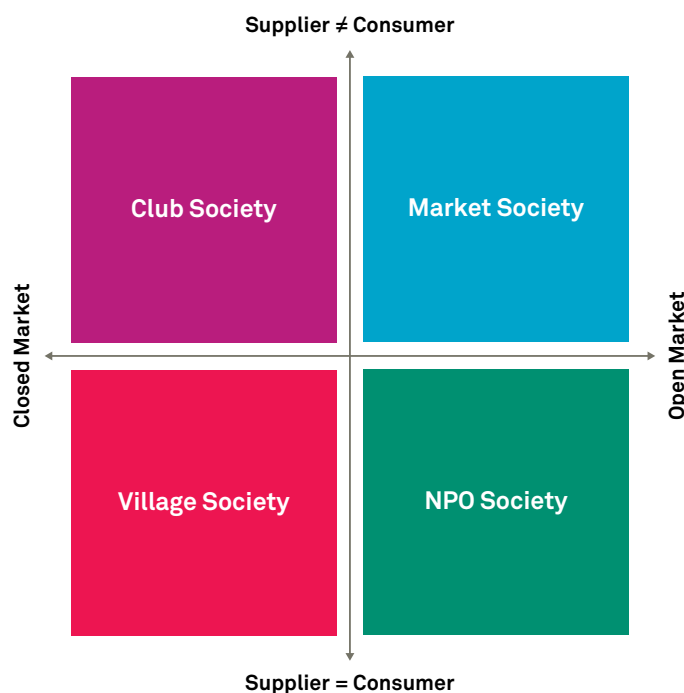
Regarding the diversifying conditions of development, Kadono (2013) refers to three basic societal contexts as phases of development in certain parts of the suburban area, which are spatially and societally *contextualized* spaces. He defines them as rings or segments of the suburban regional settlement, which not only underlie a specific situation at a particular time during their emergence, but are also codified in individual spatial (proximity to the core city, connectivity), physical (density, building size, function) and social (demography, economy and societal priority of the inhabitants) characteristics with a direct impact on particular maturation careers. These divergent characteristics define possible corridors for further settlement development alternatives that evolve for each area.

- The first suburban ring of 'inner suburbia' from the first half of the 20<sup>th</sup> century situated closest to the core is defined as the voluntarily established 'Utopia of Bourgeois', which later widely merged with the expanding compact city.
- The second is defined as 'outer suburbia', a suburban expansion area of middle-class housing and other functions during the post-war growth period, which initially also integrated older workers' and migrants' slums. As homogenous settlement areas catering to a homogenous lifestyle, outer suburbia further expanded into adjacent spaces in accordance with the growing demand of the middle-class on housing in the metropolitan area. This second area mostly included homogenous, partly state-controlled or at least supported (social) housing projects, transitional residential projects for those who first move into apartments and later into their own detached house, and a large mass of monostructured semi-detached and detached housing units. By that time, the density of urban areas was still high, and was only reduced in the case of state-planned programs. Both urban and suburban life was based on commuting between functional locations for work, residence and spare time. Suburbia was functionally diversifying, but remained focused on the core and developed its centralities mostly around traffic hubs and arteries that connected the outskirts to the core. In industrialized countries, this phase prevailed as domination suburbanization pattern until the early 1980s.
- The third phase of ex-urban settlements from the post-industrial time was not merely driven by the scarcity of living space at the core, which had already begun to become less dense, but on its high price and low quality of life on the one hand, and the low capacity of the second expansion area from the industrial age on the other hand, which still remained strongly occupied by the metropolitan population and found itself already functionally diversifying or partly urbanizing. Further, it accommodated desurbanites of all social classes, who preferred to live at the rural-urban fringe. It was therefore situated beyond the commuting distance to the core and targeted at those who longed for a suburban dream of their own house close to nature and other amenities, but who could only find an appropriate space at the sprawling outskirts of the second ring, the latest rural-urban fringe.



**Figure 8:** Transformation process of suburbia. The time-shifted manner of reaching maturity among the different 'archetypes' are shown by the diagonal ellipses (Kadono 2013, 16, adapted by author)

According to Kadono, it is important to understand that each of the suburbanization types develops its own maturation and diversification pattern: whereas voluntary and forced suburbanization was strongly divided by class, quality and location during the first phase, and later the 'Utopia of Bourgeois' during its change phase was invaded by urban functions such as retail, large housing units and plots are subdivided, new commerce and luxury condos are developed, all increasing the functional and physical density that creates urbanity and changing into a mixed-use and partly brand-conscious (sub)urban areas with corresponding users. The 'outer suburbia' represents a central or even single settlement alternative for the growing general middle class, especially regarding the urban expansion that pushes residents from the inner cities through high land prices as well as the rules and measures of urban planning. In the actual stage of development, it is influenced by a laminar physical and demographic aging process (cf. Fujii, 2010) of maturation, within which the first generation or its direct relatives are often living and the local ties to a place are high, and the remanence thus remains. Its chances for transformation depend on good connectivity to metropolitan urban cores as well as a proximity to cores in adjacent areas. Still, these are becoming quite selective across the settlement scape. The third 'super-suburbia' shows an increasingly voluntary and individual post-industrial suburbanization, which is no longer able to attract the broad middle class generally because of its great distance to (sub) urban core(s). Due to demographic challenges and the trends of reurbanization, it becomes partly stuck and matures in its growth phase. Together with disconnected areas of the second development phase, these areas are prospectively the main losers of the regional re-concentration. They may only be selectively marketed, for instance as distinct lifestyle locations at the rural-urban-fringe (Scott 2013) for certain distinguished groups of suburbanites.



**Figure 9:** Types of local governance societal system supporting core functions within settlement areas (Kadono 2013, 19)

The argument is that the potential to develop depends on particular suburban 'archetypes'. Similar to the argumentation of Ourednicek (2004), Kadono argues that these do not necessarily develop along the *whole* lifecycle trajectory, thus possibly taking an individual lifecycle course pattern. Each of the suburban area types may already show symptoms of stagnation during or immediately after their growth phase due to various external influences, and might experience a diverging pattern of maturation or decline, but also a long-lasting state of a mature stability by continuous adjustment. Particular suburban archetypes reach their maturity in a time-shifted manner: seen from the history of their emergence, the suburbs of bourgeois became mature first and have adapted during expansion phase, whereas the further two development phases reach maturity while many metropolitan areas are already stagnating. Nevertheless, both of them basically take one of two paths, declining or adapting. Rather than location itself, Kadono sees the background of path creation in a combination of potentials defined by spatial, infrastructural and functional interconnection potential to other core areas, the archetypes in each of their different maturation stage and possible adaption paths. These individual adaption paths are co-shaped by the internal logic of change as well as the individual combination of societal support for the adjustment, characterized by an alliance of societal, local, market and non-profit organizations as 'societies' supporting the core functions of a settlement and leading its adaption (Fig. 9). Together with the acknowledgement of archetypical diversity in development paths according to particular place and history, 'soft measures' play a similarly crucial role in path creation as the 'hard' locational, physical and statistical facts do. To such also belong commerce, jobs, culture, entertainment, communication and welfare at place or nearby<sup>33</sup>.

Regarding the locational character and access issue, the specific character of the suburban structure has to be taken into account. The rather international view on suburban development is undoubtedly a fruitful if arguing on theoretical level. At the same time, suburbanization in Germany historically and in terms of planning is underlying particular conditions. E.g. the rigid zoning rules differentiating clearly between areas in and outside of settlement areas and the planning power of German municipalities led together with the specific settlement structure and other measures to a specific suburban settlement pattern. Suburbs in Germany mostly evolve on areas adjacent to existing settlements and are also functionally connected to them. There are also no large suburban housing project developers as they are known from the US or Japan. For the mature suburban residential areas, the merely intergrated structure of German suburbs might prove as favorable in the future. Nevertheless, the general challenges based on aging of the society and the resulting decline in population numbers as well as the change of housing priorities and alternatives in the population are changing the perspective of suburban housing not as general phenomena, but in terms of particular locations. Seeing it from the point of the suburban housing, the competition on real estate market

---

<sup>33</sup> For similar concepts related to this understanding of fourthsome stakeholders' combination, see e.g. the Multiple Houses Project ('Multiple Häuser') supported by the German Federal Government (Reichenbach-Behnisch, 2010 & 2014).

will become stronger in coming years, most likely leaving parts of the suburban settlement areas under or unused. It is also likely that the real estate market in Germany has the chance to attract those who would like to live in the suburbia but could not yet afford it, or even those who would like to live in the city and could not afford. Hereby, not necessarily the absolute distance to the core city shall play a crucial role, but rather the actual access time, shopping, healthcare, educational and spare time activities offered at place. Especially larger cities with a diversified basic infrastructure will therefore manage to keep and even partly expand their inhabitants number, while peripherized areas, regardless if within the metropolitan area or outside of it, may struggle with over-maturity and stagnation.

### **Diversification as a natural process of suburban development**

Suburbia does not generally decline during the reurbanization phase, and particular areas of the urbanized space, including suburbia, do not necessarily develop in a laminar fashion. Rather specific (and to a certain extent also 'new') qualities of the development in any of the areas—urban, suburban or rural and those areas between them—are expected to evolve. This strengthens the assumption that, in general, maturity differentiates or diversifies urban systems. In this regard, there is no ultimate either or between suburbanization, counter-urbanization and re-urbanization, as these may simultaneously exist within the generally changing region and enable particular areas to develop along relatively independent 'paths'. Differences among these paths are based on their relational and absolute intensity at certain places, channeling them into more or less general development trends. Seen from the meso and micro levels, the different phases of urbanization may therefore be regarded as interconnected and in part parallel phenomena with a specific significance on each (micro, meso and macro) level. To understand the development in the maturing 'second circle', suburban *diversification in time* becomes crucial as another viewpoint in addition to the assumption of the general growth-maturity-decline trajectory.

Summarizing this one can conclude that maturity may shift urban systems to an even more diversified development. The maturation process over time is accompanied by divergent influences on the macro, meso and micro levels<sup>34</sup>, which co-define individual development paths. As such, the diversified developments on the micro-level become relevant in relation to the regional and urban development. Even though the methods of lifecycle phase analysis are mostly concerned with the macro view on intraregional shifts, authors indicate that the phases of the lifecycles are mirroring onto - and thus need to be tackled also on - the meso and even neighborhood level (Siedentop 2008; Bizer et al. 2008; Aring 2012; Beilein 2013; Schnur 2014). This individual development in particular parts of suburbia in different societal concepts and spatial as well as economic contexts neither follows a pre-determined pattern, nor is it necessarily stable, remaining the same

---

<sup>34</sup> Here: macro = region, meso = city / municipality, micro = (sub)urban quarter.



throughout its development trajectory. Instead, one can identify a differentiated range of development perspectives for particular parts of suburban areas. The question arises, therefore, in which way lifecycle models can accommodate diversification within particular suburban residential spaces. The suggestion followed here advocates for deeper insight into the particular development path of different suburban areas and their sub-systems (Menzl 2007, 402 f).

This must be based not only on quantitative data, but must also try to achieve a certain degree of qualitative comprehensive insight into the path dependencies that shape individual diversification patterns. According to such an approach, it might be necessary to divide the regional demographic and/or economic growth-and-decline discussion from the subject of the local suburban quarters or neighborhoods. In terms of individual lifecycle development, the functional, demographic, economic and political situation as well as the resulting societal situation in suburbia also develops along specific paths. These may not only make particular suburban areas take on completely diversified external and internal contexts and exogenous and endogenous conditions<sup>35</sup> (and a resulting complexity after some decades of existence); they may also provide these areas with a different scope of further development options along differentiated path dependencies. Such a view also offers the opportunity for a more dynamic understanding of suburban change, taking into account the dynamics of the process within suburban development trajectories instead of solely focusing on evidence offered through general theoretical frameworks and statistically approved local data or on visual signs of physical 'decline'.

---

<sup>35</sup> Here, the external context signifies the characteristic of a particular settlement area defined as using externally ascribed attributes. It often has to do with the role of the particular area in both urban (meso) or regional (macro) contexts, regardless of whether this is defined mentally, spatially or functionally (cf. Schnur 2014). The internal context stands for the sum of characteristics defined by the inhabitants and internal stakeholders of a particular settlement area. Both external and internal contexts are separate from exogenous and endogenous conditions.



## SUBURBAN MATURATION AND LIFECYCLES

# 3

### **3. SUBURBAN MATURATION AND LIFECYCLES**

#### **3.1 The growth-maturity-decline pattern in the maturation context**

The originally static definition of suburbia, understood and analyzed at a particular time and place, is gradually shifting towards a dynamic understanding of an ongoing suburban career as a transition process. Owing to such a longitudinal development, its “*examination (...) in the context of metropolises*” opened up a broad discursive field for development oriented research and strategic planning approaches (cf. McManus and Ethington 2007, 318ff). Much time had elapsed before the conclusion could be made that suburbs do not necessarily “retain their peculiar socioeconomic characteristics for long periods”, as Farley (1964, 38 in Choldin et al. 1980) stated in his Persistence-Stability Theory. They rather remain instable and change over time. This topic remained an issue until the 1970s, especially in the American discourse. Three classic concepts of change, all based on the understanding of the city as an ecological system, all based on sociology and all of them mainly related to residents, served as a foundation. The first is the ‘residential succession’ by Burgess (1925)<sup>36</sup> who explained spatial development by means of upward mobility and the succession of residents into other, better-situated areas, while the neighborhoods they had left were taken over by lower-class inhabitants. In the second concept, Lowry (1960) calls this ‘filtering’. Both authors propose an interpretation of persistence and downgrade. As third, probably one of the earliest theoretical lifecycle approaches, comes from Hoover and Vernon (1962), who combined the states of physical and social development of residential areas and defined the stages of development, transition, downgrading, thinning out and renewal. Both models are often used in a complementary manner (Schwirian 1983). Choldin et al. (1980, 973) conclude that “all three of these concepts—succession, filtering and neighborhood lifecycle—consistently portray a downward change, not stability, among residential areas”.

The classic suburbanization concepts are underlined by the proposition of a continuous growth and expansion of suburbia. They are fed by a more or less sustained economic and demographic growth, or at least by an influx in inhabitants of the metropolitan area, by stable lifestyle patterns and ideals, and therefore, by predictable lifecycles of growth, maturity and decline, which are resolved by passing areas over to the next-lower group of users or uses by spatially expansion of the settlement area. Thus, they create a kind of ‘successive novelty’. The residential succession concept takes for granted that certain areas accommodate a particular range of social strata, where the inhabitants move in as they reach the lower limit of the range and move out when they exceed the upper limit. The filtering concept is based on socially selective succession from aging neighborhoods into newer ones. The lifecycle concept of Hoover and Vernon (1962) is based on the understanding of a basic closed-cycle system in which transitions are more or less predictable.

---

<sup>36</sup> Also known as the Invasion-Succession Model (Schwirian 1983).

Choldin et al. (1980) also came to a similar conclusion by analyzing educational, occupational and income ranks in suburban residential areas over the span of their initial 30 years of existence, thus covering the first demographic generation cycle.

These basic assumptions on the suburban evolution result into a specific construction of the 'sub-urban' as a one-way time-and-space-based definition of the urban-to-suburban development trajectory. This static definition has not fundamentally changed ever since it came into being in the 1950s. It has even been reflected in the cultural perception, such as in films and works of fiction as well as in sociological texts (Beuka 2004). Meanwhile, suburban development has mostly been defined within the middle-class context. Within the process of maturation, however, vast areas of current suburbs with a history of five or more decades continue to exist, spanning over the period of far more than the first two generations of users.

Still, not only mature, but also fairly young suburban areas may experience demographic and/or physical decline (Hesse et al 2013). Similarly, evidence of vast areas of existing suburbia and of current maturation patterns has shifted the point of view from the residents to the physical structure. Socially and/or ethnically driven residential succession (Burgess 1925, 1928) exists, but it is by far not a central issue in the German suburban environment. The difficulty is rather that residents *remain* in their houses even when they are older and their houses become over-mature. All of the three points made above show that the successive novelty model is only a theoretical pattern limited by the diversity of the reality, especially where different influences shape the individual path of the life careers of those living at that place.

Still, although recently conducted studies on mature suburbia include resident surveys, their examination areas are rather defined by suburban housing types. Detailed and valuable insights such as Menzl's (2007) analysis of the social life of a suburbanizing family do exist, but they are not at the core of the questions regarding the background of general remanencies or persistencies. Current studies rather refer to a specific kind of suburban areas of the same age and physical structure, mostly from the 1950s and 1970s (Dransfeld 2010; Berndgen-Kaiser et al. 2013; Hopfner & Simon-Philipp 2013; ILS 2014). Such areas is being referred to as areas of 'demography-driven suburban decline' (Bendgen-Kaiser et al. 2013). However, the data used to identify such a decline are, at best, based on quantitative surveys or standardized surveys of inhabitants. Regarding their content again, they refer to physical housing rather than to the individual life stages and particular decision backgrounds of the residents. What we do know from quantitative statistical series analysis and physical surveys are the conditions of the suburbanization process as such, as well as the inner dynamics of particular maturing suburban areas. There is no doubt that they both have a significant impact on how suburbs develop. Nevertheless, understanding under which individual and complex conditions particular stakeholders (e.g. house owners) perform their remanence seems to be more meaningful when aimed at strategic planning action than through monitoring or surveying the occurrence of maturation. Recently, adjustment of cities, regions,

organizations and stakeholder networks is being pursued within the theoretical discussion on the adaptability of regional and urban systems (Wiechmann 2008; Reimer 2012; Altrock et al. 2014) in order to understand processes of adaptation. However, with some exceptions<sup>37</sup>, only limited attention has yet been given to the internal strategies of particular neighborhoods on the urban periphery outside of urban development programs such as 'Stadtumbau' or in suburban family housing areas.<sup>38</sup> Still, these studies already show that maturity-related diversification in time and adjustment strategies need to be discussed rather than focusing solely on particular phases of growth, maturity and the decline of the structures and demography of a place.

## **3.2 Components of a canonical view on suburban maturation**

Lifecycle polarities of growth, maturity and decline on the background of the urban-suburban polarity and successive novelty have a substantial impact on how mature suburban areas are conceptualized.<sup>39</sup> This trajectory evokes assumptions on particular lifecycle phases, not only as a part of the urban-suburban pendulum already referred to in the second chapter, but also as a set of linear given frames animating structuralistic and positivistic conceptual and analytic approaches.

### **Homogeneity**

Perhaps one of the most significant of the approaches used is the 'homogeneity assumption', which is based on the understanding of suburban expansion within a relatively short period of a development phase with significantly distinguishable morphological characteristics. These in turn enable a clear definition of particular areas in comparison to the surrounding settlement and their conceptualization as homogeneously built areas inhabited by population of a similar social status who settled during the same period and simultaneously underwent similar life careers, finding themselves in a similar mature state within a 'double matured' demographically and physically aged environment. The homogeneity assumption is defined as fixed to an area entity and is understood by its demographic and socio-cultural homogeneity. It is thus rooted in the container-based understanding of space, also disregarding other definitional aspects such as those by Lefèbvre's spatial turn (cf. Schmidt 2005, 13). Strategical planning solutions for the challenge of maturity sought on this basis merely target a re-growth strategy as a next part of the trajectory. To reach a phase of re-growth, consequent strategic conclusions essentially account for measures that evoke an investment in physical renewal and demographic rejuvenation on the micro level. Or they account for soft systemic strategies

---

<sup>37</sup> A rear case is e.g. Kabisch 2014.

<sup>38</sup> A rear case is e.g. Homburg 2001; Hesse et al. 2013.

<sup>39</sup> See Forsyth 2012 in chapter 2.1.

that generate physical renewal and demographic rejuvenation on both local and municipal levels, to encounter decline trends within a classic linear growth-maturity-decline urban lifecycle model (cf. Smith et al. 2001). Such strategies suggest that a broad scope of urban planning measures need to be implemented primarily by the municipalities in order to reach such a target (Nierhoff 2008). However, at the same time, they predominately conceptualize the suburban space as a physically definable ‘container’ (Löv 2000) on the micro-level based on mono-structured areas, not taking into account its broader functional, demographic or governance frameworks, as well as its differentiation in time. But particular suburban areas—as any others—may be strongly interconnected in a spatial, functional and contextual way beyond the particular homogenous settlement type. Thus, in many cases it becomes difficult to clearly define them within the suburban settlement space. Similarly, concerning physical investments, real estate owners within the mature phase usually act individually according to the rationalities that are rooted in the context of their individual life situation (Beilein, 2013). It, however, becomes extremely difficult to regard such situations and interdependencies within the structuralistic approach. Persistencies<sup>40</sup> and remanencies<sup>41</sup> remain strongly rooted in the individual personal and family situation, which to a certain extent is not related to a possible physical or demographic homogeneity of the neighborhood, whether or not this is given in an albeit defined suburban area. Objective inefficiencies are often individually internalized, as subjective alternatives are unclear or undesired. From the structuralistic point of view, these particular rationalities of owners and inhabitants as stakeholders within the suburban context are often understood as negatively ‘privatopic’, irrational, and therefore hindering in terms of the lifecycle change. At the same time, they reveal the limitations of the homogeneity assumption.

The assumption of *homogeneity* in suburban areas is thus based on a similar understanding of suburbia as a result of a selective migration of inhabitants and functions from the city towards its outskirts, mirroring corresponding morphological and functionally disintegrated settlement patterns. The homogeneity of suburban areas, which accounts for physical, morphological, functional as well as for demographic and social structural measures of ‘typical suburbia’, takes for granted that those who have left the city would subsequently settle in its primal suburban context within the sprawling suburbs, which to a large extent are reinforced and do not further evolve or adjust. At first glance, the clear spatial division of residential, retail or production areas allows one to assume that a clear classification and assignment of quarters or at least coherent areas would stand for a timeless

---

<sup>40</sup> Persistence in suburban residential areas is mainly defined in sociological terms, as “the maintenance of steady socio-economic composition of residents over time” (Sies 1997, 197). One or more of four variables are used: family income, occupational status, educational level, and in the American context, race. Sies points out that these factors are good for identifying persistence, but there is still no clear consensus about what kind of factors are responsible for it. Only the factors of distance to the city and the status of the original residents correlate here (ibid.; see also Farley 1964).

<sup>41</sup> Remanence is here used in the definitional frame of spatial planning, meaning the unwillingness to adjust one’s own pattern of residence after the household size or circumstances have changed (Just 2005).

homogeneity (Beckhoven et al 2005<sup>42</sup>). Studies on suburban maturity often define mature suburban quarters by measuring homogeneity in terms of morphology, age and demography. Additionally, a 'double homogeneity', both physical and demographic, is presumed within the residential areas, based on the successive city-to-fringe migration into particular juvenile areas of growth (BMVBS/BBR 2008; de Temple 2008; Berndgen-Kaiser et al. 2013; Aring 2012).

The Zwischenstadt discourse (Sieverts 1997) has introduced conceptual approaches that point out more complex spatial connections, which partly show up as more strongly interconnected across the alleged spatial-morphological borders of the settlement network than the morphologically defined place would suggest (Sieverts 1997 & 2005; Sieverts & Bölling 2004). In this sense, a morphologically and demographically based spatial definition of particular suburban quarters is relativized. As a consequence, a direct implementation of the inner-city 'Quartier' discourse (Schnur 2010) within the context of the suburban physical container comes into question.

Even though urban quarters are often morphologically and functionally definable and are often perceived as such, this definition is by far not the only valid one (cf. Schnur 2010 & 2014). Furthermore, authors report a significant independency between suburbs and the core city. Historically, the metropolitan areas of large cities were often highly inhabited prior to the mass transport revolution, and suburban settlements were characterized by a diverse local economy, ethnic profile, population density or total migration. To an extended part, inhabitants of suburban areas also originate from other areas than the city core, such as the existing metropolitan settlements or through rural-urban or global migration. Thus they are clearly not just consisting of those who were affluent enough to afford to live outside the city by their own choice<sup>43</sup>, but also of those who cannot afford to live inside it. Especially in the US, where since the end of the last millenium more people under poverty are living in suburbs of metropolitan areas than at their cores, the issue of social exclusion and economic exclusion - especially within the so called first ring close to the core cities - is going hand in hand with suburbia's ongoing diversification (Kneebone & Berube 2013). The outflow of the affluent urban middle class in this context seems itself to be an episode of what we today might call a 'classic suburbanization' within a broader history of suburban development. Consequently, one must ask to which extent non-homogeneity is distinctive and which effect it has on the suburban settlement landscape. (Wunsch 1995<sup>44</sup>; Ourednicek 2004)

---

<sup>42</sup> Quoting Turkington et al. 2004 and Hall et al. 2005.

<sup>43</sup> Such a picture has been promoted, among others, by Fishman (1989).

<sup>44</sup> The classic simple suburbanization myth is based on a social and economic vacuum of the urban borderland (Wunsch 1995, 9).



## Episodity

A 'change concept' correlating with the supposition of physical and demographic as well as social homogeneity is the *episodity* of suburban development along the trajectory of a lifecycle. Based on the narrow definition of 'classic suburbanization', an important attribute of the episodic view is that the development of the suburbs is a 'fatally determined' one, targeting decline as a consequence. If a classic linear lifecycle within a homogenous settlement is assumed, it leads to the notion that, after a period of sudden growth and subsequent universal maturation, a period of decline based on the natural maturity of households would occur. In areas that were developed as a coherent project at one point of time, it is presumed that such a period would affect most of the households at approximately the same time (Zakrzewski 2011; cf. Aring 2012; and others). Beckhoven et al. (2005, 4) summarize 'problems' of maturation which evolve beyond the 'double maturation' of planned neighborhoods through the aging of the structures and social down-filtering. These include structural problems resulting from outdated or malfunctioning physical structures, internal design problems, competition problems to newer or other more attractive areas due to the market position, including also a poor image, urban design or spatial problems related to the modernistic concept and peripheral location, internal social problems including poor neighborhood relations and cohabitation conflicts among households differentiated by social and lifestyle factors, the financial problems of both tenants and owners due to rising rent and empty units, management and organizational problems because of bad management and insufficient resources, legislative problems concerning apartment ownership as well as wider socioeconomic problems, including unemployment and broad differences in income unusual for a Fordist society for which the suburban areas have been constructed.

## Lack or absence of stakeholders

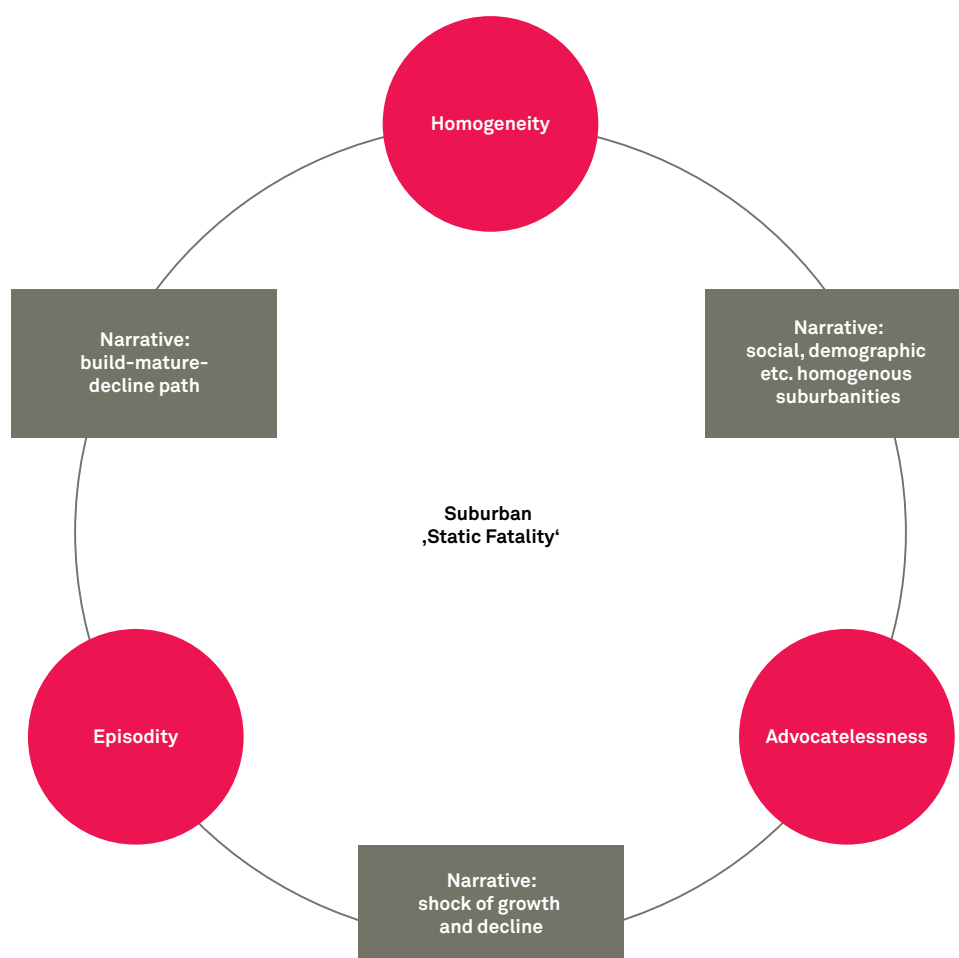
The third intrinsic assumption connected to suburban maturity is the *lack of stakeholders* within the quarter<sup>45</sup> in comparison to the city, especially when taking into account classic detached or semi-detached family housing areas. Measures for action are consequently mostly addressed at the municipality as the main or even the only legitimate actor. Studies on particular suburban areas have already collected a large scope of concepts or measures for possible action, including 'demand-oriented portfolio adjustment' (Nierhoff 2008)<sup>46</sup>, information, communication and consulting measures, or directive land use management (Wüstenrot-Stiftung 2012; Simon-Philipp & Hopfner 2013). The municipality can monitor the situation and issue strategic visions in form of master plans. At the same time, as analysis of governance of the inner-city areas shows, the steering itself needs to be fulfilled by others, which would then connect the quarter with the sector departments of

---

<sup>45</sup> 'Quarter' here is understood according to the concept of Schnur (2014) as further explained in chapter 3.3.

<sup>46</sup> 'nachfragegerechte Bestandsanpassung'

the cities (cf. Selle 2008, 11; cf. Borchard 2010, 140ff). When addressing tasks of suburban governance and on-site action, advocates of suburban areas might be even more difficult to grasp and less visible than those within the urban context, and relying on the municipality becomes the first choice. Calling the municipality to its imagined main responsibility, as it is often done in studies, assumes that no internal advocates within particular areas exist, and thus views the municipality as the main if not the only remaining advocate. However, municipalities do not often see themselves as in charge or able to fulfill this claim. Thus, the question remains of whether there is reason to believe that the three other more-or-less-institutionalized stakeholder categories of state, capital and organized civil society are irrelevant in suburban settlement areas just because municipalities do not yet engage themselves in the topic of suburban maturity in a way which a demand-oriented adjustment based on the homogeneity assumption would require.



**Figure 10:** Suburban 'static fatality'—components of the dystopian canonical view on suburbia (own illustration)

## The SCAD myth

The perception of suburban development based on *homogeneity, episodity and advocatelessness* can be summarized as a 'simply cycled suburbanized area development myth' (SCAD)<sup>47</sup>, which consists of a tight connection between *growth* as an attribute of *development*, and *stagnation* as a matter of *decline*. An important consequence of the SCAD myth is the tendency to understand the suburban area as a cyclically non-facetted generational model, where areas homogenously develop during their maturation in a consequent order, time span and particular areas: the oldest, with the highest proximity to the core, are the first to change, and the outer areas do so later. Consequently, the development of suburbia as such and its particular areas is marked by a general lifecycle episode of growth, maturity and decline. This naturalistic urban ecology based way of approaching the mature suburbia is related to structuralistic methodical concepts (Flyvbjerg 2001), which perpetually call analytic approaches based on objectively measurable indicators such as demographic and spatial data into action and reassuring the general lifecycle episode instead of opening towards alternative interpretative ways.<sup>48</sup>

## Discourse on suburban stagnation

There exists a field that describes the narrative of the SCAD complex within the German suburbia discourse. Adopting Jäger's (2005) concept of discourse, Hesse (2010) points out three parallel and concurring discourses of suburbanization: Zwischenstadt, and suburbia as the 'next slum': the canonical 'inter- or meta-discourse' in contrast to the 'special discourse' carried out by a limited number of professionals contextually connected within deeper levels of the topic, and the 'contra discourse', which presents alternative ideas and concepts. Even though all three are branded as special discourses, the suburbanization discourse might be seen in a role of a basic inter- or meta-discourse, as it possesses a significant element of broad scientific and public knowledge and contextual understanding.<sup>49</sup> It is also strongly rooted in the polarized city-suburbia distinction, which, as a counterpoint to suburbanization, led to its birth.

---

<sup>47</sup> 'Myth': Leaned on McManus & Ethington (2007) as well as Wrong (1967).

<sup>48</sup> As an analytical reference on inertia of the positivistic concept, Reimer (2008, 140) points out a politology study by Morcöl (2001) on this issue.

<sup>49</sup> The enormous expansion of cities during the industrial age stands at the core of the understanding of suburbia as a derivative of the city. However, many authors point out that urbanization within metropolitan areas might have much in common with several parallel development paths, of which urban expansion was just one. In fact, in many cases it is not clearly definable whether a city expanded in an alternative manner of density and urbanity, or evolved as an alternative product of urbanization under different spatial conditions at the same time. An alternative story would be a self-standing metropolitan area which became urban during the industrial age (cf. Wunsch 2004).

Special Discourse	'Suburbanization'	'Zwischenstadt'	'Suburbia—the next slum?'
<b>Main subject</b>	Expansion of the city beyond administrative, functional, morphological borders	Emergence of new urban forms at the urban fringes, beyond and in between	Stagnation of suburban settlements
<b>Core assertion</b>	Suburbanization as a general mistake of European urban development	These suburban spaces are neglected and misunderstood	"It's over"—suburbia is coming to an end, for demographic, social and economic reasons
<b>Discourse practice</b>	Contradictory, but overall critical assessment of these developments	Emphasizing and further analyzing related areas, focussing on the built environment	
<b>Stakeholders</b>	Urban planners, urban researchers, urban policy makers	Urban planners, urban researchers, architects	Researchers, journalists, architects, New Urbanists

**Figure 11:** Discourses on Suburbia (Hesse 2010, 5)

The Zwischenstadt discourse might—at least for now—be becoming a meta-discourse within special scientific areas. In contrast to this, the 'next-slum' discourse works on the same foundation as the suburbanization discourse. Suburbanization, as a mistake of and threat to the European city, is now being conquered by demographic and lifestyle changes, leading to reurbanization (Häußermann 2007 Brake & Herfert 2012). In this context, and Brake (2012) attempts to define societal reasons for the emerging reurbanization in Germany, coming to the conclusion that the phenomena of the living environment have changed significantly in favor of integrated urban areas. These include the multi-jobbing and working woman, flexible life and workschedules, open partnerships, a less strictly planned parenthood, reduced family structures and changing household constellations, to which households react by project oriented phased life concepts. To such, the suburban life determination is not generally fitting. Especially regarding the situation of women, significant changes in roles occur since the second half of the 20<sup>th</sup> century, leading also to divergent constellations and pressures among suburban housing (Menzl 2007).<sup>50</sup>

<sup>50</sup> The fragmentation of the conceptual discursive path shows missing reflexive links between suburbia and family housing, leading to conclusions which conceptualize the slowing growth of suburban settlements and partial population growth at metropolitan cores as the death of the suburbia as such ("Suburbia geht das Personal aus", means "suburbia is losing personnel", especially the housewives). (Häußermann 2007).

The main subject and empirical narrative for the post-industrial suburbia is stagnation, expressing the stasis of expansive development, and interpreted as the disability to develop in another way than expansion. Here, in parallel to the suburbanization discourse, an object-related discourse evolves. It concentrates mostly on housing and divides the suburban context morphologically into the most obvious and frequent types of large housing estates as well as detached and other family housing. By doing so, it separates these particular issues from the complex view on suburbia.

According to what Hesse (2010) rather polemically calls the ‘Suburbia - the next slum?’ discourse, based on a scientific literature review, Aring (2012) summarized three parallel discourses on maturing family housing, which to a certain extent have dominated the suburban maturity discourse after the large apartment housing areas were the main issue at the end of the last millennium, thus standing as a kind of *pars pro toto* of the next suburban agenda. In his reflection, he distinguishes the discourses on apartment and building vacancy in rural areas<sup>51</sup>, the discourse on suburban space around large cities, and the object-related discourse on stagnating family housing from the 1960s and 1970s.

### **Family house areas maturation discourse**

However easy it seems to analytically, conceptually and strategically handle and communicate stagnation as a scientific and planning issue, it should also be regarded with a certain caution, especially when addressing in it certain morphological and demographic constellations. On the one hand, pursuing the topic of a certain housing type within the metropolitan area might seem to be - if not more progressive - then at least more pragmatic, especially by declaring the family houses as the next potential stage of suburban ‘slum creation’. Here indeed, there is also a legitimate need for finding analytical approaches and practical strategies for particular morphologies. On the other hand, from a more comprehensive point of view, the existing research on these topics suffers from the presumptions already defined under the SCAD complex as well as limited discursive assumptions mentioned above. The discursive problems in analysis show that the homogenous housing area-based approach as a main approach to suburban development is questionable in two fundamental ways. First, it remains difficult to distinguish between urban, suburban and rural single or similar family housing, as family housing can be found virtually anywhere and thus within divergent contexts. Thanks to the distinctive definition work on peripheral areas and ‘peripherization’ in German literature, a rough but reliable discursive context is still being established for areas outside the metropolitan context (Beißwenger & Weck 2011; Kühn & Sommer 2012; Bernt & Liebermann 2013; Kühn & Weck 2013). It must be admitted that such defined peripheral areas never have or should have been a part of an earnest suburban discourse. In peripheral rural areas, where nearly the whole settlement’s building

---

<sup>51</sup> Also correlates to a large extent with ‘peripheral areas’, cf. Beißwenger & Weck (2011) and others.

stock consists of detached or similar family housing, the role and future of such a housing type underlies quite different conditions, such as the consequences of peripherization (ibid.), hardly comparable to those of suburban areas within most parts of the metropolitan areas. Unfortunately, many (even respectable) studies on family housing refer to case studies regardless of whether they are situated inside the city or suburb, or outside the metropolitan context at the periphery. Similarly, the same type of family housing within the spatial and functional context of the urbanized first suburban belt, which, however, has already been obscured by the expansion of the urban core and has become an integrated part of it, underlies different conditions of development to those areas already mentioned.

Second, it still remains unclear to which extent it is possible to define functional quarters exclusively along particular morphological and/or demographic borders. Besides the fact that statistical areas as the main sources of quantitative definitions mostly do not sufficiently fit to either functional or morphological definition of quarters<sup>52</sup>, disregarding the suburbia and/or urbia as a contextual space does not solve the question on how family housing areas are interconnected with its surrounding settlements, its functional interdependencies as well as overall development conditions on the micro, meso and macro levels. Defining housing 'quarters' as analysis and strategy entities according to the limits of certain morphology thus bears the danger not only to negate the broader locational setting as a trigger of individual development, but also to disregard the complexity of the settlement area as such, especially regarding the societal and stakeholders' context the particular part of the settlement is embedded in.<sup>53</sup>

To a certain extent, the argumentation introduced above might lead to the assumption of a critique on morphology oriented research in general and the family house type in particular. However, such assumption has to be categorically rejected. It is indeed meaningful to broach the issue of morphologically focused family house type research in order to gain knowledge about this particular settlement type, not least to prove or disprove the range of really existing 'typical' homogeneity assumed on morphological measures. What is being criticized here is the underestimation or even absence of the context marked by a broader view, both in geographic, functional and societal measures. Even when assuming that types or groups of morphologically and demographically clearly definable physical areas generally exist, if one would put aside the location as one of the main indicators, a morphologically limited view at the outset remains a factor that limits the ability to recognize the societal and functional setting of a housing area's 'connection space' and its possible role in the particular suburban house's dynamics and stability.

---

<sup>52</sup> This also might be one of the main practical difficulties in the implementation of the methodology for 'use cycles of housing quarters in city regions' by Bizer et al. 2008, who developed a comprehensive way of data analysis resulting into a handy system of early problem monitoring.

<sup>53</sup> These difficulties may apply generally. In the suburban residential context, they are connected not only to family housing, but also to the apartment housing in new towns, being definitely one of the reasons why cities in Germany are obliged to deliver comprehensive urban development plans overreaching far more than the place where concrete measures are to be done, when applying for state funding programs for reconstruction or clearance such as Stadtumbau.

It seems that the spatio-functional definition by Kadono (2010 & 2013) relating certain residential areas to areas of obligatory functions for a 'good residential area' and including commerce, jobs, culture, entertainment, communication and welfare, could stand for such a functional dimension. Also stakeholders' configurations copy and to a certain level also extend the spatio-functional definition depending on individual settings. Such an understanding is based on a neo-institutional understanding of stakeholders and their institutional structures, which evolve freely according to the particular situation (cf. Reimer 2012, 126ff). In any case, this kind of '**systemic space**' definition includes the local but also the superior levels. A space defined like this, as a general context for neighborhood change, not only accommodates the basics of neighborhood change theory and analysis, but to remarkable extent, it also pre-determines the lifecycle concept of settlement areas. This approach should therefore be discussed as a next step before conclusions will be made on suburbia maturation discourse.

### 3.3 Approaches to neighborhood change

In order to broadly reflect the quarter or neighborhood theories would lead too far from the original aim of this dissertation. Without having this possibility to reflect these fields in this context, it is worth mentioning that a morphologically narrow definition of 'quarter' ('Quartier'; cf. Schnur 2014) as a spatial reference for analysis, strategy and action can only be used in a very general way, and may rather apply if defined as a complex, multifaceted, and partly even a multi-level entity in which particular careers develop. Schnur (2008)<sup>54</sup> points out eight interconnected portals of the multi-definition of a quarter. These include: **(1) Social ecology-defined succession and invasion cycles** and quarter lifecycles based on the Chicago School of sociology and Hoover's and Vernon's succession model (1962). They define 'quarters' as natural areas emerging through segregation, based on the principal of selectively filtering invasion and succession as known from natural (ecological) systems. An argumentatively connected portal is **(2) the neo-classical theory**. It highlights **market value** as the main driver of constitution and change within urban quarters. Regarding lifecycles, it relates to the theory of so-called '**dual cyclic model**', which includes the repeatedly occurring switch between urban expansion and urban renewal (Lichtenberger 1991, 25ff). The next portal is the **(3) demography** issue, including migration and housing demography. It mainly concerns the attempt to typify the interrelation between household change and fluctuation, in turn outlining four different types of quarters: first, quarters with a highly fluctuating population mostly driven by gentrification or ghettoization; second, morphologically inflexible and/or homogenous areas with high fluctuation; third, family housing areas with families in their different reproduction and household

---

<sup>54</sup> In Germany, the quarter-based management concept for the endogenous empowerment of 'disadvantaged' urban areas has a dominant position in planning, concentrating resources from different governmental levels (city, state, federal government as well as the European Social Funds ESF) onto the local area. A further differentiated view of 'Quartiersforschung' ('quarter or neighborhood-based research') is included in the same book.

phases strongly fixed to the place through home ownership and raising children (cf. Menzl 2007); and fourth, segregated areas with no principal changes in households and no fluctuation. The fourth portal stands for **(4) sociography**, with a holistic approach to surveys and community studies, which attempts to understand the quarter as a whole and its parts in depth on the basis of empirical research rather than to typify such an area. The (5) neighborhood-based approach focuses not only on reflecting the scientific, but also the 'real reality' through mainly qualitative research approaches. It highlights the individual actors in addition to the particular space and focuses on neighborhoods as functional spatial-social entities of living spaces and the creation of both physical social places defined in a multi-layered manner. The broadly used term of (6) governance in the role of a 'quarter portal' focuses on power and decision-makers, their groups and constellations as well as influence within a particular system of a quarter or city. It sees these urban regimes as a kind of growth machine, which—to a great extent based on (local) social capital—are able to steer the fate of certain areas in a particular way. The (7) Neo-Marxist approach explains real estate as value accumulation objects and points out possible conflicts with their—mainly residential—function. Its main current critique is of the Post-Fordist accumulation regimes, which in terms of housing relate to tertiarization, privatization and deregulation with remarkable social systemic (and especially social) consequences, such as growing segregation. (8) Post-structuralism, finally, may be seen as an approach-related reaction to the previous tendencies by the reconstitution of or a 'turn' in space, culture and linguistics. As a basis for its concept of space, it relates to the spatial concept by Henri Lefebvre (1991) (cf. Schmid 2005), defining the quarter as a triad of dialectical-interdependent concepts, including 'spatial practice' or 'perceived space' experienced as a spatial area of everyday life, the 'representation of space' or 'conceived space' mentally conceptualized by science and planning as a study object, and 'representational spaces' or 'lived space' as a matter of cultural identity and symbol, including socio-cultural 'tagging' or interpretation of space by particular user groups.

However distinct these categories might appear in their argumentative concepts, their approaches may overlay or combine. Even though they invite to select the most fitting model, for any approach conceptualizing residential space, a complex understanding is necessary in order to grasp the substance. Failing to do so and thus act selectively would mean reverting to simplified approaches criticized above. Such an approach may result in a rather punctually qualified point of view on a certain settlement area, which does by no means grasp it as a whole. Consequently, it leads to interpretations that only allow for a limited explanatory ground, and, therefore, a similarly limited conceptual value. In contrary, research willing to contribute to a broader understanding of mature suburban residential areas in order to enhance the foundation for strategic planning action cannot be satisfied with a concept limited to selected analytical postulates. The 'systemic space' approach, therefore, stands here for non-dogmatically based integrative analysis. Recognizing that an all-encompassing approach is an impracticable illusion, it seeks its borders for an analytic approach in the context of the topic of change, thus focusing on processes that include and guide it as more or less intentional adaption.



## Human ecology approach

The term ‘neighborhood change’, which is mainly used in the North American context, and besides its stronger emphasis on social (and thus also racial) issues, quite directly incorporates the concept of maturation and adaptation within a multi-layered definition of a settlement area. Here, the ‘neighborhood’ is one of the central topics when addressing change in urban areas, not at least because of its long discursive tradition. Beckhoven et al. (ibid.) point out three traditional approaches to neighborhood change: the human ecology, subcultural and political economy approach. The *human ecology approach* is based on the Chicago School. The concept is identical to the approach already mentioned in previous chapters, including the assumption that “Neighbourhood change is described as a natural process that inevitably results in decay” (ibid., 7). It is based on the assumption of economic competition among social classes (Burgess 1925). Hoyt (1933) later argued that not just income, but a sum of pull-push factors determines this competition. Accordingly, (1971)<sup>55</sup> (similarly to Schnur (2010) and Zakrzewski (2011)) he argued that by decreasing investment, the attractiveness of residential areas for young families to settle also decreases. The ecological approach has often been criticized for its limitation within narrow economic thinking, and also for the fact that human ecologists often analyzed the city as an entity separate from the society and its dynamics as a whole, and especially with only a small conceptual space for human agency. A contiguous critic states that the approach mirrors the American reality, but does not fit with the European welfare state concept. Viewing this from the present German experience, developments vary according to the context of the particular settlement: in terms of succession and filtering, the maturity of the suburban settlements generates the growth of new settlements on the outer fringe, urging the wealthy to move out and leaving the poor behind. However, many of the first-wave suburbs from the early period of the suburban expansion already became an integrated part of the city and remained or regained their attractive and wealthy conditions. In relation to the US, in Germany, the social dynamics of succession are not as evident, so that the market situation of particular mature suburban areas based on location, age and the condition of particular physical objects is believed to be steered by the demand generated from the suburbanizing population in the context of generational alternation. Under such circumstances, the market potential of particular locations and physical objects, such as suburban housing in combination with demographic development on the macro level, shifts into focus. This highlights the outdated real estate in peripheral locations on the one hand and generally falling demand due to the reduction in the size of potential buyer groups (mainly young families) on the other. Similarly relevant, yet not handled quite as often within the context of the polarized view in which suburbia as such is said to be under decline, is the competition between the growing supply of real estate within existing suburbia (which, in line with ‘brownfields’, one could deem ‘suburban brown estates’) and greenfields.

---

<sup>55</sup> Quoted in Beckhoven (2005).

## **Subcultural approach**

Based on the criticism of the human ecological approach, change within the *sub-cultural approach* is based on several variables of change, including economic, social and attitudinal, psychological and demographic factors (Ahlbrand & Brophy 1975). The subcultural approach further states that “neighbourhoods do not follow the same trajectory through time and are therefore not doomed to deteriorate” (Temkin & Rohe, 1996<sup>56</sup>). The same authors argue that these trajectories are determined by the confidence, satisfaction, commitment and social network of the local actors and stakeholders. The attachment and activity of local residents is highlighted as important for the fate of the neighborhood, and the breakdown of social relationships is seen as a reason for decline.<sup>57</sup> However, the neighborhood lifecycle theory has been frequently criticized for its strategic implementation. Hollander & Nemeth (2011, 4f) point out that “neighborhood life-cycle theory was developed in order to better understand and rationalize the declining city”, and used in the American context to advocate public financial interventions within declining neighborhoods, as the Boston Redevelopment Authority’s urban renewal program in the West End of the city shows (Gans 1962; Teaford 2000). One of the main concerns of Hollander & Nemeth (2011, 355) is what they call “serious flaws” of many such smart ‘decline’ practices: *“a top-down orientation, the assumption of a blank slate at project locations, and the requirement of a quieted public”*.

The basic understanding here is that citizens are able to influence the situation within their neighborhoods by themselves (Beckhoven et al. 2005, 8). The subcultural approach is based on the matter of social cohesion of or within the neighborhood, which needs to be able to develop and realize strategies locally in connection to the broader (here often called ‘regional’), context. This connection is measured in an information exchange (Hollander & Nemeth 2011) as well as in financial measures (Metzger 2000). The critique of the subcultural approach is mainly based on the lacking role of the physical environment and its aging in connection with the situation of neighborhood communities and their possibilities to act (Beckhoven 2005). It is also based on demographic issues, including the aging of the population in a particular neighborhood, which created a specific—and, in the case of demographic renewal, by the settlement of new households—generational or even social differentiation (cf. Aring 2012). Generally, the criticism of the subcultural approach points out a one-way, narrow view on the quarter itself without taking into account the broader development trend on the macro level of both national and global societies or economies.<sup>58</sup>

---

<sup>56</sup> Cited from Beckhoven et al. (2005, 8).

<sup>57</sup> See Ahlbrand & Cunningham (1979), here quoted in Beckhoven (2005). See also Metzger (2000).

<sup>58</sup> Beckhoven et al. (2005, 8) call these “macro factors”.

### Political economy approach

The *political economy approach* takes on critics by emphasizing larger economic and societal contexts and operating on global and local levels. Especially in the European context, the retreat of the welfare state, which causes macro-level social diversification, is seen as one of the fundamental influences on neighborhoods. Such diversification not only includes decline patterns, but also 'growth machines' (Molotch 1976), following strategies of selective wealth pursued by economically, institutionally and politically strong players at lucrative areas of the settlement, such as the revitalization of urban cores through investment in real estate. Evaluation of the approach shows that it is based on the change in the welfare state environment towards a neo-liberal one, thus proving a better comparison with the European reality. On the other hand, the focus on the institutional role as an external influence within this process remains at the core of such an argumentation as a reminiscence of the welfare state's top-down societal conceptualization by underestimating internal factors of residents and their role within the neighborhood process. (cf. Pitkin 2001; Beckhoven et al. 2005)

As the role of the macro-environment has been recognized, conceptualizations have been made separately for the American and European contexts (ibid.). For the American context, the discussion continues alongside the human ecological concept, for example by emphasizing succession over decline or by trying to more strongly include the interconnection of the institutional and inhabitant levels. For the European context, particular 'conditions for decline' are being defined, often along with multi-thematic concepts but with a stronger emphasis on the physical context and under the further recognition of technical and economic decline, distinguishing internal and external conditions that influence the neighborhood's development (Prak & Priemus 1986; Power 1987) as a kind of 'self-perpetuating mode' (Andersen 2003, Beckhoven et al. 2005).

### **3.4 Critique of the suburban maturation discourse**

Summarizing the three approaches above, there is a strong argumentative interconnection in terms of the growing role of human agency within the two latter concepts, thus connecting it with the differentiated paths of each neighborhood. Consequently, works in all three concepts are criticized when they underestimate the local context, and positively perceived when interconnecting the micro and macro levels mostly in terms of managerial interaction between the local inhabitants and higher institutional systems. Except for the human ecological system, an emphasis is put on the macro societal conditions that influence the neighborhood's possibility to develop and intentionally act—for example, the macroeconomic situation. This is an important difference to the fatalistic approach mentioned above.

Regarding human agency, within the suburban context a difficulty remains that argumentation based on cases is still merely limited to large housing estates, which are often characterized by rental users and institutional owners. Only a small (but growing) amount of analyzes reflect human agency within family housing areas in Germany.<sup>59</sup> Regarding large housing estate analyses, Beckhoven et al. (2005, 16f) state that these provide lower social costs and lower quality housing, and therefore *“it has become clear that the initial quality of the housing stock can be a forceful determinant of its later situation, physically as well as socially. No matter what you do, if the initial quality is low, deterioration may start quickly and continue rapidly.”* This quite fatalistic statement marks an interpretative concept based on the decline process. However, as for owner-occupiers, a conclusion is made that *“Owner-occupiers are in general more inclined to put investments in their dwellings and neighbourhood, financially as well as socially. The fear of declining house values can be seen as an important determinant of this tendency.”* (ibid., 16f). Avoiding decline by influencing development marks an important step away from the passive understanding of a linear one-way development of a neighborhood. Certain actors of a steered process—here, the owners—are seen as subjects who can actively influence the change. It draws to the conclusion that neighborhood adaptation to changes in order to prevent or cope with decline, shrinking or other change phenomena, even growth or gentrification, is more important than the change itself—regardless of the question of whether decline is causing neighborhood change or vice versa.

Hereby, it remains questionable to which extent fatalistic assumptions are right at place: From the adaptationist point of view, low initial quality of the housing stock combined with unfavorable external circumstances may also induce an earlier and more substantial impulse for improvement among institutions, including financial resources, thus avoiding fatal maturity and strengthening the housing stock's further development. Similarly, the owner-occupier model in certain cases may stand for a lower inclination to negative changes, as the owners are keen to

---

<sup>59</sup> Studies by Beilein (2013) belong to such rare examples.

maintain or increase value of their real estate rather than let the value decline. However, as already mentioned above, recent experiences with ‘double matured’ (aged physical structure and population) family house neighborhoods show that remanencies and persistencies of owners may lead to disinvestment, caused by a significant readiness to passively accept the consequences of negative changes such as bad or inappropriate physical condition of the housing as well as the internalization of ‘hidden vacancy’ within their own houses, thus generally resisting adaptation.

Regarding the definition of suburban residential quarters, it might be necessary to re-conceptualize the area definition and step out of the morphology and statistic definitions towards a more systemic definition of space which would capture functional and other interconnections. Schnur’s concept of quarter may deliver initial hints on how to do this, but it still leaves a quite ‘fuzzy concept’ of space. Defining areas using a systemic approach might remain similarly general. A further hint on such a concept should, therefore, first be drawn on the experiences of stakeholders. This may remain a topic for the forthcoming empirical chapters.

It seems that there is yet only little knowledge about the diversification of suburban residential quarters *during* the process of its maturation. Therefore, one must also ask in which way maturation needs to be understood within the concept of lifecycles in order to reflect the dynamics of change and adjustment, especially regarding the action of stakeholders at the local place as well as the higher institutional levels. To do so, after laying a discursive base for the ‘*maturation*’ in suburbia, as the next step it is reasonable to focus on its *processual* part, described within the lifecycle concept.

Despite of the basic accuracy of such a *dystopian canonical* view along a time and space trajectory, the societal and spatial context of the suburban area’s development *during* the lifecycle plays, together with other individual aspects, a fundamental role for diverging maturation careers in both time and space. According to the research question, the cognitive interest of this dissertation focuses on capacities, patterns of action and processes in their relation to the mature suburban space, rather than describing the state of an area development on behalf of indicators. The following chapters, therefore, attempt to deal with a more pluralistic alternative to the homogeneity-based definition, including both spatial and actor issues within the neighborhood concept, moving towards a universalistic phronetic (Flyvbjerg 2001) actor and process oriented approach, which aims on process description and understanding in order to reveal mechanisms beneath the indicator-based cognition.<sup>60</sup>

---

<sup>60</sup> An introduction into the phronetic approach and its distinctions offers Reimer (2012, 62f and 140ff).

### **3.5 Life-cycles in ecological and social-ecological systems**

This dissertation focuses on the lifecycles of settlement systems in general and of suburban residential areas in particular. Lifecycle concepts are rooted in different disciplines such as biology, sociology and economy as well as in urban planning. Although based on similar basic principles, in each of the disciplines they show specific discourses of different theoretical depth and directions. The common understanding of lifecycles is based on the trajectory of formation and growth, peak and fade-out for what is generally being described as 'systems'. As for the planning context, this general pattern has already been mentioned in the settlement context as consisting of growth, maturity and decline in previous chapters. It should be stated that it is neither the task, nor is there a capacity in this dissertation to discuss the broad fields of lifecycle concepts in all their particularities. Therefore, in the following sentences, specific main discourses and their characters will be presented against the background of the particular cognitive interest of this dissertation.

In social sciences, the focus is directed towards demographic as well as social life phases of individuals and communities, such as families and households. Due to lifestyle changes in the post-industrial and post-modern society, the traditional family models are pushed aside as individual life careers significantly change the way of life and new flexible lifecycle models emerge to accommodate such diversity. This diversity includes, among others, the growing number of, for example, single-life careers, single-parent households, non-traditional life communities, divorced households, late parenthoods or childless couples. As the traditional life patterns diversify, so does the related housing market. The typical housing career, i.e. moving out of the parents' home after having reached maturity, founding a household and family, then reaching retirement, which have created predictable demand on particular housing markets within (but not limited to) suburban residential areas, is becoming less explicit. It merely results in weaker ties to local neighborhoods, greater mobility and partial preferences of flexible urban environment. (Herlyn 1990)

In economics, the lifecycle of products stands in focus, marked by trends of total sales numbers of a product. New products usually experience a growth in sales at the beginning of their career and a later decline when being replaced by newer products. Marketing and production strategy as well as innovation in products may steer the lifecycle in order to stabilize or prolong it. This makes steering tools a strategic focal point of production, labor and investment management. Especially regarding the continuity and perspective of the producing company itself, the combination of lifecycles of different products towards a continuous execution is of a significant importance. (Koppelman 2001)

A relatively juvenile but already distinct field within economic lifecycle studies is the real estate economy. Here, the expected or actually useful life of real estates is conceptualized, including the three main and further diversified stages of building erection, use, and finally abandonment. Similar to product lifecycle strategies,

management targets uses that are the most profitable and longest lasting. This is marked by the distinction of the technically and economically useful life spans. Here, too, the strategic product portfolio management may play a significant role, as the well-known distinction between 'cash cows', 'poor dogs' and other types show. A real estate usually differs from short-life products such as everyday goods in its length of useful life span and their immobility that fixes them to a certain location. Innovation and market adjustment take paths that differ from usual movable products. Reuse, adjustment, update, repair and reconstructions are common. Within this context, the dual cycle developed by Lichtenberger (1998), which includes a second lifecycle of renovation following the decline phase, can also be sub-summarized. (Preuß & Schöne 2010)

Bizer et al. (2008) summarize basic findings relevant for the conceptualization of lifecycles in residential quarters within metropolitan regions. A general transferability is - as already mentioned - given within the basic concept of the lifecycle. But also within the particular fields, references to alterations may deliver valid conceptual hints. Thus, the basic concept proves to be a solid simple basis, being relatively rudimentary and inflexible at the same time. Further alternations, therefore, aim to mirror the complexity of the real world, such as the concept of new household types in the sociological context or the inclusion of external costs including environmental follow-up costs in economy, and the dual cycle in real estate lifecycles mark the convergence of discursive directions on the lifecycles. Furthermore, and perhaps more important if regarded from a strategic point of view, a continuous management of the product life and system innovation seems to be an ultimate necessity in order to remain successful on the market beyond the lifespan of the particular product. Significantly, taking balance within lifecycles does happen in regard to the integrated management of different products within a common productive palette in order to reach long-term stability in a (productive) system: *"Analogically to the different products in one firm, which may appear in different phases of a lifecycle in one time, the 'quarter' also consists of different 'components'. They include buildings, social and technical infrastructure, but also the inhabitants."* (ibid., 11). In the eyes of Bizer et al., the alternated lifecycle concept also helps to *"operationalize the social dimension of lifecycles"*, as it *"offers a conceptual framework for the development of indicators which would describe the requirements on the use of apartments, adjacent open spaces and the quarter itself."* (ibid., 16). Besides the dual phase model, they build their approach to the 'use cycles' of the van den Berg urbanization model and the human ecology approach of the Chicago School, further operationalized by Hoover and Vernon (1962) and Ottensman (1975), who finalized and enlarged the criteria set into a numerical indicative catalog.

As far as the theory of van den Berg and the basic human ecology concepts by the Chicago School have already been reflected and evaluated in the previous chapters, this approach in its principles leads back to a structuralistic methodology based in the positivistic planning ideology of the 1970s rather than offering insights into decisive adaptive processes. Contrastingly, the argumentation in further chapters sees suburban areas as systems which do not necessarily develop steadily in a

regular and clearly definable pattern, but are reluctant to internal and external influences and woven into economic, demographic or financial contexts, trends or crises both locally and regionally. A distinct alternative approach to neighborhood change could be, therefore, led by the assumption that maturation of particular parts of suburbia is grounded in differing societal concepts and spatial contexts. This opens the possibility of an enlarged view on the lifecycle concept, which is usually trapped within the evidence of growth or decline. In terms of individual lifecycle development, this would mean that the functional, demographic, economic, political and the resulting societal situations develop along specific careers. These not only make particular suburban areas appear in a completely different context, role and physical shape after some decades of existence. They also offer a different scope of further development options along differentiated path dependencies. Such a view offers an opportunity for a more dynamic understanding of suburban change and adjustment. It is more concerned with process dynamics within suburban development trajectories than with their statistic evidence or visual signs of physical decline, which are indeed definable as attributes of stagnation.

In order to approach the open path, two development concepts should first be discussed in order to structuralize the differential approach: the lifecycles in *ecological* and *social-ecological* systems, among others connected with Holling (2001) and Walkers (2006), and the discussion on *lock-in, equilibrium* and *evolution* within *path dependency* by Martin (2012), based on the economic geography discourse as a more pluralistic alternative to the basic neighborhood change concepts and lifecycle theory. As a discursive frame, it further serves the following analytic levels: the resilience—stability phenomena of transition patterns as lifecycle balance steering strategies, including and balancing the processes of urbanization and diversification, flexibilization and specialization; the physical and societal conditions of the suburbanization process within external and internal contexts; and the panarchy system within and between different levels of space on the macro, meso and micro levels, its stakeholders, their conflicts and synergies.

### **Life-cycles in ecological and social-ecological systems**

Even though the definition of *ecological* adaptive cycles as established, for instance, by Holling (1986, 2001), can be easily related to demographic lifecycles or those of physical buildings, there is a mass of yet uncategorized strategic patterns to encounter transitions within *social-ecological* systems<sup>61</sup>. Holling's system is based on the characteristics of two basic development loops, both consisting of two phases, which altogether build the lifecycle system: the Fore loop, consisting of a growth phase, where the system is under construction and retains a high level of flexibility to adapt to changing conditions, and of a conservation phase, in which the system strengthens the form which it achieved during the growth phase, chan-

---

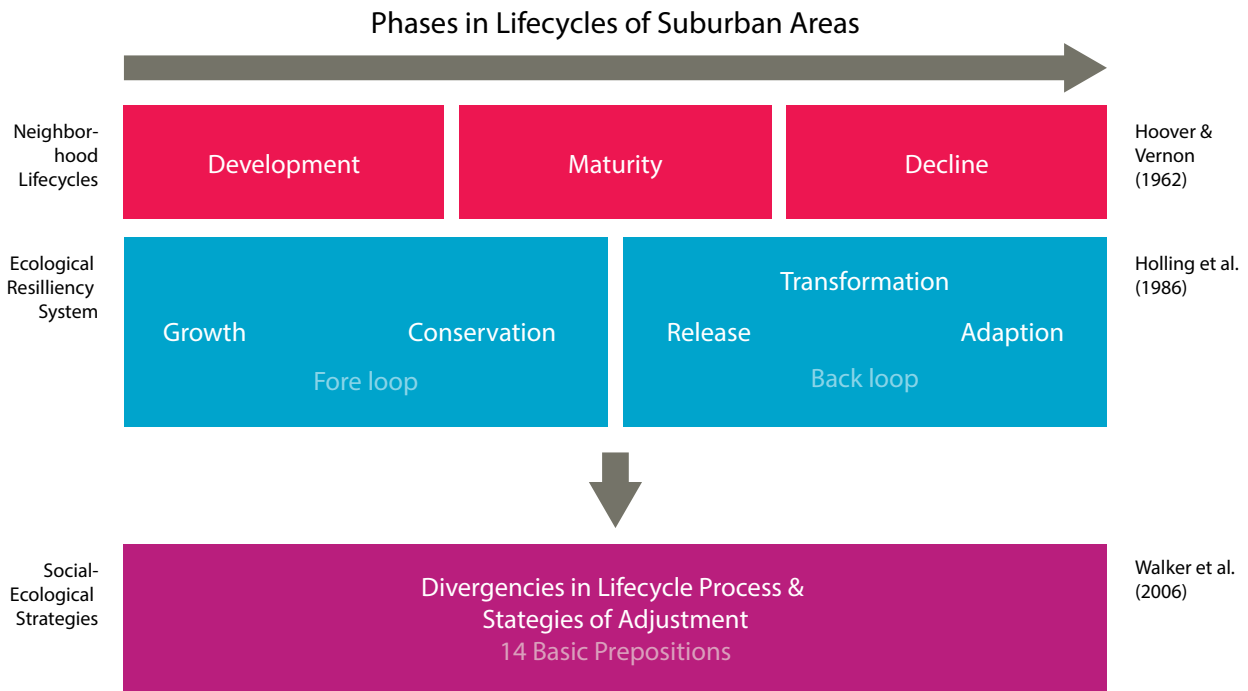
<sup>61</sup> Here, 'system' is defined as 'neighborhood', with all the limitations discussed in previous chapters. 'Sub-systems' stand for particular households.



ging it into a more stable, but less flexible one. The Back loop consists of a release phase where the resources are used not to stabilize, but rather to retain the system in its stabilized shape, thus preventing changes and adaptations.

It further consists of the adaptation or transformation phase, in which the system is no longer able to retain its previous state. It then adapts by using available internal and/or external resources, or it collapses and transforms into a different system.

According to Walker’s (2006) heuristics of adaptation and transformation, compared to ecological systems, human actors in social-ecological systems account for some 14 different resiliency propositions. Walker also points out that rules for both adaptation and transformation applied to ecological systems have not yet been sufficiently proved and developed for social-ecological systems, which suburban and urban areas account for: *“Coupled social-ecological systems may have very different dynamics when compared to the ecological components, because the social domain contains the element of human intent<sup>62</sup>. Management actions can deliberately avoid or engineer the crossing of actual and perceived thresholds.”* (Walker, 2006, 7).



**Figure 12:** Approaches on Phases in Lifecycle of Suburban Areas (own illustration)

<sup>62</sup> 'Human intent' mentioned by Walker in the context of the lifecycle theory can be handled here as identical to what Yuen (1979) calls 'human agency', as mentioned in the previous chapter.

This illustrates the complex dependency between different physical layers, stakeholders and actors within a system of particular interests and both institutional and functional interconnections conditioning each other. The question remains of whether certain patterns are followed within the suburban transition as social-ecological systems in terms of space, place and society, or whether they generate a complex dynamic of transition on merely random, situationally determined principles. Simply put—are there basic suburban lifecycle trajectory patterns, and if yes, of what kind?

### **Resilience—stability phenomena**

As Walker et al. (2006, 13) put it: *“Resilience is the capacity of a system to experience shocks while retaining essentially the same function, structure, feedbacks, and therefore identity. It follows Holling’s (1973) notion of resilience as the amount of disturbance a system can absorb without shifting into an alternate regime.”* As a ‘boundary object’ (Brand & Jax 2007, 22), resilience includes different connotations of more vague and malleable meanings. Since the 1990s, it has been used as a concept to measure sustainability, and each discipline has provided specific definitions (Arrow et al. 1994, Perrings et al. 1995, Folke et al. 1996, Levin et al. 1998), including in planning (Pickett et al. 2004). However, Walker’s and Holling’s definition draws a picture of a certain amount of a passive stability or flexibility of a system thanks to which a system may withstand a shock. Swanstrom et al. (2009, 8), referring to social phenomena, deliver a more general definition in the context of the dynamics of development and change processes, which lead systems to the ability to withstand particular influences<sup>63</sup>.

*“Resilience is the ability to respond to a challenge by 1) redeploying assets or expanding organizational repertoires; 2) collaborating across governments and across the public, private, and non-profit sectors; 3) mobilizing or capturing resources from external sources.”*

According to the basic resiliency concept, systems switch into the adaption phase or remain static in their development path and collapse after a shock. In social-ecological systems, path dependency might become more differentiated. During the phases of release and reorganization, systems are most vulnerable to change, because *“...it is in these phases that the effects of the linkages between the system of interest and systems at other scales become more pronounced.”* (Walker, 2006, 9)

---

<sup>63</sup> Note that Swanstrom et al. use the word ‘challenge’ instead of ‘shock’. As we will see further on, shocks do not necessarily have to stand for the only form of influence on a system.

At the same time, the quite complex and often individual adaption phase is not yet as well understood as the growth and conservation phases. Though shocks to a system may occur in several ways, they are mostly understood as a sudden change of an external regime<sup>64</sup> that influences the system. Thus, challenges within the resiliency system are usually conceptualized along external influences, causing systemic adaptations or collapses. Still, slow, long-lasting or change trajectories such as demographic change or economic/social decline on both macro and micro levels may also cause challenges to a system and act as triggers of transition, leading to collapse, adaptation or transformation, as soon as in certain situations the point of no return has been crossed. For example, the main point about the interconnection between the built/physical and social structures, which often has the same relevance as the built/physical and demographic homogeneity discussed in the previous chapters, is that they often (especially in current suburbia which evolved after World War Two) grow and mature together, so that usually during the growth and conservation phases not just one of them significantly changes if the other does not. During the release phase, however, the built/physical structure and the social and demographic structure seem to adapt in a divergent pace: social and demographic structures, as based on individual personal careers of generational cycles within particular households, develop more individually as sub-systems within a particular microsystem of the neighborhood. They might be changed by varying constellations within the households, including move-outs or deaths, which in some cases can be regarded as a shock or threshold to a micro-system of a particular household and may finally even lead to its collapse. If several households are of the same age and display a similar career, the impact may influence the microsystem: theoretically, the whole social ecosystem of a settlement area may break down when a certain amount of households faces such a fundamental shift. Such a situation is often predicted for homogenous settlement areas (Aring 2012 and others). The physical structures, however, which obviously cannot change by themselves until they are adapted by the actors of the social structures, remain mostly existent in this phase, just keeping losing steadily their accumulated (market) value towards a—more or less theoretical—physical collapse. Such a characteristic relatively lessens or slows down the physical structures (slow variables) and relatively increases or accelerates the social structures (faster variables) inclined to (abrupt) changes. Consequently, the physical structure as a slow variable can be seen as a greater determinant of the resiliency of a settlement area than the demographic and social structure. However, the tandem of physical and demographic or social structures may show a relatively high resilience as a particular micro-system, which finally manifests itself in both persistence and remanence effects. Particular case studies of suburban households, such as those of Koura (2016) and Beilein (2013), reveal that social micro-structures (households), especially within the release phase, are mostly unwilling to adapt or transform

---

<sup>64</sup> e.g. the end of the communist era and its influence on the framework of the housing conditions and policy in East Germany, or the 2008 real estate crisis in the U.S.

their physical structures or social environment as long as fundamental disruptions (such as serious disruptions in social constellations or constraints caused by age, illness or death) virtually disable them to continue on the path of the release phase. Consequently, the career during the release phase depends on the combined resiliency of the physical and social structure, which in turn is determined by the amount of accumulated resources—both physical/material and human. A ‘prolonged release phase’, manifested in the combination of the continuing decline of the physical value of a building and the very resilient social micro-regimes in which a fundamental adaptation or transformation is not an option (cf. Gunderson & Holling 2002), is what can be called *mature suburbia*<sup>65</sup>.

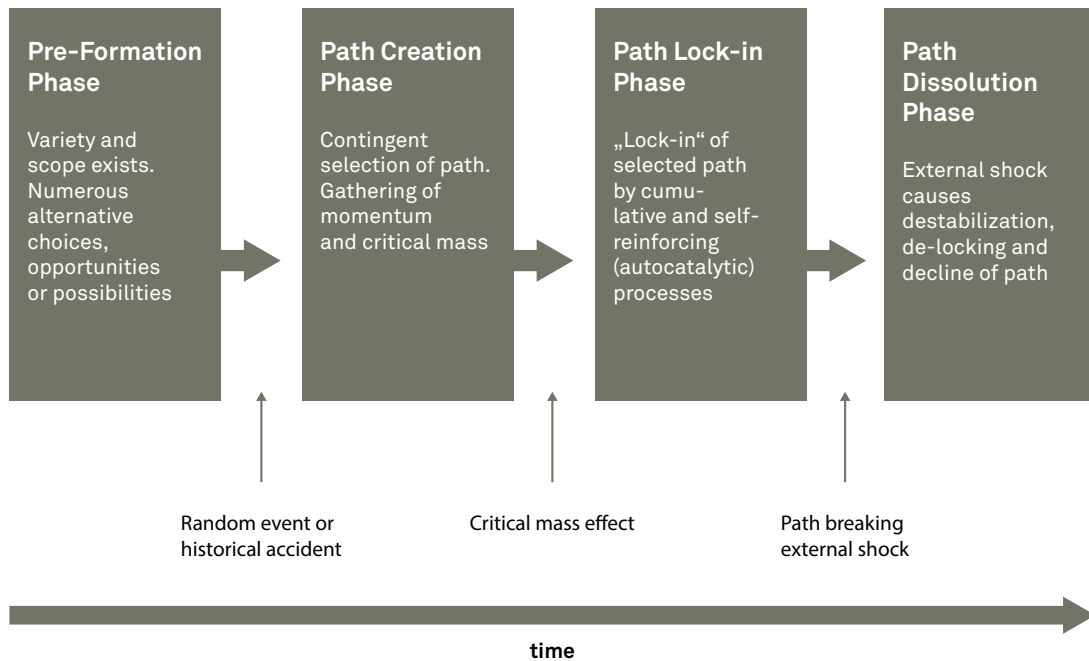
### 3.6 Path dependence— Approaching maturity and adaption within evolutionary concept

Now, as the basic lifecycle patterns have been accommodated within the basics of the suburban perspective, the previously formulated question on the suburban lifecycle trajectory patterns becomes more concrete: when and why do systems switch into an adaption phase or collapse after a shock? Through which measures can adaption be tackled? And finally, which measures can planning strategies use in order to steer the adaption of the suburban landscape?

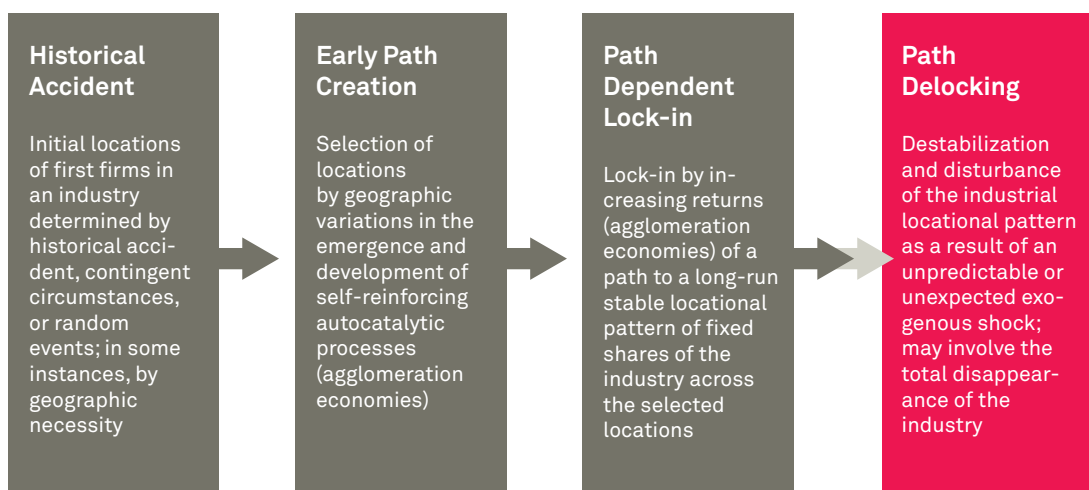
The question of when and why systems switch into an adaption phase or remain static in their development path is related to the *path dependence* discourse, as it is pursued in political theory in terms of the evolution of institutions (Boas 2007, Martin 2010), as well as in economic geography in terms of the evolution of technology and technological standards (David 1988; Arthur 1988). However, during the past years, path dependency has been adopted by several other academic concepts and especially in the field of social sciences (David 2007), basically remaining within the context of societal (such as organizational, political, institutional or cultural) innovation. It has also been implemented within economic and technological evolution (Martin 2010), like into firm clusters, location and innovation (Martin & Sunley 2010; Martin 2010 & 2012). It has indeed created an interpretational context reaching far beyond the science of its origin; Martin and Sunley (2006, 2) refer to it as a “general ‘evolutionary turn’” (Martin 2010, 2). This generalization shift also presents the opportunity to use it for analyzing development phenomena in the context of suburbia. To understand it in terms of path dependence, terms from evolutionary economic geography prove as highly compatible and thus useful. The Evolutionary Economic Geography “*explains the spatial evolution of firms, industries, networks, cities and regions from elementary processes of the entry, growth, decline and exit of firms, and their locational behaviour*” (Boschma & Frenken 2010, 2). Through its process of understanding, it is directly connected to the evolutionary system of lifecycles already mentioned in previous chapters.

---

<sup>65</sup> In German: ‘Reife Suburbia’



**Figure 14:** Phases of economic evolution of an industry or technology implied by basic David-Arthur type path dependence (adapted by Martin & Sunley 2010 from Sydow, Schreyögg & Koch 2005)



**Figure 15:** The canonical path dependence model of spatial industrial development (Martin 2010, 5)

### **History in the path dependence context**

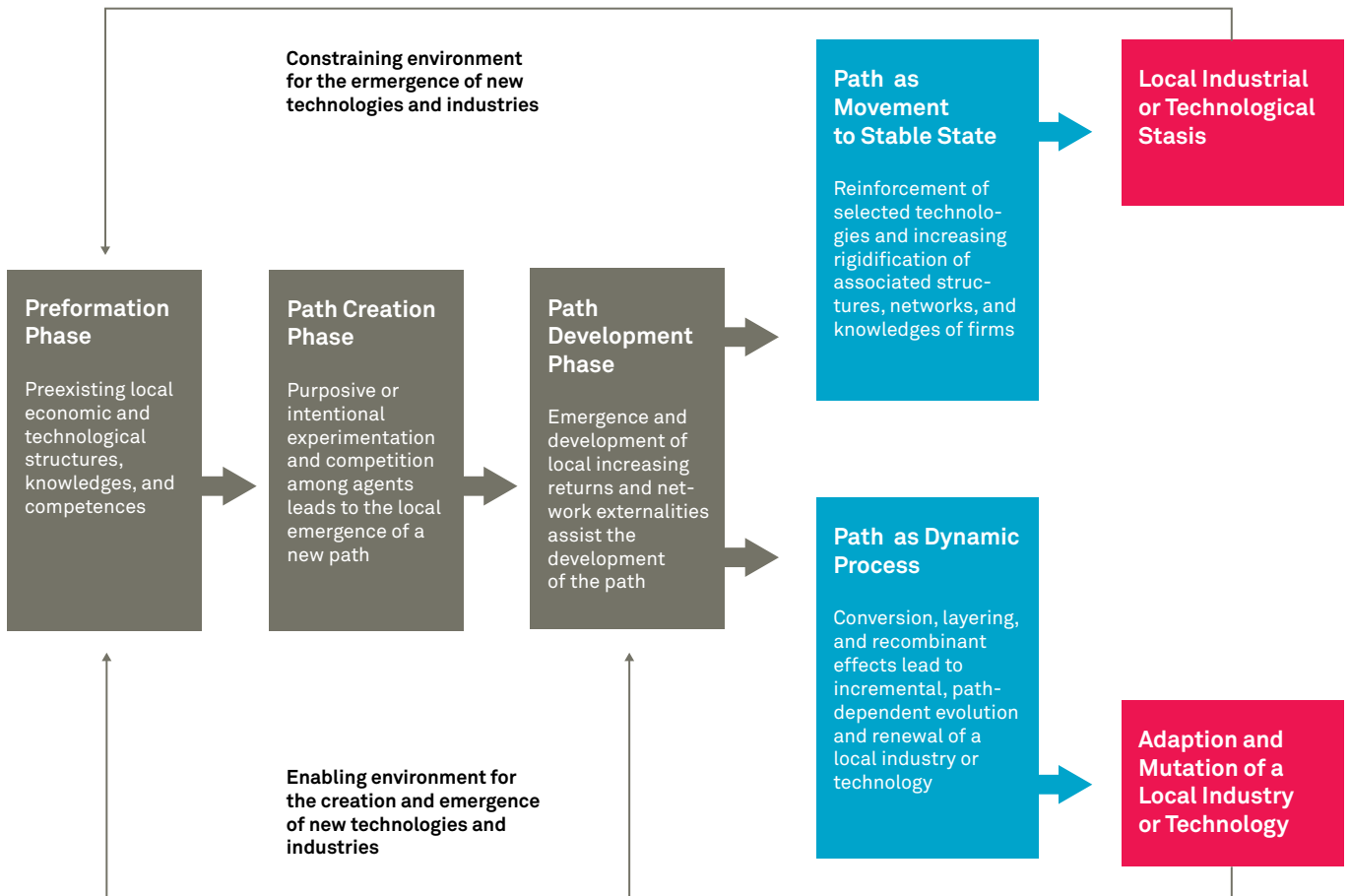
The canonical precondition of the path-dependent evolutionary system is that 'history matters' and that an 'equilibrium' state exists (Simmie et al. 2008; Martin 2010). Both of these phenomena are of interest when looking at the question of whether suburban systems strive to reach an equilibrium on their development paths, and how they are determined to do so. History as a concept of path dependence enables theorizing of the evolution of systems according to their individual pre-conditions. Martin and Sunley (2010, 3) spatially contextualized history by asking to what extent the path-dependent processes explain spatial persistence: *"Path dependence may help explain why regional growth disparities persist; it may help explain why particular industries and technologies develop in certain locations but not in others; and it may help us to understand why some regional economies are better able to adapt over time than others."* (ibid.)

However, based on Glasmeier (2000), Martin and Sunley criticize a one-dimensional view on path dependence as a history-dependent and locationally contingent system. Their skepticism is based on the notion that a path-dependent development evokes a limited portion of development possibilities constrained by the 'cumulative causation' of history at a place: *"Of especial interest is the question of whether and to what extent the evolution of the economic landscape is a path-dependent process, whether the mechanisms that make for path dependence have a quintessentially local dimension in their form and operation, and thus whether, in this sense, path dependence can be seen as a process or effect that is locally contingent and locally emergent, and hence to a large extent 'place dependent' (Martin and Sunley, 2006, 3)."* Martin and Sunley consequently ask to what extent path dependence may serve as an **evolutionary** concept. The understanding of a path-dependent development as based on Sydow, Schreyögg and Koch (2005) (Fig. 13) evokes the notion that systems (firms in their case) develop linearly according to external impulses and react internally according to the possibilities channeled within the contingent of their historically given causations. This understanding is based, among others, on David's (1988) 'network externalities' or Arthur's (1988) notions of 'increasing returns'<sup>66</sup>, which functions as a self-enforcing mechanism that steers the development process within individual path dependency 'guardrails'. As their own alternative, Martin and Sunley present a differing concept marked by adaptation<sup>67</sup>. It stands in contrast to the fatalistic, decline-oriented maturation and hardening of a system.

---

<sup>66</sup> See Martin & Sunley 2006, 6.

<sup>67</sup> The authors use 'adaptation' to convey the same meaning. They further obviously use 'mutation' for what Holling (1986 & 2001) and Walker et al. (2006) refer to as 'transformation'.



**Figure 16:** Toward an alternative path dependence model of local industrial evolution (Martin 2010, 21)

### **Equilibrium, lock-in and open non-equilibrium models of path-dependent evolution**

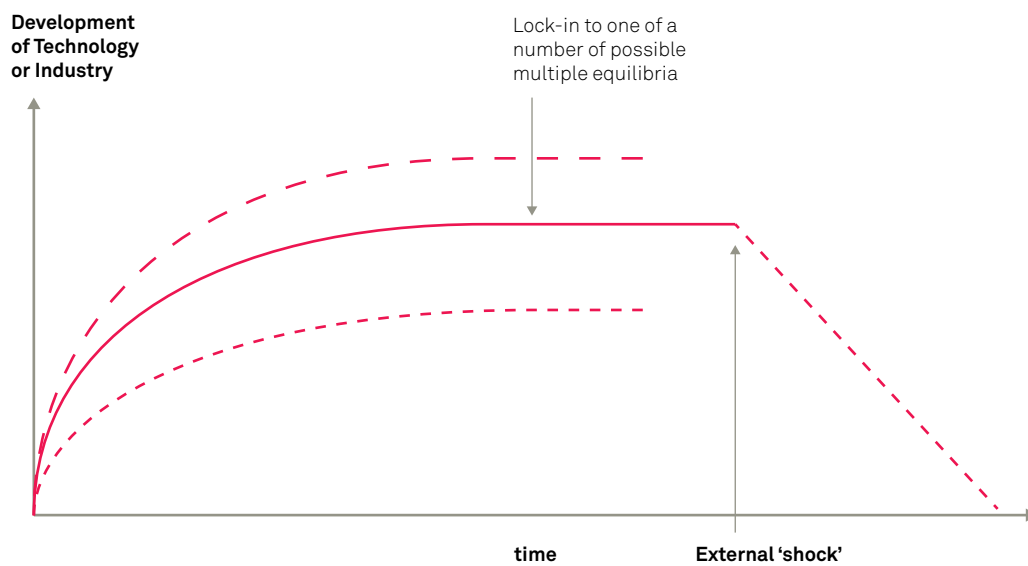
Another difference of path dependency towards that of a historically anchored process is the traditional economic view on development which is driven by the assumption of striving for equilibrium. A key point here is how the equilibristic approach conceptualizes development/evolution. According to this concept, not the historically given causations, but rather the striving for an equilibristic **state** is what produces **dynamics**. Once reached, it remains static until the next moment in the future when an exogenous shock pushes it out of balance. This concept is appealing in the economic world and beyond. The ‘equilibrium path’ builds on the fact that particular developments remain locked-in for a long period before they are replaced by a completely different system. David (2005 & 2007) then defines the development path as a chain of consequent lock-ins, which is reached by external shocks that unlock a previous state that has proven antagonistic because of changes in external circumstances.

---

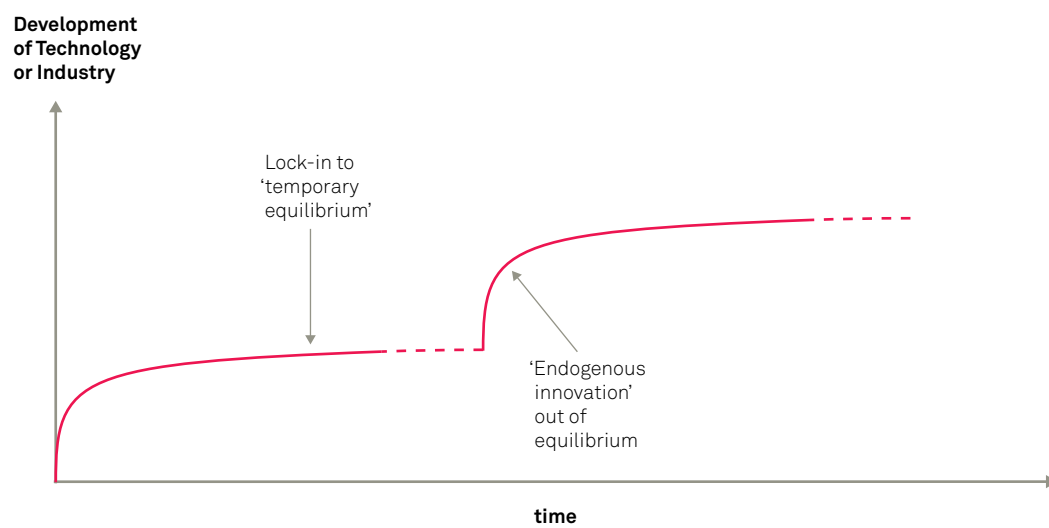
see Figure 16

Speaking in terms of evolutionary theory: shock moves a system towards adaption so that the system, though adapted, can persist. Here, resilience denotes the span of the duration against a shock without changing, where through different internal strategies and available resources the system adapts to new conditions in order to balance thresholds and to prolong its perspective for existence. The way then taken is based on the inheritances and resources of every particular system. This explains why every system may react in a different way to the same shock impulse, as it acts within its historically contingent evolution pattern and resources limitations. In this process, there is not a single ‘ex ante’ state that needs to be reached, but the process is shaped, steered and adjusted towards an individual equilibrium, which is a state of balance based on and achieved through the unique summarization of individually (pre-)shaped and added circumstances. Martin and Sunley criticize these models as being incompatible with an evolutionary understanding of system development as such. The main critique is aimed at the lock-in within the equilibristic state, which needs to be unlocked by external shocks, as well as at the discontinuous evolutionary pattern. The authors point out that the way towards an equilibrium has less to do with the historical processes or events within the system, being more an “*abstract solution state determined by the specific assumptions, equations, and exogenous parameters and variables built into a formal economic model, the basic purpose of which is to determine the existence and stability of equilibrium*” (2010, 10). Martin summarized the main issues of skepticism in his controversially discussed (Drahokoupil 2012; Oosterlynck 2012; Simandan 2012) Roepke Lecture (Martin 2010).





**Figure 17:** David-type model of path dependence evolution (Martin & Sunley, 2010, 18)



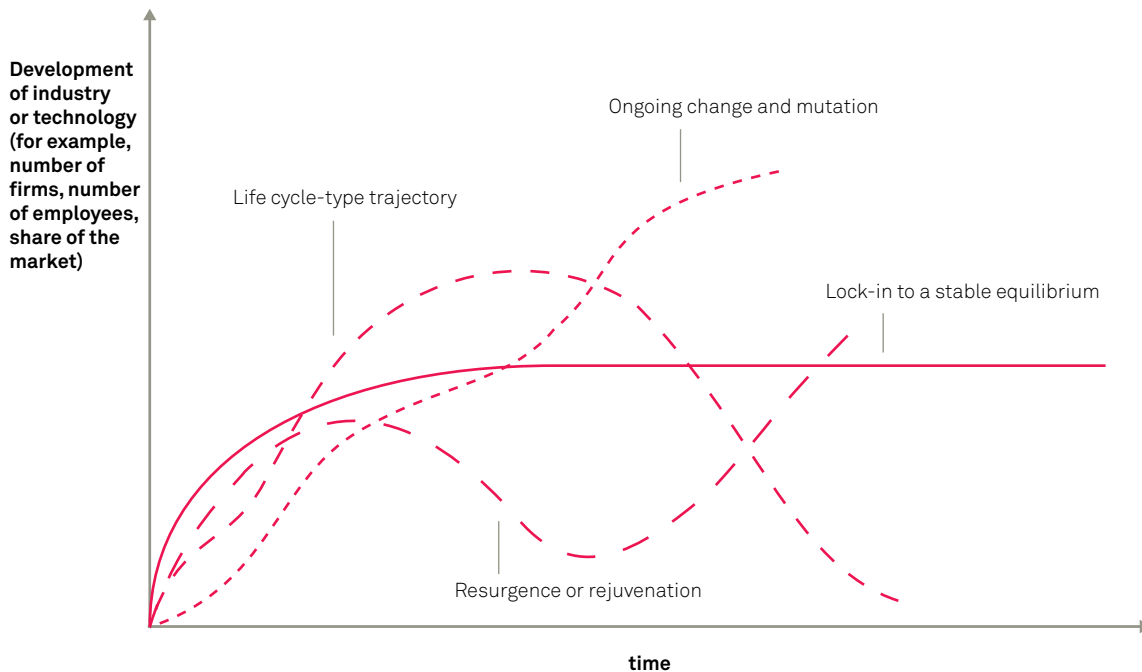
**Figure 18:** Setterfield-type model of path dependent evolution (Martin & Sunley 2010, 19)

He regards the canonical view on path dependency as based on the linear coherency of the equilibrium, lock-in, shock and outcome as temporal developmental components. Underlying his theory, systems—merely of social-ecological complexity—would not be simply coherent, but complex entities, able to continuously self-organize and restructure themselves. This view shifts the focus from the model of an active influence of an ever-changing and complex external reality on a rigid, simply composed and mostly static structure, which might (only) break out of its lock-in and adjust and change its state of equilibrium owing to an external shock. It argues that since systems are self-organized composites per se (especially social-ecological ones), their local development paths may be generated endogenously as active patterns and not only because of a reaction to exogenous impulses. Systems may be influenced by external measures, but as *“self-organized entities they need not to tend to any long-run configuration but can evolve incrementally while remaining self-organized.”* (Martin 2010, 9) (cf. Fig. 18). Here, ‘can’ means that other states, such as of passive stability or stagnation, are also possible, but according to Martin, they are relatively rare. Thus far, this is also what Setterfield suggests. But there are also differences. Regarding lock-ins, Martin’s argumentation differs: if a lock-in occurs, for which a shock is needed in order to release it and to provoke a change, then the system as such is probably already quite near collapse, or this had already become one of its meaningful alternatives. The locked-in state may—but need not—evolve or continue only within an equilibristic state. Whether this is to be positively evaluated as a sign of resilience, or negatively as a sign of a very poorly shaped development path that hinders any further change, creates over-maturity and exhausts resources by persisting within a release phase headed for decline, then, becomes a matter of more or less speculative interpretation. From an evolutionary perspective, Martin and Sunley admit that lock-ins at early stages—within the ‘Fore loop’, to use Walker’s et al. (2006) term—might let routines evolve. This results in increasing external return effects and agglomeration economies, which help to reduce variety and increase competitive measures as well as constraining institutional possibilities to narrow and deepen the development path (Boschma & Frenken 2010). However, as innovations mean an expansion of variety (ibid.), lock-ins during the ‘Back loop’ may hinder the competitiveness and flexibility of a system.

There is also another point in the context of the evolutionary issue. Concepts of evolutionary economics are merely based on endogenous change, constant transformation and novelty, rather than on exogenous shocks (Metcalfe et al. 2006, quoted in Martin 2010). According to Martin, and taking consequences from what has been stated above, two points challenge the canonical equilibrium concept. The first is the fact that it is hardly possible to declare if or when a system finds itself in an equilibrium state or where and when this begins and ends. The stability of a system does not necessarily mean an equilibrium state, as also change or evolution may be signs of stable systems. Second, even without a shock, systems may reshape themselves according to their internal complexity (cf. Martin 2010; 8, Setterfield 1997).

They may follow their own logic, target or rationality, which does not necessarily have to be tackled exclusively as a reaction to a particular exogenous influence. It may even occur that such endogenous or inner structural change may weaken or destabilize an otherwise externally stable system (cf. Setterfield 1997).

As an alternative view of the development path Martin (2010 & 2012) suggests what he calls an **'open non-equilibrium evolutionary type'**. This could be specified as non-equilibrium, no shocks, differentiated lock-in and an open outcome model. Here, systems are seen as multi-layered composites, consisting of different types of fast and slow variables. These usually (re)act in a specific way to external impulses and internal dynamics. The individual path is thus a sum and result of the outcome of these outer influences and internal dynamics within the composite's panarchy. These strategies are referred to in Walker's social-ecological systems already discussed above. The individual development path is thus driven by various strategies undertaken within the panarchy of the particular system. For social-ecological systems, including suburban neighborhoods in this case, the open non-equilibrium evolutionary type of development path is of crucial importance as it draws attention from the system as a passive part of the developmental change within a process actively steered by the outer circumstances and enduring it by struggling with internal maturation processes, and towards a concept in which maturation becomes an impulse for active internal adaption.



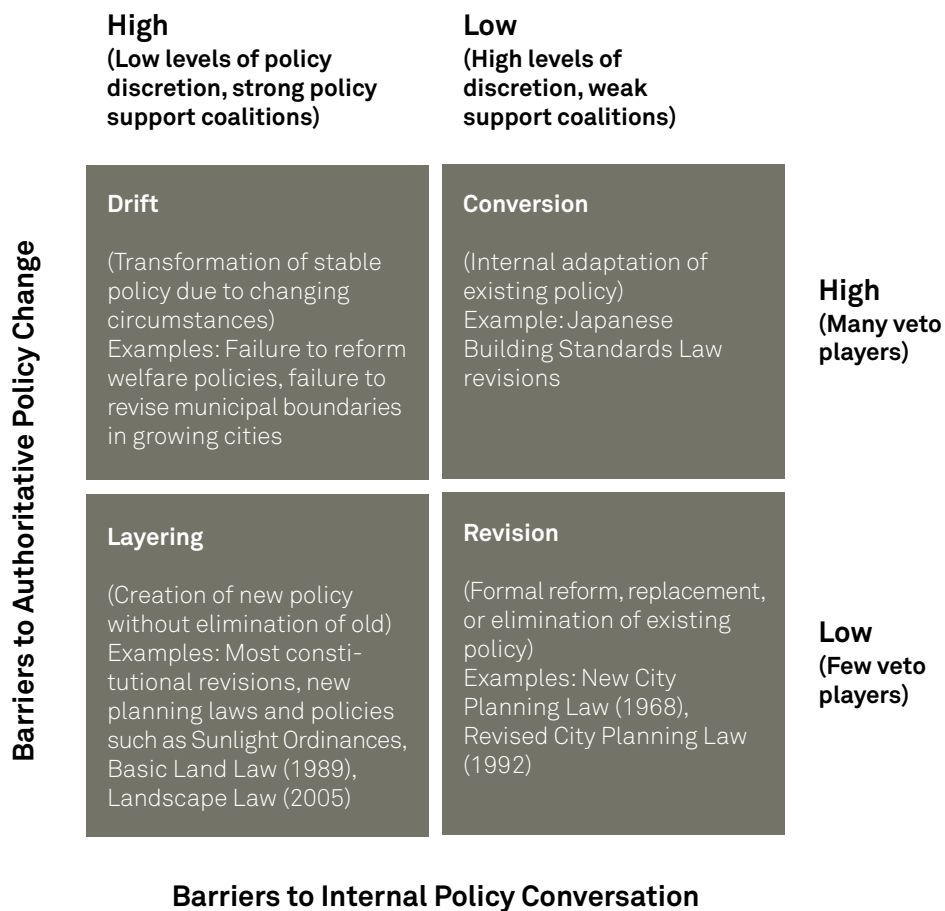
**Figure 19:** Stylized alternative evolutionary paths according to Martin (2010, 10). The 'ongoing change and mutation path' refers to the 'open, non-equilibrium-type model of path dependent evolution' by Martin & Sunley (2010, 19)

### **'Change' within the open non-equilibrium-type model of path-dependent evolution**

There are some particularly charming points in Martin and Sunley's concept. First, its *plurality*, which Martin points out in a reaction to the critique of his concept (Martin 2012). Even though it dissociates itself from the basic equilibrium concept as a universal or basic idea, it does not generally deny any other path dependency development careers—including the purely equilibristic one of David or Setterfield's 'temporal equilibrium'. As Martin and Sunley show, development paths of systems *may vary*; thus, their concept is not preclusive. In the evolutionary path-dependent model, at least three basic paths then become possible: the equilibrium path, the lock-in path and the open path. Each one emphasizes a different component of the path-dependent change/evolution pattern. By challenging the notion of equilibrium as an evolutionary stage within path dependency theory, Martin (2010 & 2012) and Martin & Sunley (2010) hypothetically rank the three basic models introduced above according to their frequency, suggesting that equilibristic path lock-ins may occur as quite rare cases in mainly technical fields (e.g., the well-known example of QWERTY), or in specific industries such as mining, but not necessarily in others. Rather often, development paths occur as *stages* of the evolutionary cycle *within* an endogenous system (Setterfield 1997).

A second point regards the concept's compatibility with the institutional path dependence model of continuous *change*. In most cases, Martin and Sunley (2010) argue that lock-in may evolutionarily shape certain *composites* of the endogenous system. According to their understanding, such process adaptation would be more likely than the rare case of a lock-in bringing a system to a kind of universal equilibristic halt. Regarding composites, institutional change becomes important when seeking a model to understand change *within* complex panarchy systems where different rationalities shape a system's individual path. It also overlaps with the concept of a continuous change. In his analysis, Sorensen (2011, 716) stresses that: *"Most historical institutional analyses have relied on a 'punctuated equilibrium' model of change, which assumes that long periods of institutional continuity follow infrequent institution-creating critical junctures that are generated primarily by exogenous factors. A problem with this model is that it will tend to miss gradual and incremental change or indeed any changes generated endogenously from within the institution."* Change is usually interpreted as a revision which means it undertakes a formal reform of existing rules or replaces an existing policy. But according to Sorensen (2011, 717), such a policy change would account only for a minor portion of the actual change, even though it is most intensely discussed in the policy itself as well as in the scientific discourse. Stakeholders usually evaluate whether a direct systemic change of rules of action (as in the case of a revision), or alternative indirect ways are more effective for achieving their goals.

Such alternatives include 'drift', 'conversion' and 'layering'. Drift accounts for a strategy that hinders the further development of an (undesired) policy instead of changing it. Conversion is an internal adaption or setting of policy rules which can disclaim broader participation process due to its specific/specialized internal nature. Layering describes the creation of policies materially replacing old policies without formally eliminating them (Hacker 2004). Hacker tackles these four strategies for change between the barriers of authoritative policy change and internal policy conversation. The key issue is that endogenous energies within the system co-shape a future path.



**Figure 20:** Models of policy change. Adapted from Hacker 2004, 248 as quoted by Sorensen (2011, 717)

This is quite similar to what Martin and Sunley (2010) argue in the shaping of certain **composites** of an endogenous system via lock-ins. The ways of institutional change thus strengthen the argument that systems are complex composites with different internal stakeholder settings and tensions which might have the same importance as the external circumstances by influencing their development paths. This enables them to change continually along differentiated, multi-directional trajectories. In addition to the simple cycles or phase-like evolution, other, more variable careers are also imaginable.

Martin and Sunley (2010) show the variety of path creation in combination with external and internal impulses (Fig. 20). Within their plurality concept, they distinguish between enabling new and constraining existing paths and place effects in combination with intentional or accidental origins of new paths. The matrix shows the variety of developments which may make change a system. An implicit argument is that such a path variety is occurring quite in parallel according to the system's composites, influenced by impulses of different origins.

Path and place effects	Origins of new path	
	Deliberate and intentional	Chance and accidental
Enabling new paths	1. Agents search for opportunities, re-use resources, transfer competences as basis of new growth	2. Agents gain assets and experience, but accidents and events trigger new path
Constraining to existing path	3. Designed interventions to break path or switch location to overcome lock-in	4. Unpredictable external shocks and random events break old trajectory and launch new path

**Figure 21:** Varieties of path creation (Martin & Sunley, 2010, 29)

### 3.7 Adaptive cycles, hierarchy and panarchy

Discourses on ‚change‘ mentioned in the previous chapters reflect the necessity to grasp the resilient development of systems. The reason is that these address one of the basic challenges faced by theories on systemic lifecycles connected to the resilience. As the static understanding of development in ecological systems emphasizes the phases of the Fore loop, namely the Growth and the Conservation, the resilience consequently becomes an issue of resistance, where the extent of a system is marked by its ability to sustain despite of external or internal changes. In such case, the grade of resilience becomes measurable by the extent of the threat it still can bare in its state despite of changes. If however resilience means the ability of a system to sustain with changes, the effective strategy of systems to sustain becomes adaption, as it enables systems to sustain under changing circumstances. Adaption is the domain of the Back loop,

According to Westley (2002), system stability and adaption play crucial roles for understanding lifecycle concepts. To fulfill their own existence, social systems develop functions of goals or objectives which enable them to be integrating and adaptive and enable themselves to re-produce (cf. Parson 1951). In order to do so, social systems structure themselves specifically along signification (articulation), domination (codified into hierarchies allocating power and resources on behalf of hierarchies), and legitimation (based on norms rules and routines) (cf. Giddens 1987). Gunderson et al. (2002) however argue that the rules of adaption may alternate across different lifecycle phases. The Fore loop is dominated by rigid rules of a hierarchic top-down order. During the growth or exploitation phase, such ruling is enabling the system to effectively expand. During the Conservation phase, it enables it to keep order and sustain. Such Fore loop resilience does not necessarily mean that the system is generally static, as it allows interaction between different levels. But it remains one-directional and asymmetrically ruled by the hierarchy of higher and slower systems over smaller and faster ones. This enables it to become immune to the „buzz of noise‘ from small and faster processes“ (Holling et al. 2002, 73). Here, higher and slower levels control the lower and faster ones. In case of suburban residential areas, within the growth and conservation phase, the local (sub-)systems are rather steered into the spatial, physical and societal systematics of every particular development approved and opened by the higher hierarchical systems of regional, municipal and/or developmental planning, in which sub-systems are selectively incorporated by accepting the rules enabling them to settle down. Regarding the Back loop, Holling et al. (2002, 72) state that „it is not broadly recognized that adaptive cycle (...) transforms hierarchies from fixed static structures to dynamic.“ Generally, this means that large and slow systems are becoming responsive to the lower and faster ones during the Back loop, shifting from top-down to bottom up adaptional changes. This points out the important role of local systems during the Release and Adaption phases, even though it does not necessarily mean a complete switch from top down to bottom up dynamics. Rather, the asymmetric hierarchical processes are becoming balanced and co-steered by

bottom-up impulses. Panarchy, in contrary to hierarchy, is defined by mutual cross scale interactions as the base for reorganization of systems. While hierarchical organization is being organized along the social system structures of top down signification, domination and legitimation (cf. Giddens 1987), bottom up systems are merely using ‚revolt‘ during the the release phase and ‚rememberance‘ during adaption to creatively destroy and effectively reshape overmatured systems (cf. Gunderson et al. 2002, 14ff). While the hierarchic principles are strongly rooted in conceptual thinking, the dynamic aspects are remaining rather underexposed in the lifecycle theories as well as anylyses and conceptualization of ecological and social ecological and social systems: „*The structural, top down aspect has tended to dominate theory and application, however, reinforced by the proper, everyday dictionary definition of hierarchy that is vertical authority and control. The dynamic and adaptive nature of such nested structures has tended to be lost.*“ (Holling et al. 2002, 73). The resulting consequences are that the Back loop cycle remains left aside or conceptionalized accoring to the hierarchical, and not the panarchical understanding. For the case of perspectives of mature suburban residential areas, this means that concept, analysis and proposed action in scientific studies are carried merely out under the Fore loop understanding of a lifecycle, which is well fitting to conceptualize development and maturity, but not best fitting to understand processes, potentials and stakeholders of adaption. Tesult, as argued in previous chapters, is the SCUAD-shortcut, issuing to suburban residential areas a law ability to self-adaption and keeping with a strong believe into top-down solutions. The empiric analysis carried out from chapter 4 on is based on the implication of a more pluralistic adaption concept in order to understand the powers and shaping of mature settlement systems with all implications on definition of stakeholder arenas, space and place.

### **3.8 Implications of the pluralistic concept of lifecycles and the path dependent evolution**

Previous chapters have asked about patterns followed within the suburban transition as of social-ecologic systems in terms of space to which extent they generate a complex dynamic of transition on merely random, situationally determined principles. They described systemic paralells and interconnections between the lifecycle and the path dependence concepts. These are based on the common issue of change as a natural process caused by maturation as well as on other internal and external influences, and the adaption as a development driven strategic intent. These different theoretical and conceptual approaches to adaptation have in common the attempt to understand and describe development careers of systems. Within their specific conceptual frames, they come to findings of systemic complexity within the path dependence evolutionary theory.



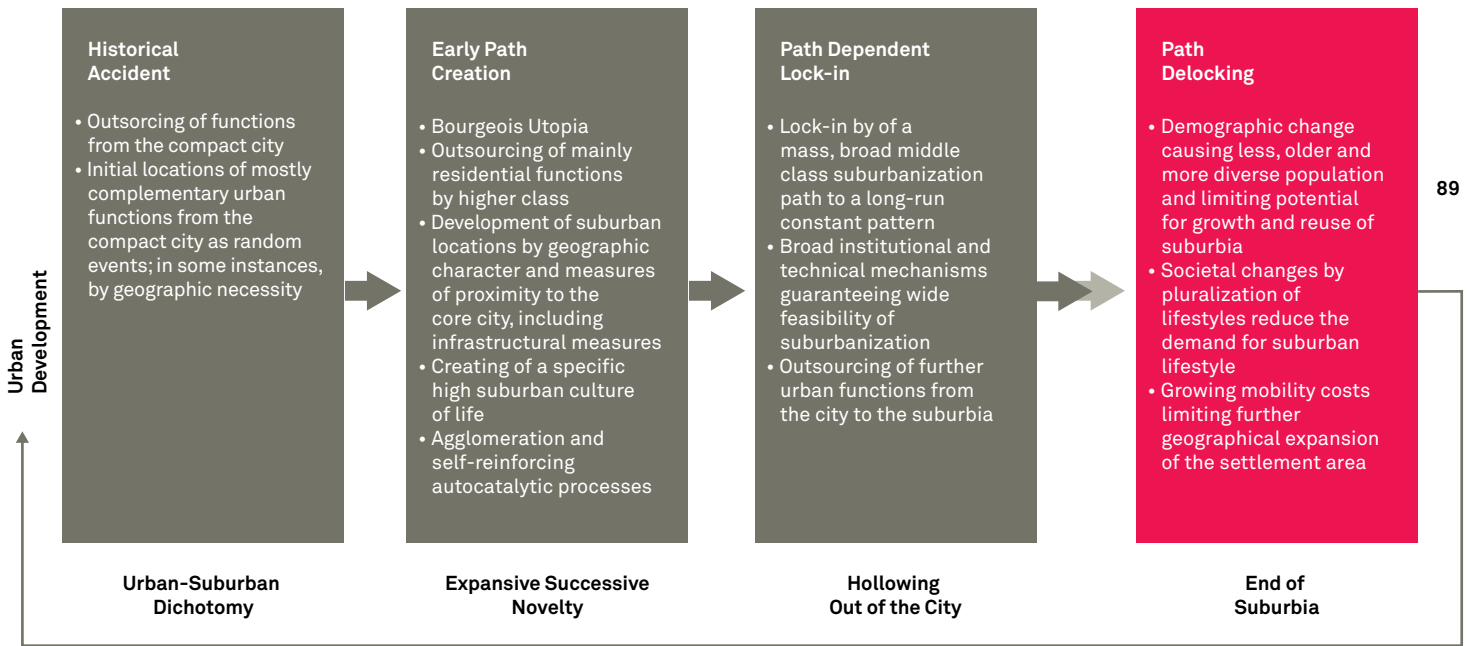


Figure 22: A canonical model of suburban evolution (adapted from Martin 2010, 21 by author)

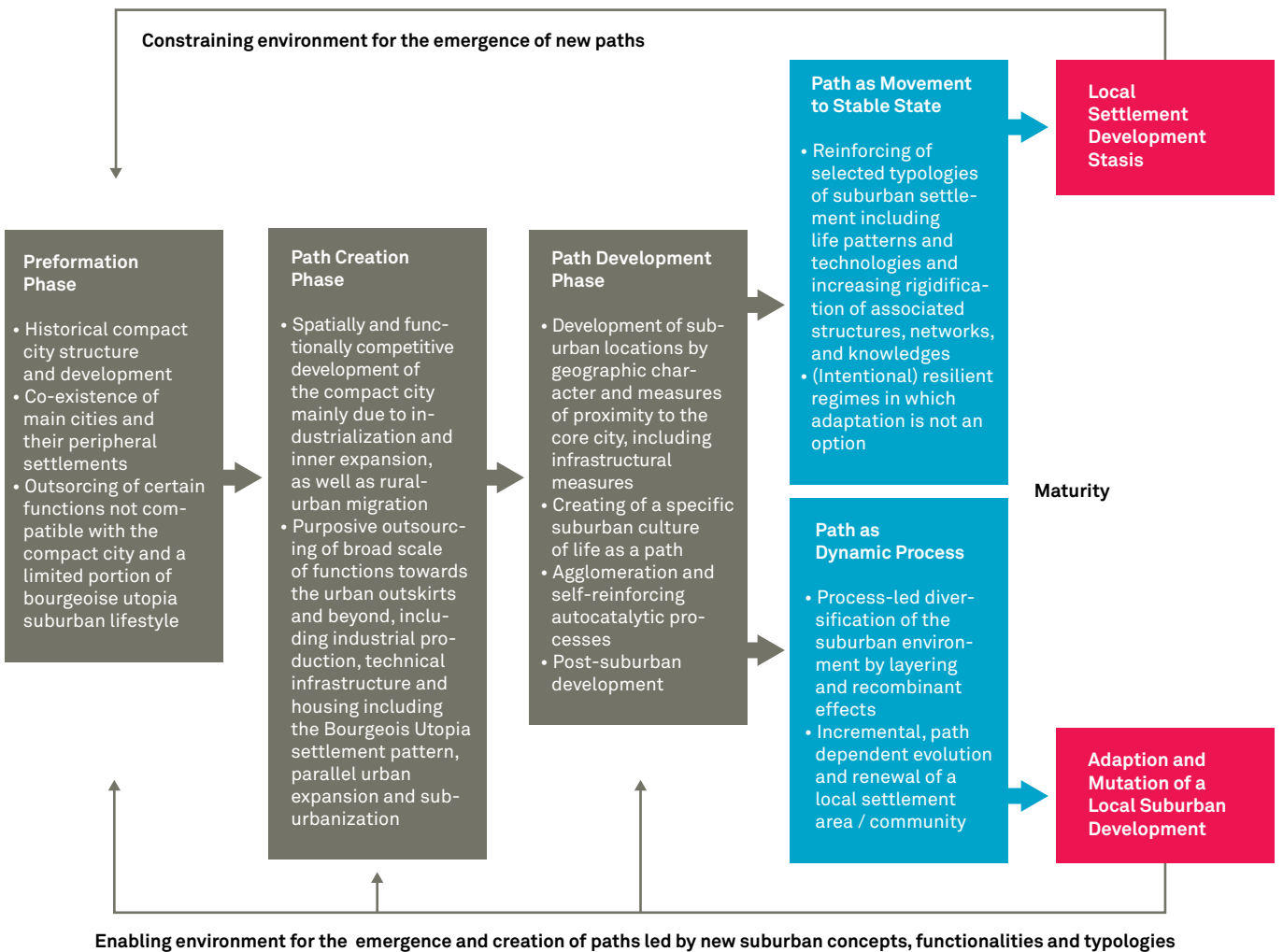


Figure 23: An alternative model of local suburban evolution (adapted from Martin 2010, 21 by author)

The canonical approach to path dependence proved to be a similarly limited concept as the ecological models, as this approach is based on them to a great extent. Its classical evolutionary concepts for societal systems of any kind (including economic, political or others) are characterized by the endeavor to reduce complexity and to describe reality along a simplified ideal theoretical concept. If for path dependence theory Martin speaks out for expansion of interpretational limits, for lifecycle development patterns the pre-conditions of social-ecological model by Walker aims on a similar task. At the same time, both are not preclusive rigid ideal terminatory models. They admit that a variety of paths may occur among different systems or even within their complex internal settings along a specific trajectory. Path dependence approaches are attempting to overcome their limitations by emphasizing internal complexity and micro level heterogeneity of systems. They are regarding systems as composites within a panarchic multileveled setting. Such a conceptual approach is opposite to the one-directed point of view on development as a linear, historically based and clearly shapeable path, created by concretely definable steps of the hard-fact defined systems' evolution between long-lasting equilibria and crucial periods of conceptionalistic change. The alternative pluralistic concept denies that systems generally stay in equilibrium and do change only under shocks. They rather emphasize an ongoing evolutionary process within particular local systems. Here, the approach of incrementalism seems to be quite close to describing the changing mode, including some kind of perspectivism steering the long-term-view perspective. Within such an understanding, perspectivistic and therefore strategy-based action gains more attention. Another question remains regarding the extent to which it accomodates a concretely definable, ultimate target, or a perspectivistic incrementalism of a 'muddling through' (Lindblom 1959) with the aim of securing an even adjusted existence of the system as such within an ever changing time.

Adapting the phases of the model of spatial industrial development and the model of local spatial industrial development (figures 14 & 15) from the theoretical discourse of economic geography into the general context of spatial planning and the particular suburban maturation issue in terms of suburban development and area change along generalizations by Martin and Sunley (2010), the basic canonical model shows parallels with the narratives of the SCAD myth settled along the growth and decline trajectory. According to this, the suburbanization plays the role of a historical accident which led to the outflow of functions and inhabitants from the core city to its surroundings. It may be seen as a pre-formation phase of the urban-suburban dichotomy. Suburbanization, as an early settlement model of the industrial city, triggered an early path creation phase and established the dynamics of expansive successive novelty. Locked into this path, mass suburbanization followed, ultimately hollowing out the core city. This path has been 'delocked' (Martin 2010, 5) by several shocks as well as many other slow but intense and complex changes, and has resulted in the end of the growth of suburbia. These changes include lifestyle and demography as well as structural and other societal changes.

---

see Figure 14/  
see Figure 15

---

see Figure 21

In contrast to this canonical view on the suburban career, the open non-equilibrium evolutionary type of development path allows for a more differentiated view on the development of suburbia and its particular settlement areas. The preformation phase of suburban development sees suburbanization as a complementary and interacting development mode to the compact city concept, enabling an outsourcing of functions not compatible with the dense urban environment of the medieval city. It also includes self-standing urban or rural municipalities proximate to a dominating core city. At the same time, it sees the outskirts within the rural-urban-fringe as an intermezzo and flexible space for further urban expansion in terms of amalgamative city enlargement. During the industrial era, the path creation phase gave a shape to an even more strongly related connection between the urban core and its suburban outskirts by the spatial distribution of functional environments of work (city) and residence (suburb). Similarly, other expansive clusters such as of industrial complexes or infrastructure took hold in the suburban surroundings and began to fundamentally reshape them. The path development phase sees a massive suburbanization pattern which relieved the over-crowded urban cores, at the same time accommodating further urban growth and migration at the urban outskirts diversifying it. Negative effects at the core city caused by suburbanization seem to be a temporal deflation, which soon changes into a requalification through reurbanization. Dominating is the metropolitan point of view which continues to put emphasis on the interaction between the core city and the diversifying post-suburban cityscape. Its flexibility is expressed by the variability of the enabling process.

---

see Figure 22

However, and in the first place, as plausible the open development path concept may seem, it also conceals particular difficulties regarding the maturation and adaption of settlement areas. First, and more general, even if putting aside the canonical concept of a basic development path conceptualized on the growth-maturity-decline trajectory, it has not yet been proven whether the suggested alternative model generally works without the basic resilience mechanisms, such as equilibrium, lock-in and threshold, when it comes to empirical based review. Second, the reason why maturation according to Martin and Sunley is seen as a possible rigidification is the argument that *"decline itself can be a slow process (...) and needs not necessarily be a sudden collapse due to an external shock"* (Martin & Sunley 2010, 19). The second possibility is that the 'path as a dynamic process' is seen as a 'reinventing' path of systemic adaption. Within the pluralistic approach, both paths may appear simultaneously and may be related to each other (ibid.). Maturation, therefore, does not necessarily need to be seen simply as a decay and decline oriented path. In terms of urban development, it is also a general result of a natural development determined by the inevitable physical and demographic aging within a lifecycle. It is in this momentum when it becomes necessary to enlarge the pure economic theory thinking by the urban planning context: the economic theoretical way of thinking is based on the understanding the lifecycle as a maturation of a product, which to a certain extent shows a life career different from urban settlements. An economic product in terms of 'ware' may simply disappear from market when it is overtaken by other more competitive products or by a change

of demand. Built environments and their inhabitants, however, show much slower and more differentiated life careers. Mature settlement areas therefore do not necessarily disappear when they mature, but develop in several combined ways of those two mentioned. During their long lifecycle, several turns, ups and downs and adaptations as a reaction to external and internal changes may occur.

This pluralistic concept developed from the theory of the economic geography path dependence quite illustratively captures the complexity of systemic changes within social ecological systems of particular settlement areas. The complex view offers a theoretical base for tracking diverse suburban lifecycle trajectory patterns. The following fields of analysis should be pursued, closely reckoned and confirmed.

### **Diversification process**

A first issue for investigating mature suburban residential areas is the actual process of diversification of particular settlement systems. According to the theoretical backgrounds discussed above, a maturation process is connected to the growth of complexity. Adaptation strategies may often lead to specialization, which enables systems to focus on a certain path in order to remain resilient. Within the theoretical discourse, these are often associated with lock-in equilibria, but also with adaptation. It has not yet been sufficiently explained whether there are certain periods of equilibristic halt or at least equilibrium states, as considered in chapter 3.6. and how a switch into an adaptation process between them might look in the case of triggers other than shocks. In contrast to Martin's open, non-equilibrium-type model, Hesse et al. (2013) come to the conclusion that a certain state of stable maturity exists as an ideal concept towards which systems adapt. The universal strategies of growth, consolidation and adaptation account for every one of the canonical lifecycle phases of build-up, maturity and decline (ibid.). Thus, after reviewing the points made in previous chapters, in its basic principle such a concept rather corresponds with the canonical *shock-based lock-in equilibristic model* than with the *open evolutionary paths* according to Martin. However, it also advocates a broader understanding of adaptation as a continuous matter along the whole trajectory. This slight dissonance incidentally reveals the limits of the current general understanding of path development within suburban maturing areas and calls for further investigation.

### **Human agency**

The shift from the ecological to the social ecological base of conceptualizing suburban residential areas seems quite obvious, but it is not yet broadly apparent. To a certain extent, it may be regarded as remarkable that physical matters and fatalistic images still prevail in the suburban residential area discourse. Difficulties hindering a resettlement are obviously rooted within an interconnected network of mutually reinforcing narratives, as stated in chapter 2. Regarding the agency issue,

---

**see chapter 2**

conclusions often lead to the assumption of a general lack or absence of stakeholders within suburban residential areas as well as of their real potential to act. Consequently, they often end up calling on the public state sector to resolve the situation instead of scrutinizing the self-assumed limitations of the actor's pool. Putting human agency into the conceptual core offers the chance to draw attention towards other stakeholders on site and their interactions that take place in different institutional settings.

### Systemic space

Regarding the definition of what has been referred to as 'systemic space' and its constitutional levels, functional and institutional interconnections must be evaluated. In the argumentation above, it has been assumed that other than homogeneity-based morphological or societal definitions of suburban areas might be more meaningful to investigate when analyzing residential suburbs. In reference to the panarchy system of institutional interactions within social ecological systems, an additional focus, therefore, should be directed not only at the classic definition of settlement space by institutional borders, but—in a neo-institutional way—on a panarchic arena of stakeholders and their target-oriented strategy that requires certain alliances across traditional hierarchical levels and their directive responsibilities. The overview of types of social systems that support core functions within settlement areas discussed in chapter 2.2 and 3.7 delivers initial evidence of the probable extent of such panarchic systems.

---

see chapter 3.2

---

see chapter 2.2

Previous chapters were targeting on mapping the discursive frame of change and adaption of mature suburban residential areas. In its argumentation, it attempted to follow the existing discourse on suburbia by its main 'entrance point' of the urban-suburban dichotomy. The position taken here is that despite of the still dominant role of the core city(ies), suburbia as a legitime part of the metropolitan area is a complementary object to the city, rather than its oppositum. Regarding its development perspectives, it is argued that rather than the canonical growth-maturity-decline pattern, a more sustainable and also diverse way of adjustment towards the changing framing condition is possible. A central characteristic of the mature suburbia is its flexibility to diversificate and adjust according to the changing demands and framing conditions. For understanding the diversification, the pattern of suburbia's development has been analyzed by a critical deconstruction of the growth-maturity-decline narrative. As a result, the attention has been turned towards the endogenous potentials of suburban residential areas in maturity to adapt. This alternative viewpoint is theoretically based on the evolutionary path dependency concept (Martin 2010). The theoretical examination targets on a better understandig of endogenous possibilities of mature suburban residential areas, which is happening by activating organitzational and institutional resources to strenghten their resiliency and adaptive potential. Even though settling the argumentative path into a broader international context of literature and theory, the main focus remains on German general conditions and cases. Following two

case studies aim at gaining empirically based evidence on how mature suburban neighborhoods become resilient, and whether they sustain by retaining their current state as long as possible, or by rearranging themselves, and what in suburban residential neighborhoods possesses, accommodates and utilizes the potential for such adaption, by addressing the above issues.

EMPIRICAL APPROACH

4

## **4. EMPIRICAL APPROACH**

### **4.1 Methodology and method**

The aim of the empirical part of this dissertation is an explanatory analysis that complements the theoretical part. At the core of the empirical study is the question of how do mature suburban residential areas under stagnating or declining conditions manage to successfully adapt. The empirical challenge lies in the interpretative concept. When—as has been assumed in previous chapters—the canonical understanding of lifecycles shows a fatalistic tendency, causing a limited interpretative frame for the particular systems (here, of suburban mature settlements), then the basic terms describing these systems and the processes within them are also conceptually interpreted according to the canonical concept for the time being. Regarding conceptual descriptions, the result of such limited interpretations show the ‘suburban myth’ as well as the SCAD complex as examples, both based on a set of particular thematic presumptions. These thematic fields include, for instance, the growth-maturity decline pattern homogeneity, archetypically specific distinction between the core city and suburbia as well as socio-cultural limitations and others. Regarding its procession understanding, it likewise conceptualizes the understanding of terms such as growth, maturity, decline, shock, change and adaption in a corresponding way.

To reflect the discourse, it is worth comparing its meta-narratives with their understanding by local stakeholders. As has been stated for the narratives, empirically based inside views come to more favorable conclusions. It is not the aim of this dissertation to idealize suburban development either in the macro or in the micro societal view. The approach chosen here also does not aim to deliver comprehensive definitions on suburban development, but rather to trace its divergent meaning within divergent reality contexts. Stakeholders may have an understanding of meta-narratives that is different from what the canonical understanding purports. Such an approach might be quite easily labelled as relativistic. At the same time, one must admit that the judgmental canonical concept relativizes otherwise neutral terms. In a similar way, shrinking is generally regarded as negative at the outset, while connected to the image of decline and shortage and disregarding both its complexity and general non-fatality as a phenomenon. The aim of the discourse reflection is thus to a certain extent to demystify these meta-narratives by describing and explaining them within the particular discursive field used by the stakeholders themselves. This may not only significantly help to understand how particular stakeholders identify, understand and approach a natural change process and steer it using adaption strategies, but also to confront this view with the theorizing about suburbia’s change. However, not only the stakeholders’ perspectives, but also the context defining them, are at the core of the interest. For widening the discursive field, such reflection aims at connecting with the existing theoretical concepts of Martin’s open evolutionary path and of stable maturity to reach further within the understanding of adaption processes, which enables to include both traditional and alternative views on development paths.

---

**see chapter 2.1**

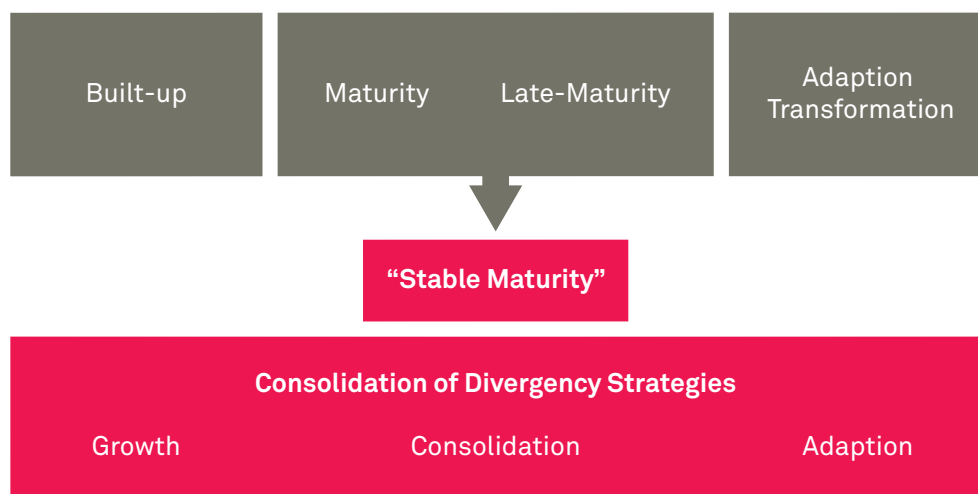


## Levels of analysis

Based on the previous chapters, the core of the explorative interest and therefore the target of analytical endeavor is embedded within the context of three overlapping interpretative analytical levels.

The first analytical level features a reflection on the lifecycle discourse within the case study analysis. In the chapter 3.7, the possible dissonance between the open evolutionary path and the notion by Hesse et al. (2013), who come to the conclusion that a certain (albeit ideal) state of stable maturity exists, is stated. The first analytical level thus aims to test stable maturity as a theoretical concept. It focuses on the critical case of quarters within a declining regional context, which—despite their unfavorable global setting—manage to adapt at a local level and thus stabilize and develop further. An additional aim of this study is to prove the inherent potential to adapt by understanding the capacity of particular local systems as drivers for adaption, and showing which mechanisms are used to make mature systems successfully adapt under stagnating or declining conditions.

It has been argued that it is not yet clear whether such mechanisms evolve uncoordinated and of the free will of individuals by answering particular immediate challenges, or whether there is a systematic reaction strategy. Without further specifying this, Hesse et al. (2013) assume that stable maturity is an ideal state towards which systems consensually tend, and that strategies consequently seek to reach such a balance. What makes the notion of stable maturity central to the empirical investigation is that it stands for the meta-narratives of the lifecycle discourse. Together with the notion of decline, shock, change and adaption, these narratives lie at the core of the lifecycle concept. It thus is one of the tasks to broaden the knowledge around the targets of action among stakeholders in particular settings.



**Figure 24:** Strategies towards stable maturity according to particular lifecycle according to Hesse et al. (2013) (own illustration)

The second analytical level aims at the topic of how systems actually adapt, thus recapitulating the cognitive interest in paths of adaptation, here focused on mature suburban settlements. In previous chapters, the development path discourse was selected as a valid possibility for explaining the adaptation by exploring system adjustment in the context of the research question. Next, a concrete case-based breakdown is targeted in order to gain an understanding of more detailed questions, such as:

- what is actually changing,
- when and why do these changes occur,
- what are the determinants of adaptation,
- who are the stakeholders who actually drive the adaptation,
- how can a specific settlement area be defined in the context of the settlement space,
- what are the levels of action and their interconnections for a specific settlement area,
- and finally, how do adaptation concepts fit with the pace of the lifecycle and its phases and what can we learn regarding maturation?

The third level of analysis includes the three analytic fields generated at the conclusion of the theoretical chapters (chapter 3.7). The basic research questions here regard how systemic spaces might be defined, how a diversification process occurs, and how human agency within the particular settings of mature systems under stagnating or declining conditions is constituted. They mark an attempt to release the understanding of maturation of suburban residential areas from existing concepts and their theoretical and analytical consequences. As with any initial hypothesis, even when induced by comprehensive discursive or phenomenological backgrounds, they bear a certain amount of uncertainty, thus requiring further analytical, explorative and open-end verification processes, to which this dissertation attempts to initially contribute.

### **Empirical method**

With the explorative interest and its cognitive levels, the empirical work depends on the implementation of relevant methods. As the research aims to explore paths and forms of actions and their motivation within a certain individual context, the choice of the methods is fundamental when deciding upon appropriate research strategies.

Yin (2003) addresses the empirical research strategy by means of a distinction in the context of the research questions. Strategies, experiments, surveys, an analysis of existing data, research of historical material and case studies form the five main alternatives for an empirical approach. Experiments generally aim at answering

the question of 'how?' or 'why?' regarding a current 'incident' in order to reveal related context and behavior mechanisms. Surveys usually serve to reveal findings on 'who?', 'what?', 'where?' and 'how many?'

Such surveys mostly relate to a current incident or process and are usually not processually experimental. The same applies to the analysis of existing data, except this does not necessarily have to relate to a current incident or process. The research of historical material mostly asks 'how?' or 'why?', as it is non-experimental and not related to current incidents or processes. Case study research, similar to experiments and research of historical material, aims at answering explorative questions such as 'how?' and 'why?'. Even though these questions do not reveal experimentally induced contexts or behavior mechanisms, they focus on current incidents and processes.

Context Strategy	Form of research questions	Context monitoring/ behavioral control?	Incident in the presence
Experiment	How? Why?	Yes	Yes
Survey	Who? What? Where? How much / many?	No	Yes
Analysis of archival material	How? Why?	No	Yes / No
Historical investigation	How? Why?	No	No
Case study	How? Why?	No	Yes

**Figure 25:** Situative decision matrix for different research strategies according to Yin (2003), taken and adapted from Schmidt (2006, 105)

Yin (2003) ascribes case studies the same ability as other research strategies to be used in explorative, descriptive and explanatory ways. Explorative studies deliver pioneering knowledge and open new fields of research. Descriptive studies enable to understand complex interconnections and dependencies and help to sort them in connection to an existing theoretical basis, to reflect on such a basis or to establish new assumptions. Explanatory studies reveal backgrounds and contextually explain phenomena by delivering valid interpretations. Referring to Yin (2003), Schmidt (2006, 101) distinguishes a case study as “an empirical investigation, which 1) investigates a current phenomenon within the context of a real existence, especially when 2) the relationship methods between the observed phenomenon and its context is not clearly recognizable.” Here, the framework conditions are integrated into the approach. In other research strategies such as experiments, these are explicitly eliminated in order to be able to concentrate on certain limited indicators, such as in the case of laboratory experiments. Keeping in mind the research aim mentioned above, targeting processes makes the case study the most suitable research strategy, as it allows an explorative approach towards the question of how mature areas adapt, taking into account the processes through which this happens. The basic types of case studies are further divided into single case studies and multiple case studies. Hereby, distinctions are made between a holistic study that focuses on just one particular case within the study context, and an integrated one, including two or more objects within the study. As a case, any separately inspectible entity (such as an institution or a person) is defined. Generally, single case studies are appropriate when a special case or a case under special circumstances, such as a long-term study, is being investigated. Other cases are defined as single critical cases testing an existing theory, extreme or unique cases that do not show parallels, or very normal and thus representative cases with no need for duplication. Similarly, a single case study is suitable when examining a new case as a phenomenon that not yet has been researched. In any case, contextual factors play an important role. They deliver information on the settings in which the objects of the study find themselves, thus creating an interpretative contextual framework for the study. Schmidt (2006, 115) remarks that, in case of quantitative studies, the interpretative framework often does not become clear until the study begins, and needs to be operatively built throughout the study.

Mintzberg (1979) credits qualitative studies with the ability to deliver a better understanding of organizations than anonymous data collected by standardized survey sheets. This position has been a part of the criticism of structuralistic approaches since the 1960s. This criticism in the beginning also included case studies as such. With the ‘grounded theory’ approach (Glaser & Strauss, 1967), case studies methodically became more broadly applicable to qualitative research. Here, the survey and the theory making are seen as interconnected processes, in contrast to a statistical random sample. The method builds on a principle of a ‘permanent comparison’ in which coding and analysis happen at the same time. The analysis begins with an ‘open coding’ focused on keywords that are repeated and emphasized. As soon as the open codes show a certain pattern that connects with the research interest, they are used to establish categories for such connec-

tions and distinctions. In a second step, further analysis is conducted based on the coded categories. The approach is generally targeted towards theory building. At the same time, it may be determined by an explorative research interest, as this in turn determines the coding process, thus creating an approach towards gaining knowledge from particular cases rather than creating a general theory.

As summarized in the context of the cognitive interest and aims declared at the beginning of chapter 4, a qualitative research method based on the case study approach is optimal for the aims of this dissertation. This approach mirrors the explorative nature of the research task. As the systems within the case study are expected to be different according to various institutions and stakeholders, an integrated study will be necessary to conduct. This approach further allows the creation of theories as well as targeting certain 'research interests' by means of qualitative empirical data.

### **Research design and case studies**

Finally, the question of which and whether one, two or more studies are necessary to achieve the aim of the particular analytic undertaking is to be answered by a similar logic as the question about the general methodical approach. However, this question is even strongly related to the study context itself as well as to suitable qualitative criteria that justify a certain case study model and its application. As for case studies, the following logical-analytical criteria apply:

The first point is the 'construct validity'. It is related also to cases in which indicators are not directly operationally definable, but rather constructed. In a qualitative context, the core of validity is focused on the question of whether these constructs used as indicators correlate in a non-conflicting way. In contrast to the portfolio of measurable criteria used for quantitative statistical approaches, the situation for case studies is more complex. The main challenge here is the influence of subjectivism on the construction of indicators, which in heuristic approaches may always be the case—at least as an artifact. In common practice, emphasis is therefore given to transparency in the derivation of the basic criteria as well as to their connection to the research question(s) and assumptions. This is usually fulfilled by anchoring these in theory and through transparency throughout the case study process as well as during the development of findings (Lienert & Raatz 1998; Liebermann 2005).

The second point is the 'internal and external validity'. Internal validity describes the relation between a causal origin and the following incident. Especially in qualitative studies, the observed phenomena may interconnect several causalities, of which some might be more hidden or difficult to ascertain than others. Therefore, the aim must wherever possible be to uncover the whole complex of causality. Accordingly, complex (meta-) narratives need to be detected and analyzed. External validity relates to the question of whether and to what extent the results of one

study may be generalized or transferred to other cases. In contrast to surveys and experiments, with their statistical generalizations, case studies allow for no generalization (with the exception of analytical issues). This means that cases as such are generally not comparable on their concrete level, but only on a higher theoretical level. In the context of this dissertation, this concerns the relation between different types of settings within mature suburban residential areas. As mentioned in the introduction and the chapters on theory, case study-based research on family housing is often conducted regardless of whether this housing is located within the core city, its inner or outer suburbs or in peripheral areas. Such results only show a 'replication' limited to the physical housing as such, but not necessarily on general trends in family housing, as the circumstances among such broadly (un)defined locational attributes turn out to be quite different. This study attempts to avoid such methodological generalization by focusing on residential housing in suburban areas defined as metropolitan areas of German cities within the National Spatial Survey<sup>68</sup> 2009 (Hesse et al. 2013, 17ff). Admittedly, whether one sees mature residential areas as parts of suburban areas that are or are not morphologically distinct depends on the point of view. Usually, suburban settlement areas include also rental apartments, 'new towns' or a mixture of different settlement types connected into a settlement's functional mixture. According to the argument that has been made in the theoretical section, and with regard to what has been summarized under the term of 'systemic space', it would not be relevant to limit the case study to just one morphologic or otherwise homogenous type of residential settlement. More coherently, study areas need to be chosen in which the morphology does not play the only distinctive role, thus taking into account that other morphological definitions than that of areas alone may apply. As mentioned above, replication does not just apply to morphologically similar areas, but to all kinds of residential areas within a comparable (and thus here, mature suburban residential) setting.

Replication—in contrast to reliability—does not relate to the same case study, but to the relation between different case studies, "in which, according to the theory, the outcome should show comparable results"<sup>69</sup> (Schmidt 2006, 110). To prove general replicability, several types of housing areas within the mature suburban residential areas may be investigated. When applying more than a single case study, the replication of results would usually be a sign of a coherent theoretical assumption. However, investigating a high number of areas would clearly exceed the capacities of a dissertation. What should be done here is to contribute to the discussion about the perspective on suburban mature residential areas and widen it by suggesting an alternative conceptual approach rather than developing an inalterable universal theory. In the context of suburban variety, a universal theory is not on the agenda, and certainly not as an initial step. In such a case, external validity and reliability may play a certain—but not the dominant—role (Numagami 1998, 3). According to the analyzed context of the broadly defined suburban resi-

---

<sup>68</sup> 'Laufende Raumbewachung'.

<sup>69</sup> Translation by author. Yin (2003) further distinguishes between direct replication, meaning the same results in different case studies, and theoretical replication, meaning the achievement of differing results.

dential areas, a focus at least on two particular studies within a differing suburban context is a deliberate choice as it allows the researcher to enjoy the advantages of a replication check. Two different cases, both under the same basic circumstances of maturity and localized within a clearly below-average economic and demographic metropolitan suburban setting, interpreted along the common designated fields of analysis, deliver at least a sufficient insight into replication.

To test the extent of potential replication, two cases will be chosen from areas that had already been initially investigated within a study initiated by the German Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) in the Lifecycle of Suburban Areas project (Hesse et al. 2013) mentioned above. The connecting point here is the first analytical level, defined at the beginning of chapter 3 as a reflection on lifecycle discourse and especially the stable maturity assumption. Connected to the notion on the second analytical level of how systems actually adapt, this gains relevance by testing the stable maturity assumption against the theoretical background of the development path theories, especially newer discourses regarding resilience and path dependencies. It further adds a new explorative direction in the three analytical fields generated at the conclusion of the theory chapters, elaborating on the issues of systemic spaces, diversification processes and human agency by making them the focus of an updated investigation.

Testing the stable maturity assumption as part of its original model by continuing an existing study calls for a transparent methodological approach. This especially regards connection with the existing study, which is grounded in its own research structures. A challenge lies in drawing a clear line to the study while leaving clear contact points at the same time. A further challenge is in the risk of methodological inconsistency. In the study of Hesse et al. (2013), the initial analysis is based on a large number of general quantitative analyses as well as on a follow-up of a small number of cases of statistically based qualitative analysis. The general methodological principle is based on a mixed-method strategy defined as ‘nested analysis’ by Liebermann (2005). This method was developed as a framework for combining research based on quantitative and qualitative methods in order to avoid conflicts between those two approaches and to enable enhancing benefits of both. It suggests methodologically coherent ways to develop theoretical models via a model-testing or model-building small number analysis (SNA) based on the result of an initial large number analysis (LNA). According to the nested analysis approach, findings by Hesse et al. (2013) showed divergent development patterns on the LNA level, including all metropolitan areas in Germany and regarding the combinations of economy, population and settlement area development. The authors accordingly summarized their findings into eight different categories.

---

**see chapter 3**

---

**see chapter 3.6**

---

**see chapter 3.7**

---

**see Figure 25**

---

**see Figure 27**

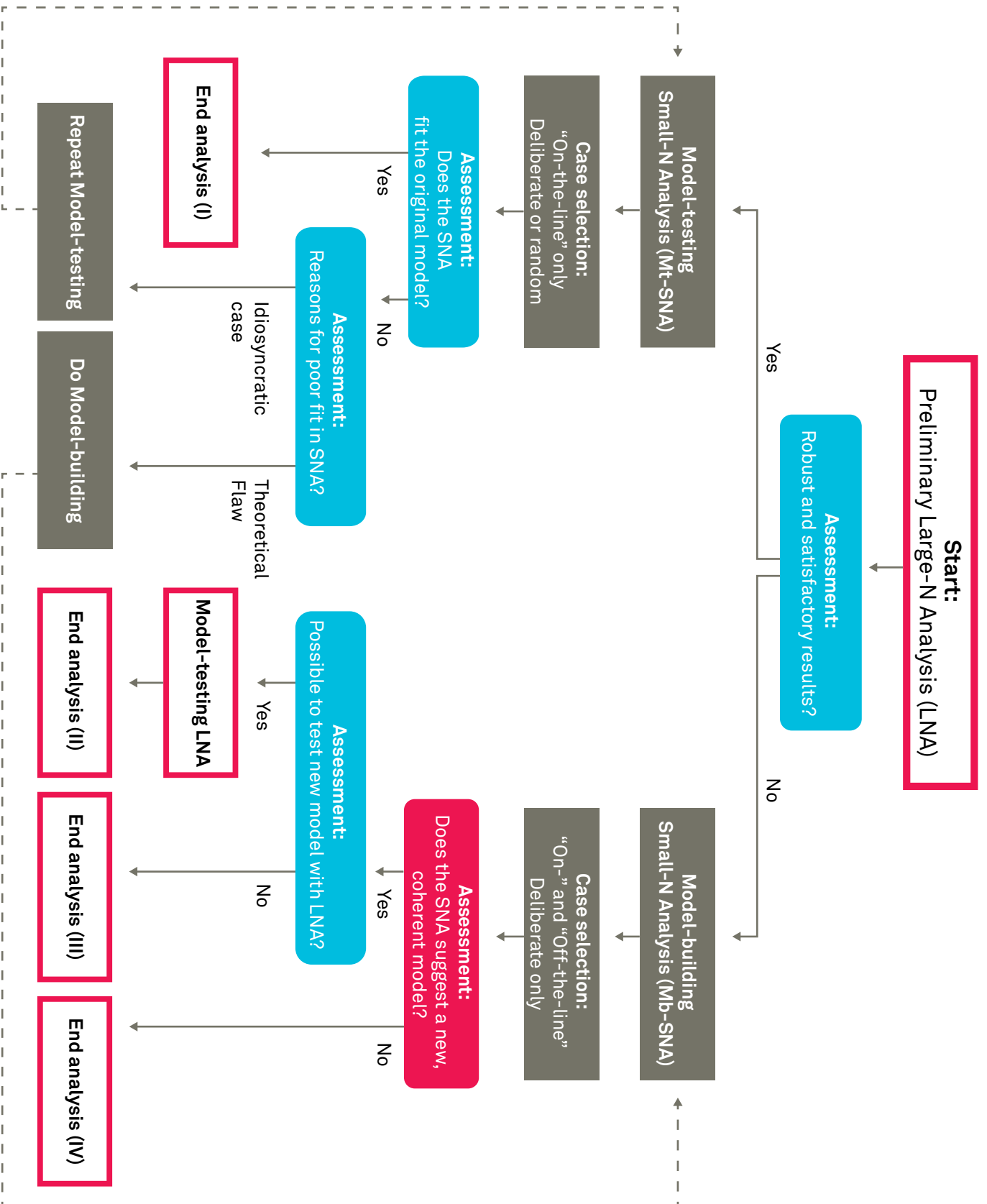


Figure 26: Overview of the nested analysis approach (Liebermann 2005, 437)



Even though the LNA showed a qualified picture of how suburban residential areas in Germany tend to develop, it did not generate a satisfactory answer to the question of how lifecycles change within these areas proceed. Therefore, a model-building small number analysis using a sample of twelve different localities in four different types of metropolitan areas has been undertaken, suggesting a new model of lifecycle change, including a systemization of adjustment strategies and targets as well as the stable maturity assumption. This dissertation's analysis thus aims to test the robustness of the theoretical model of stable maturity by complementing the existing study with selected further analyses and thus by deepening the results of the initial study. As this seemed to be a coherent model within this study and further testing of the new model with LNA would bring no further insight, the analysis ended there ('end analysis III'). However, the enlarged theoretical discussion in chapter 4 suggests a further testing of this model of adjustment strategies and targets. Hesse et al. (2013) suggested a mechanism of adjustment towards resiliency in terms of variational patterns. However, it did not explain the steering mechanisms in specific settings of time and place. The study describes this in a valuably descriptive, yet non-analytic way. Thus, the studies undertaken in this dissertation attempt to add a further qualitative analysis to the 'model assessment' based on deepening selected cases from the existing SNA in order to test the underlying generalized assumption on stable maturity. At the same time, the knowledge of internal mechanisms of adaption within the maturity phase should be complemented.<sup>70</sup>

Regarding the conclusiveness of this particular study, the internal and the construct validity play a significant role, as the study uses constructed indicators and builds on particular narratives to understand systemic causalities. Therefore, the grounded theory mentioned above becomes one of the underlying methodological principles of the study. Despite the fact that this dissertation does not intend to build a universal theory, for which grounded theory was initially developed (Strübing 2004), it is used as an analytical system to exploratively structure the empirical studies along the designated fields of analysis (cf. Reimer 2012, 143ff) derived from the theoretical chapters and summarized in chapter 3.7. The main reason for such a procedure lies in the fact that the approach to be described by the study is not yet settled within a particular methodical system.

---

**see Figure 23**

---

**see chapter 4**

---

**see Figure 23**

---

**see Figure 25**

---

**see chapter 3.7**

---

<sup>70</sup> The general preconditions formulated for the complementary approach have to be born in mind during further case study analysis. First, a high degree of transparency is necessary, particularly when adding complexity to the scope of analysis. Again, this is a basic principle of the construct validity. Second, if the cases are the same, they are to be deepened in a way they have not been deepened before. This is achieved by deepening through new third-level indicators. Additionally, the approach allows for the inclusion of additional parallel qualitative (comparative) cases outside of the previous population of cases (additional references). This strategy is also included in the scope of methods.

With regard to what has been stated about the importance of meta-narratives and stakeholders at the beginning of chapter 4, in-depth interviews with planning stakeholders are at the core of relevance for such empirical case studies. In-depth interviews work with non-directive interviews, aiming not only at gaining facts, but also at understanding significant positions and logics of action inherent to the interviewee's operational schemes (Friedrichs 1990). The frame for analyzing the interviews is hereby based on following levels:

- First and most direct is the level of phenomenological empiricism documenting what planning stakeholders say.
- Second is the level of relevance regarding mainly what the statements mean in the particular context.
- Third is the level of meta-narratives, which are the primarily determinants for what is being said or done.

Analyzing qualitative data is always related with the challenge of double hermeneutics (Giddens 1984), as the interviewee first evaluates and interprets the reality, and whose interpretation is in turn being evaluated and interpreted by the interviewing researcher.<sup>71</sup> The research design settled within an operative approach delineated as follows therefore seeks to at least partly minimize the risk of such based misinterpretations.

### **Operative procedure**

The research design as described in the present chapter determines the operative approach chosen for the empirical studies. It is divided into three phases. Within the first 'review' phase, materials from the initial studies are reviewed with the aim of operationalizing defined fields of analysis by further concretizing them into components that can be researched in the next steps. A next aim is to structure the pool of studies and accordingly select case studies to be further examined. This step only includes the review of existing materials of the study. In the second phase, qualitative research based on in-depth interviews with planning stakeholders who took part in steering local development during the last decade as well as with stakeholders from additional contexts are carried out. Choosing planning stakeholders within case studies as well as for additional evidence is based on a 'snowball principle', according to which stakeholders indicate further key persons, but is also determined based on own inquiries. The third phase can be called the 'interpretative filtering' of the material collected within the second phase. It is dedicated to the grounded theory approach of permanent comparison, which makes coding and analysis occur at the same time. Therefore, the second and third phases are interconnected repeatedly by pre-summarizing codes based on empirical results. To reach a certain degree of reliability, conclusions to particular components

---

<sup>71</sup> Hillier (2002, 17) defines a triple hermeneutics while arguing that interpretations of unconscious processes, ideologies, power relations and other expressions of dominance may privilege certain interests over others within argumentative statements.

are undertaken first when a base has been confirmed through gathering data from different sources and points in time and bringing them together. Conclusions on the three fields of analysis are undertaken after finishing the interpretative filtering.

The operative procedure is carried out together with an equivalent data management. As far as the interview partner agreed, the interviews have been archived in fully transcribed form. Local stakeholders' interviews were evaluated using the qualitative data analysis software maxqda. All remaining data is gathered within a database. This includes original planning materials, data as well as scientific literature and its extracts prevailing in digital form, particular project documentations, own notes and chronicles, as well as a standardized interactive electronic literature database.

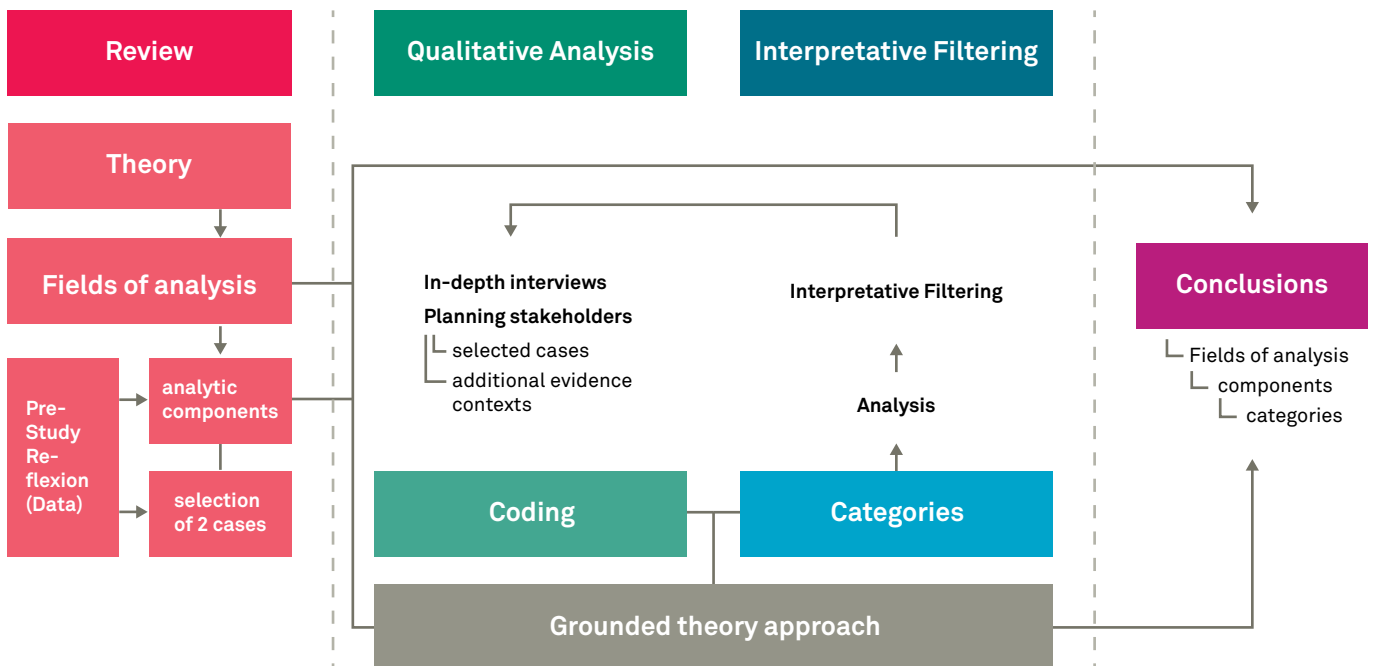
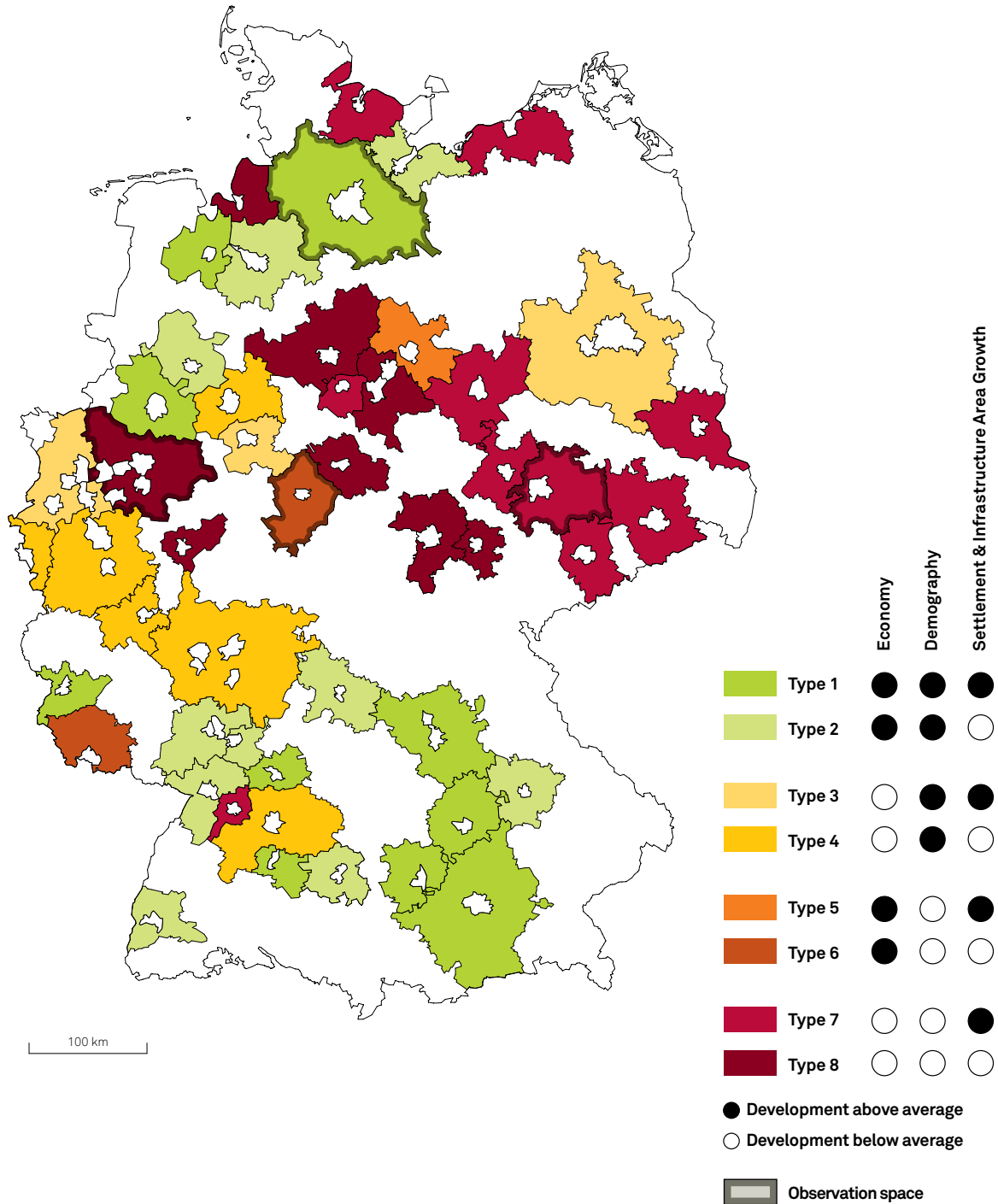


Figure 27: Study design (own illustration)



**Figure 28:** German suburban areas and core cities as well as the classification of their general development dynamics between 1997 and 2009 in eight types according to the demography, economy and spatial development of their metropolitan regions. Four regions—Hamburg, Ruhr, Kassel and Leipzig, selected to contain three case studies apiece—are marked as observation space. (Hesse et al. 2013, 56)

## 4.2 Pre-study reflections

### Excursus I: lifecycles in suburban areas

The study on lifecycles in suburban areas (Hesse et al. 2013), from which two case study areas, partly alternated, will be further examined, serves as a starting point for the empirical research. It accommodates two basic cognitive interests: the first concerns a heuristic definition of the lifecycle concept of suburbia. In regard to lifecycles, this model is a kind of orientation and not a formally rigid concept. Oriented towards Hoover and Vernon (1959 & 1962)<sup>72</sup>, it incurs three basic phases of growth, maturity and decline. Rooted in the pool of case studies that find themselves in different stages of development, it then generally maps out careers of diversification. It further addresses the topic of resilience and its tipping points. These points are assumed as an inherent part of the adjustment leading to diversification, hereby not distinguishing between process and threshold. As the second foundation of resilience, the equilibrium represented by a state of stable maturity is defined as an ideal (and not actually a 'real') condition; it is likely that the tipping points are also conceptualized in a similar way. Building on this, the study concludes that suburban areas tend to take alternating paths when the surrounding conditions in combination with the actual phase and situation within the area does not show any perspective for reaching the next phase in a state of stable maturity.

The second cognitive interest is targeted towards the concepts of such development paths and the strategies for steering them. In terms of a canonical point of view, the conclusions are surprising, especially in regard to the dominance of individual paths found in every case regardless of its lifecycle phase. This shows that the influence of change, which evolved from particular macro, meso and micro contexts, on the development of particular suburban residential areas is at least as significant as the combination of location, morphological type and state of maturity. Furthermore, it shows that stakeholders deliberately or indeliberately shape a development path by acting their role within a certain level of the panarchy.

Hereby, two underlying analytic complexes of development co-shape the discourse. First is the change and the consequent passive diversification of suburbia. This includes changes in particular areas that happen due to unswayable external or internal circumstances, such as general trends mainly in terms of economic and demographic development and the subsequent societal changes. Second is adaptation, which occurs in an active, mostly rationally planned and systematic manner. This is a result of a scope of strategic actions by stakeholders according to existing consequences of change as a reactive adaptation, or as a strategy of a perspectivistic adaptation meant to encounter changes and consequences expected in the future.

---

<sup>72</sup> See fig. 12 in chapter 3.5.

Within its regional focus, the study assumes the tendency to integrate suburbia into the regional urban context due to the trend of diversification, which in terms of morphology, society and function sees the suburbs as complementary to the core areas. This argumentation puts aside the outsourcing argument related to the shift of particular functions through suburbanization towards the urban outskirts and beyond. Instead, it shows suburbia as both a space and place offering a palette of possibilities for different functions, life phases and lifestyles—all attributes usually given to the core city. Considering its local focus, the research field focuses on particular areas. This includes the conceptual topic of border definition in order to gauge the area using its coherence, networks and integration, and open space. The study areas have been defined based on an intensive exchange with the regional and local government institutions. Together with urban design analysis, this delivers valuable initial indices for attempting to conceptualize 'systemic space'. The study further defines 'placemaking' as one of the core targets: "Placemaking connects supply-and-demand-oriented strategies for dealing with suburban space—individual approaches towards the revaluation and enrichment of suburban space should connect static-operative and dynamic-social levels." (Hesse et al. 2013, 25). This is a programmatic statement for dealing with suburbia instead of a research agenda on suburbia. By mentioning the terms 'community' and 'placemaking', on a basic level the study analyzes local stakeholder settings and their connection to higher levels. Additionally, it is defining the basic mechanism of the evolution of targets and actions along the lifecycle concept. However, it does not further connect this concept with a particular community system and its stakeholders.

The methodological approach and operative result can be divided into the analysis of suburban areas in Germany, the subsequent construction of metropolitan types according to the key indicators of demography, economy and spatial development, and the selection of corresponding case studies.

The case study concept consisted of three phases. In the first phase, quantitative data on the meso and micro levels were scanned in order to provide a basis of information on the sites. This became a foundation for building concrete approaches as well as the research questions and design for each area. A second phase included qualitative research on-site, including site visits and interviews with planning stakeholders and professionals. A third step aimed at defining development paths and particular challenges. These were later elaborated upon in the final conclusions.

The spatial definition of suburban areas is based on the definitions by the National Spatial Survey 2009. The urban region consists of core city/cities with more than 100,000 inhabitants and their interdependent outer areas. Their outer areas are a conglomerate of what the survey regards as complementary urbanized area, inner commuter area and outer commuter area. The complementary urbanized area consists of municipalities with a daytime population density of more than 500 people per square kilometer, with a strong functional interconnection to the core city. Within the model, the complementary urbanized area accounts for an integrated part of the core city. In the inner commuter area, at least 50 per cent of residents commute into the city center. In the outer commuter area, between 50 and 25 per cent commute into the core city area (web BBSR, Hesse et al. 2013, 31).<sup>73</sup> The results show a quite differentiated picture of the development of the suburban areas around large cities in Germany. To a great extent, it mimics the economic and demographic development and is clearly distinguished from rural areas, where the suburban phenomenon largely underlies different conditions. Especially in former East Germany, with the exception of the state of Brandenburg, all metropolitan areas were stagnating or shrinking. The picture in the northwestern part of Germany is quite diverse: especially the Ruhr region, rural areas in eastern Westphalia and around Hannover, as well as Bremen and Kiel showed stagnation, while others were growing. The southwestern part of Germany partly shows demographic stagnation, while the southeast is growing steadily.<sup>74</sup> The four metropolitan areas of Hamburg, Ruhr, Kassel and Leipzig have been chosen to exemplify different types of development. (ibid.)

The particular meso-level (municipal) area of the case studies has been chosen in consultation with regional stakeholders. The selection complied with the target of including areas of different types regarding the location of the case study within the complementary urbanized area, the inner commuter area and the outer commuter area, respectively. Similarly, the concrete case study areas have been defined in close consultation with stakeholders from the meso-level area. Here, the location within the particular municipality, urban typologies, age of structure, identifiability including construction and administrative coherence as well as the availability of statistical data on demography, economy and settlement structures on the micro level were considered. Therefore, the trilogy of complementary urbanized area, the inner commuter area and the outer commuter area, among the spatial distribution of the case studies has not been rigidly followed in all cases in each of the four regions. Nor has the sole focus on housing been followed, and areas with different main uses have also been included (ibid, 58f).

---

<sup>73</sup> 'Ergänzungsgebiet zur Kernstadt', 'Engerer Pendlerverflechtungsraum', 'Weiterer Pendlerverflechtungsraum' (cf. web BBSR). For detailed description of the model, see Hesse et al. 2013, 30ff.

<sup>74</sup> The data show development between 1997 and 2009. Particular changes occurred since then, especially within the core cities. E.g. between 2009 and 2013, Berlin gained on population by ca. 130,000 inhabitants (web ASBB). Same tendencies showed also most of Germany's large cities during the same time span, including those in stagnating metropolitan areas. However, suburban areas in stagnating metropolitan areas are further losing population, while those already gaining population between 2009 and 2013 are continuing to do so.

	macro area	E/W		meso area	micro area	metropolitan zone	type	main use
1	Hamburg	W	1	Hamburg Eimsbüttel	Burgwedel	core city	4	housing, local centre
2		W	2	Quickborn	Dichterviertel	close inner commuter area	6	housing
3		W	3	Tornesch	Tornesch Mitte	close inner commuter area	6	production, housing
4	Kassel	W	1	Ahnatal	Kammerberg	close inner commuter area	2	housing
5		W	2	Fritzlar	Roter Rain I – III	wider outer commuter area	1	housing
6		W	3	Vellmar	Musikviertel	complementary urbanized area	6	housing, local centre
7	Leipzig	E	1	Borsdorf	An der Parthenaue	close inner commuter area	3	housing
8		E	2	Grimma	Grimma Süd	wider outer commuter area	7	housing
9		E	3	Leipzig-Altwest	Rückmarsdorf	core city	3	service, housing
10	Ruhr	W	1	Gelsenkirchen	Resser Mark	complementary urbanized area	8	housing, local centre
11		W	2	Herten	Bertlich	complementary urbanized area	6	housing
12		W	3	Hamm	Römerstraße	complementary urbanized area	2	service, production

**Legend:**

**E = East Germany**

**W = West Germany**

**Figure 29:** Case study types by Hesse et al. (2013) (adapted by author)



As the results regarding the lifecycle concept have already been exposed in previous chapters, the second cognitive interest in development paths and steering strategies are catered to here. These manifest themselves as quite diverse. First, strategies differ according to the level on which they are established. Second, they differ according to general conditions of every particular level and its superior levels in terms of the basic socio-demography and economy in each metropolitan region and particular area. A comparative view on the study areas allows one to conclude that, in stagnating and shrinking areas, the general activity of superior administrative levels is generally stronger than in areas of growth. Especially the steering limitations regarding land use and the enlargement of settlement areas underlies a stronger control. Instead, in growing areas, municipalities act quite autonomously. Even more diverse are the measures on the municipal level. These have been divided into physical adjustment, including market demand for physical adjustment, and the renewal or demolition of physical structures and their environment in order to adjust the quantity and quality of useable space. Second, but strongly interrelated, is functional adjustment, including marketing, service and management innovations. Both adjustments are related to diversification. Diversification as a phenomenon is evident in both residential and industrial or service areas, albeit with certain differences. Housing areas differentiate in order to attract further user groups other than the ideal core user group of young family with (two) children. Production areas increasingly tend to incorporate services; service areas in turn further diversify in the scope of their sectors. These processes of user group and functional enhancement also lead to growing demands on urban design and management complexity. (Hesse et al. 2013)

Strategies on the micro level are described as mostly steered by the meso and macro levels. Municipalities play a key role here, especially when regarding land use or support programs for physical and structural adjustment, such as the Stadtumbau program. In large housing estate areas, housing companies may take on a dominant role; however, this differs according to the type of company. Locally based companies and institutions such as schools and parishes are more interested in responding to the local level than globally based owners.

Regarding possible strategies for the transformation of suburban areas, instead of solely relying on municipalities and other formal institutions, the study discusses possible ways of activating citizens to participate in the transformation. Using the term of 'placemaking', it turns towards physical improvements as well as the strengthening or building of self-organization networks that should create local attachment and thus improve the local environment. Even though it builds on Fürst's (2008) definition of placemaking, the study conceptualizes the suburban issue as one that needs a collective perspective across all three levels of the regional (macro), municipal (meso) and local (micro) areas: "It is about detection of attitudes, problem perspectives, domains of interests within households or users who should be integrated into concrete strategies for the improvement of particular areas—under the consideration of the specifics of every particular location type and the particular demands according to the particular lifecycle phase." (Hesse et

al. 2013, 133)<sup>75</sup>. Hesse et al. further conclude the challenge to be not the general non-existence of suburban communities, but its specific character which is rather a result of the modernistic society: it did not lead into fatal societal crisis, but it also did not create any classic community. It rather is an expression of a “specific form of social cohesion” (ibid.). On the basis of such understanding, the study suggests three strategic areas of placemaking in suburban areas, including the creation of an ‘address’ of non-interchangeability and thus strengthening local identity, the creation and support of local activities in order to strengthen generating stronger community and self-responsibility, and the monitoring of suburban development in order to enable stakeholders of any kind to act.

According to Hesse et al. (2013), the central topics of further investigation are the enlargement of case studies as well as deeper insights into particular areas. They stress investigating areas between the problematized ones, meaning ‘other than those seen as problematic’. As also will be shown later in chapter 5.3, they are usually not in the focus of stakeholders on higher levels because they do not display extraordinary challenges. However, these unspectacular cases could deliver notions on how stability functions. A further point is the diversification of suburbia, which takes into account current developments. Next, resiliency in terms of ‘collective conflicts’ is discussed, expressing the ability of suburbia as a specific settlement space to react to general societal changes and assessments, such as the sustainability yield. Another issue is the governmental institutional structure and its ability to answer, track or lead suburban transformation: it is clear that intrinsic powers need to be recognized and included into this process in order to reach most areas in change. Finally, besides the critique of morphologically based studies and of studies limited to designated localities, it is a call for qualitative research to move towards planning settings, international comparative studies and experimental programmatic approaches (Hesse et al. 2013).

## **Excursus II: placemaking, social capital and local governance**

The interest of the study centers around adjustment strategies against the background of the lifecycle change, especially regarding related development paths and steering strategies. There is a notion that such strategies and paths are likely to be quite diverse, as they are determined by several indicators on different spatial and organizational levels, which are in turn influenced by differing general conditions. Furthermore, a discussion on the content of the case study undertaken by Hesse et al. (2013) along the fields of analysis identified in the theory chapters will be provided in order to derive and determine initial components of analysis and select two case study areas as subjects for further analysis. But before approaching this, in regard to the topic to be studied, the placemaking approach used by Hesse et al. should be shortly discussed in order to prepare lines of argumentation.

---

<sup>75</sup> Translated from German by author.

Interpreting Fürst et al. (2004) and Fürst (2010), placemaking, as a widely used term, can be generally defined in the following three ways. The first way sees placemaking as social engagement supported within the conceptual framework of, for instance, the 'activating state'. This includes the instrumentalization of non-public assets in order to improve the living environment and thus enhance quality of life. This hybrid concept reflects, for example, endeavors of public private partnerships (PPP). Based on win-win situations, it is far from being altruistic; it rather seeks to improve entrepreneurial conditions mostly by improving the living environment. Within this concept, qualitative high and functionally distinct 'hybrid' public-private spaces or responsibilities may arise based on similar concepts. Examples of this are business or housing improvement districts (BID, HID).

A second understanding could be summarized as 'making place out of space', which is related to the idea of local distinction, identification and thus engagement. Such a concept suggests that the shaping of space creates social affiliations in terms of engagement, community and social capital enforcement. It argues along the distinction between place (socio-cultural and socioeconomic functional spaces with common values) and space (publicly accessible physical spaces) (Healey 2001). Seen as milieu effects, intense communication builds social capital, common visions, an ideological base, place-related value and intensifies the bonds between certain spaces and community.

A third understanding might be defined as 'beyond participation and towards self-steering', conceptualized as a part of the discourse. Governance in this sense means self-steering on the local level, a spontaneous organization with autonomy from the governmental institutional system due to collective action (Fürst 2004, 28f): "New forms of governance evolve when the traditional government institutions do not cover the necessary scope of steering." (Fürst et al. 2004, 30). This is usually the case when governance enables to more effective resource allocations by new stakeholder constellations, in cases when new tasks that transcend the classic task-and-responsibility division within government structures arise, or when new structures for societal steering should be developed based on self-organization and using the state in an activating role, as has been referred to above. Governance connects by collectivity based on the same level of actors. This collective is self-managing in its actions. It is different from participative forms of steering that 'only' enable participation in government—which however remains steered and thus controlled by the institutions of the governmental system. Important for governance structures is that they remain permanent even after the impulse that sparked them has calmed down. (Fürst et al. 2004).

Especially for the relation between the latter two elements, Fürst et al. (2004) see social capital or its assets as one of the connecting issues, as it links social interaction and governance in terms of collaborative partnership. Even though the authors' findings on the interdependency between placemaking, social capital and local governance show no quantifiable interconnections, it remains clear that in areas with higher levels of social capital, local governance is more likely to evolve.

In the production of social capital, “place is a central organizing principle for many of these emergent collaborative partnerships” (Cheng et al. 2003, 88 in Fürst et al. 2004). One of the issues discussed will always remain the balance between rational choice and the common good, as coined in the first definition of placemaking as social engagement mentioned above. Here, social capital plays a crucial role, as it marks *“the collective capital to act, which is, for example, the trust, solidarity, development of public spirit, which all has to be accommodated similar to any other asset in order to be used. (...) This definition of social capital differs from how Bordieu understands it. While Bordieu relates it to the richness of relationships (...), (Putnam) understands the Anglo-Saxon term as a potential for common welfare which is constructed within civil associations. Putnam emphasizes its (advantageous) character as the public good that social capital carries for social organizations. For Bordieu, it is connected with uneven distribution within social groups (...).”* (Fürst et al. 2006, 36)<sup>76</sup>

The concept of social capital in its limited understanding within placemaking relates to the two core topics of **trust** and **learning**, which both operate as bonds between stakeholders. According to McEvily et al. (2003, 93f), trust is seen as the readiness to widely, without testing, rely on the impulses and behavioral expressions of a partner. There are two kinds of trust: generalized and personal. Both are seen as easier to establish in constellations of power equality, mutual dependency and low risk in case of disappointment.

To generate social capital by learning, cooperation must evolve based on perceivable success, or—again—a win-win situation. Here, motivations for cooperation might be different for each partner: some may primarily wish to secure financial benefits, such as business improvement districts, other may follow non-monetary or even altruistic aims. Fürst (2010) thus also sees the benefits as being related to positive effects of social capital accumulation: as a closer familiarity with other stakeholders who are important for one’s own actions, in the process that shapes a frame of relations and information exchange itself, in the construction of a network to follow one’s own interests while sharing the transaction costs, and in shaping one’s own as well as external paradigm perceptions.

In their study (Fürst et al. 2004), the authors examined the interconnections between placemaking, social capital and local governance. The assumption was that induced placemaking as a collective coordinated action in a space would create place dimension. Behind this assumption, for example, so-called ‘place effects’ have been purported. Within the placemaking process, social capital would evolve and would then induce or allow for local governance. First, the authors examine the connection between placemaking and social assets focused on self-organization and the creation of sector-crossing networks. They come to the conclusion that such interdependency exists, but remains difficult to quantify. It is especially difficult to measure the surplus of social assets due to placemaking programs tem-

---

<sup>76</sup> Translated from German by author.

porarily funded and steered by state programs. The strongest effects were seen in areas in which such assets already had existed before the placemaking project began. Similarly, and even more subtle, was the connection between social capital and (enduring) governance structures. These again were mostly strong only where an organizational background already existed beforehand.

### **Reflections on endogenous development**

Regarding the specifics of placemaking, it becomes necessary to define the extent to which this fits the concept of what is to be investigated in the empirical part. Placemaking is generally related to a collective arrangement of space; Fürst (2010) sees placemaking as a collective process of spatial organization with the target of improving quality of life and its socio-emotional appropriation. Its further characteristic is the establishment of a community by actors at the same level. This applies at least in the placemaking socialization process itself in order to accommodate social capital by trust and benefits through mutual learning. This also means that, within the placemaking socialization process, citizenship becomes more significant than, for example, personal social status.

However, placemaking groups are not necessarily completely pluralistic and open. Placemaking connected to the accommodation of social capital is conditioned by the definition of groups of actors, creating an (insider) collective. This may be established in a selective manner—especially the middle class tends to engage itself, rather than other groups that are partly or fully professionalized, or socially or culturally excluded. Placemaking may then become a ‘closed-shop’ matter, as is often the case in public private partnerships. Here, equality and demarcation occur in order to enable the accumulation of capital and thus provide benefits on the basis of trust and learning, as well as the benefits of achieved strategic targets and profits. In our context, the question remains in which way placemaking stakeholders organize in mature suburban areas in order to achieve their desired goals.

The results of Fürst et al. (2010) deliver important notions regarding the causalities between placemaking, social capital and local governance. Their study shows that existing interconnections are rather loose. They also show that the existing structures, regardless of the extent to which they are organized or influential, play an important role during any coming processes. As the impulse to cooperative action most often seems to be connected to a particular critical situation, citizen organizations react mostly spontaneously and release their ties after the crisis passes. This often is the case with NIMBY movements. Even though social capital is being created then, it does not necessarily show easily measurable effects in terms of structural enrichment and governance engagement. One of the reasons might lie in the competitive field of the panarchy, especially the fact that stakeholders within existing structures have their own action habits and thus not necessarily encourage competitive structures to form. As such, administrative bodies do not like to cooperate completely openly, as they are less used to being told what to do. They

---

see footnote 101

rather tend to cooperate with established institutionalized groups, as this makes it easy to keep social capital accumulated. In the following analysis, it is therefore necessary to track which stakeholders are active in which constellations, how they manage social capital and to which extent they create episodic or enduring governance structures.

Placemaking is further directed towards common space, and mostly open space. The difference between these two is quite remarkable: open spaces are, according to Gehl (2012), the spaces—both physical and social—between buildings. Common space might include constructed social spaces, which include also common interests and targets, marked by win-win situations in turn. In the following study, however, placemaking includes societal issues on local—but also across the municipal and regional—levels.

### **Initial codes as analytic components within particular fields of analysis**

The case study analysis takes place along three fields of analysis as defined in chapter 3.7 as systemic space, the diversification process and human agency. Being thematically interconnected, they together build a triangular relation. These, however, are quite abstract in order to serve a concrete qualitative text analysis, so that concrete codes are necessary. According to grounded theory, codes evolve through the process of qualitative analysis. The sources of analysis are also enlarged along the process of analyzing according to the gradually evolving codes and their categories and to the snowball principle already mentioned in chapter 4.1. Nevertheless, based on the theoretical framework and the results of the review just undertaken, in the following, particular analytic components are generated as initial codes in order to concretize the fields of analysis so that they can be practically used for analyzing interviews. As they are designated as initial, they do not raise the claim of remaining unchanged during analysis, but they are used to begin the process.

#### **A. Systemic space**

This category is usually defined in a spatial manner, and often along particular morphologies. In the following studies, the aim is to find a mode of spatial definition which defines the physical space of a particular suburban area using a combination of levels of space, place and the stakeholders' arena. In the context of the case study selection for this dissertation, an additional analytical review on the case by Hesse et al. (2013) has been undertaken. It revealed the subordinate role of the (mono-) morphology and the priority of 'mental coherence' in defining case study units—namely, the twelve case studies that were conducted. In only one of nine cases (three were excluded since they are not residential areas), the area was defined to show a clearly mono-morphological pattern; in five cases, it showed differentiation within a particular settlement type (e.g. a variation of at

least two types of family housing, including detached, row houses, semi-detached), and in three cases, a poly-morphological pattern with different types of structures dominated.

The initial codes for systemic space are defined as follows:

- **Topics of spatial definitions**  
Morphology
- **Organizational spread**  
macro  
meso  
micro ('address')
- **'Place': social cohesion & community place**

---

see Figure 29

## **B. Diversification process**

During the review, diversification proved to be a relevant concept not only for analyzing mature suburban residential areas, but also for analyzing mature or maturing suburbia generally. Similar to the connections between systemic space and human agency, the diversification process turns out to be tackled on its connection to both systemic space and human agency. In this sense, knowledge of internal mechanisms of adaption within the maturity phase should be complemented.

The initial codes for the diversification process are defined as follows:

- **Adaption**  
reactive adaption  
perspective adaption  
continuous adaption
- **Adjustment**  
physical adjustment  
functional adjustment
- **User groups**  
core user groups (young families)  
peripheral user groups
- **Functional enhancement**

### **C. Human agency**

This category is connected to local stakeholder action and within panarchic systems related to it. In order to re-prove the assumption of a lack of stakeholders, it first attempts to figure out which stakeholder constellations actually exist within a systemic space and how these actors—if present—act.

The initial codes for human agency are defined as follows:

- **Partner**
- **Stakeholders**
- **Municipality**
- **Social Capital**
  - trust
  - learning
  - strategies (macro, meso, micro levels)
  - participation—activating citizens
- **Change issues**
  - demographic and market-steered changes
- **Adaption strategies**
  - triggers of action
  - sustainability yield
  - shock, crisis, threshold
  - decline, shrinkage
  - equilibrium

#### **Selection of case studies**

Hesse et al. (2013) conducted twelve case studies on lifecycles in four German metropolitan regions in order to accommodate diversity. Nine of them including suburban residential areas, and at least one in every of the region covered a case of a mature residential area. They have shown that a potential in advocacy for adaptive adjustment of development path is inherent in all cases regardless of their regional economic and demographic and settlement development trend or the local morphological and demographic as well as maturity conditions, and described the way such adaption manifests.



E/W	meso area	micro area	metro zone	type	main use	housing type	morphology	planning law	reg. coop.	physical adj.	municip. adj.	mobility	monitoring	informal design
W	Hamburg Eimsbüttel	Burgwedel	CC	4	housing, local centre	FH & AP	MM/PM	X		X	X	X	X	X
W	Quickborn	Dichterviertel	CCA	6	housing	FH	MM/MM	X	X	X	X	X	X	
W	Tornesch	Tornesch Mitte	CCA	6	production, housing	X	PM/PM	X		X	X		X	
W	Ahnatal	Kammerberg	CCA	2	housing	FH	MM/PM		X	X	X	X	X	
W	Fritzlar	Roter Rain I – III	WCA	1	housing	FH	MM/PM	X		X				
W	Vellmar	Musikviertel	CUA	6	housing, local centre	FH & AP	PM/MM		X	X			X	
E	Borsdorf	An der Parthenaue	CCA	3	housing	FH & AP	PM/PM	X	X	X			X	
E	Grimma	Grimma Süd	WCA	7	housing	AP	MM/PM		X	X	X	X	X	X
E	Leipzig-Altwest	Rückmarsdorf	CC	3	service, housing	X	PM	X	X	X	X		X	X
W	Gelsenkirchen	Resser Mark	CUA	8	housing, local centre	FH & AP	PM/MM	X		X			X	
W	Herten	Bertlich	CUA	6	housing	FH	PM			X	X		X	X
W	Hamm	Römerstraße	CUA	2	service, production	X	GE/PM	X		X	X		X	X

Strategy

**Legend:**  
 CC = core city  
 CCA = close inner commuter area  
 WCA = wider outer commuter area  
 CUA = complementary urbanized area  
 AP = Apartment House  
 MM/... = general morphology: monomorphic  
 .../PM = within general morphology: polymorphic  
 FH = Family House

**Figure 30:** Characteristics of selected suburban areas by Hesse et al. (2013, 58 & 136f), summarized and complemented. The two studies further examined are marked in color (own illustration)

According to the methodology discussed in chapter 4, two case studies shall be further analyzed. The selection process is based on reaching highest possible variety among macro, meso and micro settings. Therefore, one East and one West German example were chosen. At the same time, the choice focused on areas in generally stagnating (or shrinking) regions. As the dynamics of urban cores are changing during at least the last half decade and core cities in metropolitan areas with only some rare exceptions are turning to stabilize or slightly grow, core city areas have been precluded. Further, it focused on areas which despite of the stagnating or negative development of their metropolitan area are quite successful in remaining stable, without showing extraordinary locational advantages over other common areas at the meso level. Quite broadly settled regarding the local settings: For the case study, a micro area in Grimma city in the Leipzig region, and in Gelsenkirchen in the Ruhr Area have been chosen.

Choosing these two particular study areas allows reflecting the designated fields of analysis within different settings: an East German area on a town outskirts including several typologies of industrially constructed apartment housing from different postwar periods on one hand, and Resser Mark as polymorphic, mostly detached family house area mixed with further typologies on the periphery of Gelsenkirchen city, West Germany, on the other hand. The spatial demarcation of both study areas has been overtaken from the original study, where it is based on definition by local stakeholders and the city. However, it will be re-proved during the analysis according to findings in particular fields of analysis. Though showing completely different typologies and history, both areas have been outside the 'Stadtumbau' programs and are coordinated in development by local stakeholders. This fact also played a preferred role for choosing these two particular areas as cases for the deepening study.



### **4.3 Grimma Süd and Gelsenkirchen Resser Mark mature residential areas**

#### **Grimma, Leipzig region**

Grimma is a city in the County of Leipzig, located 25 km southeast from the city center of Leipzig, the second largest city of the Free State of Saxony in former East Germany. In 2013, the municipality of Grimma had around 28,500 inhabitants, of which 14,270 lived in the city proper. Similar to other cities in Saxony, many municipalities were amalgamated between 2000 and 2010, together with the merger and reshaping of the county borders of the current County of Leipzig in 2008. (INSEK Grimma 2002; web Grimma 2015)

The historic city core established at a ford of the Mulde river dates back to the year 1200. Beginning in the late Middle Ages, manufacturing production in connection to water power was developed. After its decline at the beginning of the 19<sup>th</sup> century, Grimma became a garrison town, which brought forth the construction of barracks and a further expansion of the city as well as economic stability and wealth. By the end of the 19<sup>th</sup> century, Grimma had been connected by train to the emerging regional traffic network and grew further as an industrial city, giving birth to mechatronic and chemical plant construction industries in the 20<sup>th</sup> century. (Priemer 1992)

After World War Two and until shortly after the German reunification in 1990, the large garrison areas were used by the Soviet army. In 1970/71, the highway between Leipzig and Dresden was put into operation, significantly improving access to Grimma. Together with the expansion of the mechatronic industry, housing demand grew. A first large housing project was realized in a classic brick style as part of a collective self-help program in 1958, with more than 700 apartments mainly on the western outskirts of the city. Another 600 apartments followed in an industrial construction style in 1973. The city's southern edge, which includes the micro-area of this case study, was established and consequently constructed in four main phases between 1979 and 2000. (web GWB 2015; SH3, 97<sup>77</sup>)

In the years following the end of the socialist era in 1990, the city experienced remarkable changes. Besides the closing of the garrison, the two main industrial combines, which had been the largest employers in the city, were partly shut down. A remarkable fall in employment numbers during the first half of the 1990s reflected the regional trend and animated many young people and their families to leave the city. However, as a regional center, Grimma's economy has continuously remained quite stable—albeit not significantly growing—since 1995. This can also be seen in the portion of the working population. In the year 2000, this was already nearly 48 per cent, 10 per cent above the regional average. The number of

---

<sup>77</sup> SH code refers to a stakeholder interview. Interviews referred to in this dissertation have been anonymized to protect the sources. For explanation see chapter 5.1.

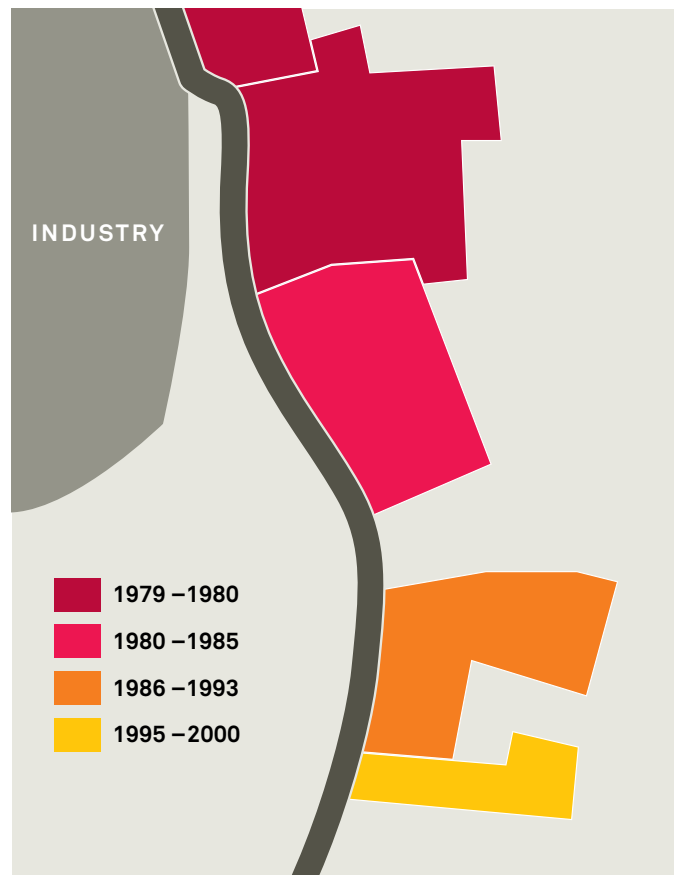
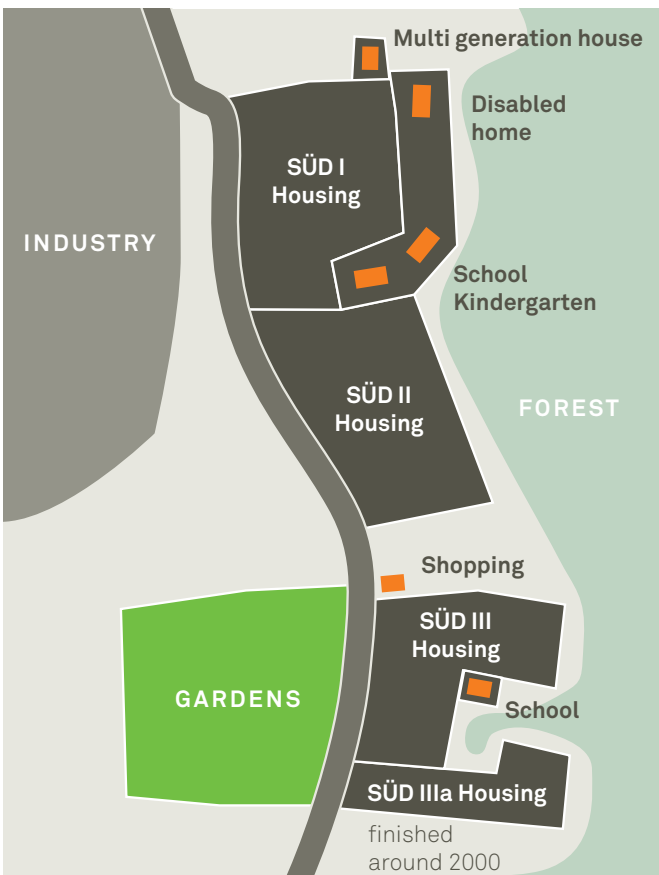
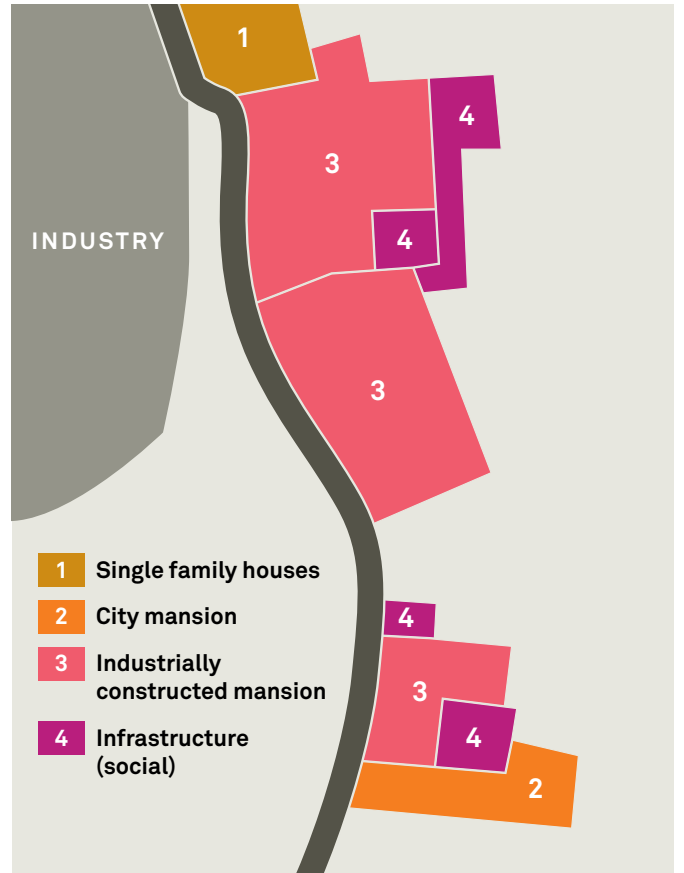


Figure 31: Grimma Süd case study area, development phases, morphology, functions (own illustration)

companies also rose in reaction to the decline in the previous main employers and at a pace quite similar to that of the surrounding regional centers. Despite major structural changes and unemployment rates of around 10 per cent, Grimma has maintained a daytime population that is nearly 12 per cent higher than its night-time population (2000). (INSEK Grimma 2002 & 2009: cf. SH3, 156)

Since its peak in 1990, the population has been steadily shrinking by under around a half per cent per year. The city experienced its highest losses between 1993 and 1995, which was a quite typical situation in Eastern German regions due to the structural changes following reunification, as many companies and institutions had closed down and workers had to search for workplaces in the western part of the country. Between 1990 and 2001, Grimma lost nearly 7 per cent of its inhabitants. The outflux of younger families allowed the average age to rise. This changed the demography of the municipality, together with the fall in natural population growth and the surplus in deaths over births. Remarkable in this context is the prognosis by the Integrated Urban Development Concept (INSEK Grimma) from the year 2002. In 2002, the city registered 8,495 households and 9,485 housing units. In 2012, the average vacancy rate was approximately 10 per cent, mostly concentrated within larger apartment houses. Three scenarios for population development have been put forward, predicting a population loss between 2000 and 2015 of 5 to 15 per cent. In 2015, the conservative scenario has proved realistic, mostly because of a stable economy, but also because of a slight (but growing) senior population influx from surrounding villages. This influx is currently becoming a general trend among regional cities in otherwise shrinking areas. On the other hand, the composition of the population has changed so that demographic aging and a fall in the birth rate will continue. (SH16, 115)

Regarding the prognoses in the development of households, the number of two-person households is mostly growing, followed by one-person households. The highest decline is among three-person households, followed by four-person households. As the composition of housing units mimics the regional average, a significant growth in the demand for housing units for one and two persons appears. Many senior households are moving to Grimma city proper from the neighboring villages, exchanging their rural homes for rental apartments. As the income of pensioners is generally lower than the German average, senior households seek reasonable housing options when their households become smaller. Therefore, classic remanence effects are not very significant. As a consequence, vacancy rates rise selectively according to location—especially among larger rental units with four and more rooms, which make around 60 per cent of the total rental house units in the city. (INSEK Grimma 2002)

Even though the vacancy rates within the large housing estates on the city outskirts began to significantly rise in the second half of the 1990s, the main challenge until the present has been seen in vacancies within the historic city center that have reached 30 per cent, mostly caused by the long-term dilapidation of the historic built substance. The flood disasters of 2002 and 2013 had a significant impact on the inner city, which is situated just next to the river. However, recovery subsidies from the State helped the city on both occasions not only to recover, but also to overcome preexisting general dilapidation and thus to make the inner city more attractive. Since the 2000s, a significant growth in vacancy rates has been experienced, especially in rental housing units in the large socialist-era housing areas on the city's outskirts. (SH3, 13ff)

### Micro-area Grimma Süd

The area of Grimma Süd is situated next to industrial properties that have been developed and continuously enlarged since the introduction of modern industry in the second half of 19<sup>th</sup> century. The housing was mainly aimed to serve their workers. Until 1988, shortly before the German reunification and the end of the socialist era, 1,600 housing units had been provided; by the middle of 1990s, the number had grown to nearly 2,000 apartments for ca. 5,000 planned inhabitants (the peak population ca. 4,250 inhabitants in 1990).

The final apartments were planned prior to and finished after 1990, accounting for nearly 700 housing units, and were the last public housing investments in the city. Similar to Grimma West, the construction was realized by both the city-owned GWB mbH public housing company<sup>78</sup> and the WGG eG housing cooperative.<sup>79</sup> Between 2002 and 2010, the total number of inhabitants in Grimma Süd dropped by 25% to 3,400. (INSEK Grimma 2002 & 2009; web WGG 2015 , SH3, 5ff)

The apartment housing area consists of four different sub-areas, each showing morphologically specific units. The first, 6-hectare sub-area was built between 1979 and 1981 and includes three high-rise apartment buildings, ten freely placed buildings and one row building consisting of three segments, as well as a supermarket area and a kindergarten. Four types of prefabricated houses were incorporated into the development. The total number of housing units was 607. One three-tower building served as accommodation for foreign workers, featuring around 110 one-room flats. Half of the remaining approximately 280 apartments were financed by

---

see Figure 30

---

<sup>78</sup> Grimmaer Wohnungs- und Baugesellschaft mbH (GWB mbH), founded in 1993 as successor of a city-owned public housing company, which has been established from the VEB Gebäudewirtschaft. In 2000 and 2015, it owned 1,798 and 1,450 apartments, respectively, in Grimma. As of 2010, 1,012 apartments were situated in Grimma Süd, 594 in Grimma West, and 48 in Grimma North Hohnstädt. (INSEK Grimma 2002; GWB 2015)

<sup>79</sup> 'Wohnungsgenossenschaft Grimma eG' (WGG eG), established in 1955 as 'AWG "Einheit" Grimma'. In 2000 and 2015, it owned 1,666 and 1,472 apartments, respectively, in Grimma. As of 2015, 551 apartments were situated in Grimma Süd, 888 in Grimma West, and 34 in Grimma Nord Hohnstädt. (INSEK Grimma 2002; web WGG 2015)

the GWB company, the other half by the WGG cooperative. The towers themselves are under the ownership of the GWB company. In 2010, all buildings had been at least partly refurbished. (INSEK Grimma 2002 & 2009; SH3, 15)<sup>80</sup>

The construction of Grimma II also started 1979 and continued until the year 1985. This 11-hectare accommodated 813 apartments and also included housing units for physically handicapped persons. Here, 40 prefabricated houses of only one type were realized due to a higher demand for standardized family apartments and in order to lower costs. Due to its younger age, in 2002, 90 per cent of the apartments had not yet been refurbished, which stands in contrast to the 100 per cent of at least partly refurbished units in segment I. With 8.9 per cent, the vacancy rate was 1.5 per cent higher than in segment I in 2002, although increasing dramatically. In 2010, 80 per cent of all buildings had been at least partly refurbished. (INSEK Grimma 2002 & 2009)

The third segment covers 18 hectares and provided, as of 2002, 69,781 housing units in 54 buildings of the same type, with only one standardized full-corner alternation in six cases. The construction of the buildings started in the second half of the 1980s and continued until 1993. Shortly after construction was finished, vacancies due to outmigration became evident. Due to low construction standards, half of the apartments already required at least partial refurbishment by 2002. An important anchor point has been the construction of an elementary school with a gym hall and open-air sports facilities. After 1990, a new local center with shops was added. Still, mainly because of its peripheral location, the vacancy rate of 14.9 per cent in 2002 remained high, especially in units of the city-owned GWB, which reached a vacancy rate of around 20 per cent in 2002 and 13.2 per cent in 2010 after the number of housing units had been reduced by 200. Vacancy in Grimma Süd III is the highest in the city. In 2010, around 40 per cent of apartments had not yet been refurbished. (INSEK Grimma 2002 & 2009; SH3, 115; CIMA 2014)

The last segment and the southernmost location was constructed during the second half of 1990s, financed by a private investor and providing apartment ownership in 14 higher-standard large houses. Even though this sub-area is completely different in construction, design and its ownership pattern, it is understood by the stakeholders and inhabitants as a part of the third segment, and is thus referred to here as segment IIIa. (SH3, 71)

---

<sup>80</sup> The interviews referred to in this dissertation have been made anonymous to protect the sources. The code delivers information on the position of the stakeholder within the panarchy: SH marks case study (Grimma Süd, Resser Mark) stakeholders on the micro, meso or macro level. EX marks experts from scientific areas involved in the research topic. RE marks interviews in reference studies carried out in similar areas in other regions than those of the two case studies and other than those investigated by Hesse et al. (2013). The number following the code marks the passage. The total number of interviews and observations included into the investigation (26) is as follows: SH: 16, RE: 6, EX: 3. Notes in materials collected by Hesse et al. (2013) used in this analysis are additionally marked in appendix. Brackets mark cuts in cited text and its contextual complements undertaken by the author of this dissertation.

<sup>81</sup> The INSEK Grimma states 529 housing units in 2002. However, an interviewee quoted his own statistic data, which more clearly correspond with later numbers.



## Gelsenkirchen, Ruhr region

Gelsenkirchen is a regional city with around 258,000 inhabitants as of 2013, one of the eight designated cities in the Ruhr agglomeration—the largest polycentric agglomeration in Germany, accounting for more than five million inhabitants and located in the State of North-Rhine Westphalia in West Germany. The current city is a conglomeration of the three main cities of Gelsenkirchen, Buer and Horst as well as several other villages, most of them incorporated during the 20<sup>th</sup> century.

The location has long been inhabited, and was temporarily also administrated by the Roman Empire. However, the city was first mentioned in 1150 as a concentration of settlements in an otherwise only sparsely inhabited agricultural area. The main phase of urban development began around 1840 after the discovery of hard coal in the area. Coal mining and the adjacent industrial production of coke as well as chemistry, glass and iron products grew rapidly and the population exploded. Between 1840 and 1900, the number of inhabitants rose from 624 to 37,000. Profiting from its convenient location on the Rhein-Herne canal and at a meeting point of several cargo railways, the city developed into one of the main industrial locations in Germany, playing an important role in both world wars as well as later on in reparation payments after World War One and Germany's reconstruction after World War Two. After the World War Two, the city already had more than 300,000 inhabitants. The massive population growth was mainly fed by immigration from Central Europe, primarily East Prussia (present-day Poland). Thus, the tradition of an immigrant population is strongly connected to the city's development and has continued until the present day: the share of immigrants in 2012 was 24.3 per cent, while the share of immigrant children under six years of age made up more than half of the total demographic.

During World War Two, more than two thirds of the city were destroyed by allied bombing. However, due to the post-war economic boom, the population soon recovered and reached a peak of 315,000 in 1964. Due to the crisis in the coal industry as well as the globalization of heavy industry beginning at the end of 1950s, the population of the city began to shrink. By 2012, it had dropped to 257,000. During the second half of the 20<sup>th</sup> century, the city's economy was marked by the economic decline of heavy industries. The unemployment rate climbed from 3 per cent in 1973 to 29 per cent in 2009, which remains one of the highest in the Ruhr region. Despite significant unemployment growth, a structural change continued, changing the mainly secondary sector-based urban economy to one based on services: in 2007, two thirds of the city's GDP originated from the steadily growing tertiary sector. The statistical data available during the 2000s allowed for negative population forecasts, in line with the generally negative trend of population development in large cities hit by the negative consequences. Gelsenkirchen was supposed to shrink further by some 12 per cent until 2020. This forecast was only matched by a limited number of cities in the Ruhr region, such as Hagen, which had the highest decline in population (-16.3%). (Stadt Gelsenkirchen 2008; Sucato & Zimmer-Hegmann 2006)

The population of Gelsenkirchen, however, grew slightly between 2002 and 2014, thus at least negating the prognosis by profiting from an overall reurbanization trend. Since 2012, the total population has increased slightly in three consequent years, moderately copying the trend of reurbanization that can be observed at the cores of larger metropolitan areas and some regional cities at the periphery. The population decline is more and more based on the increasing death rate relative to a low birth rate, indicating the consequences of demographic change. Simultaneously, the outmigration rate became positive in 2004<sup>82</sup>. The share of unemployment oscillated between 14.1 and 15.5 per cent in 2014. (Stadt Gelsenkirchen 2008, IT.NRW 2014).

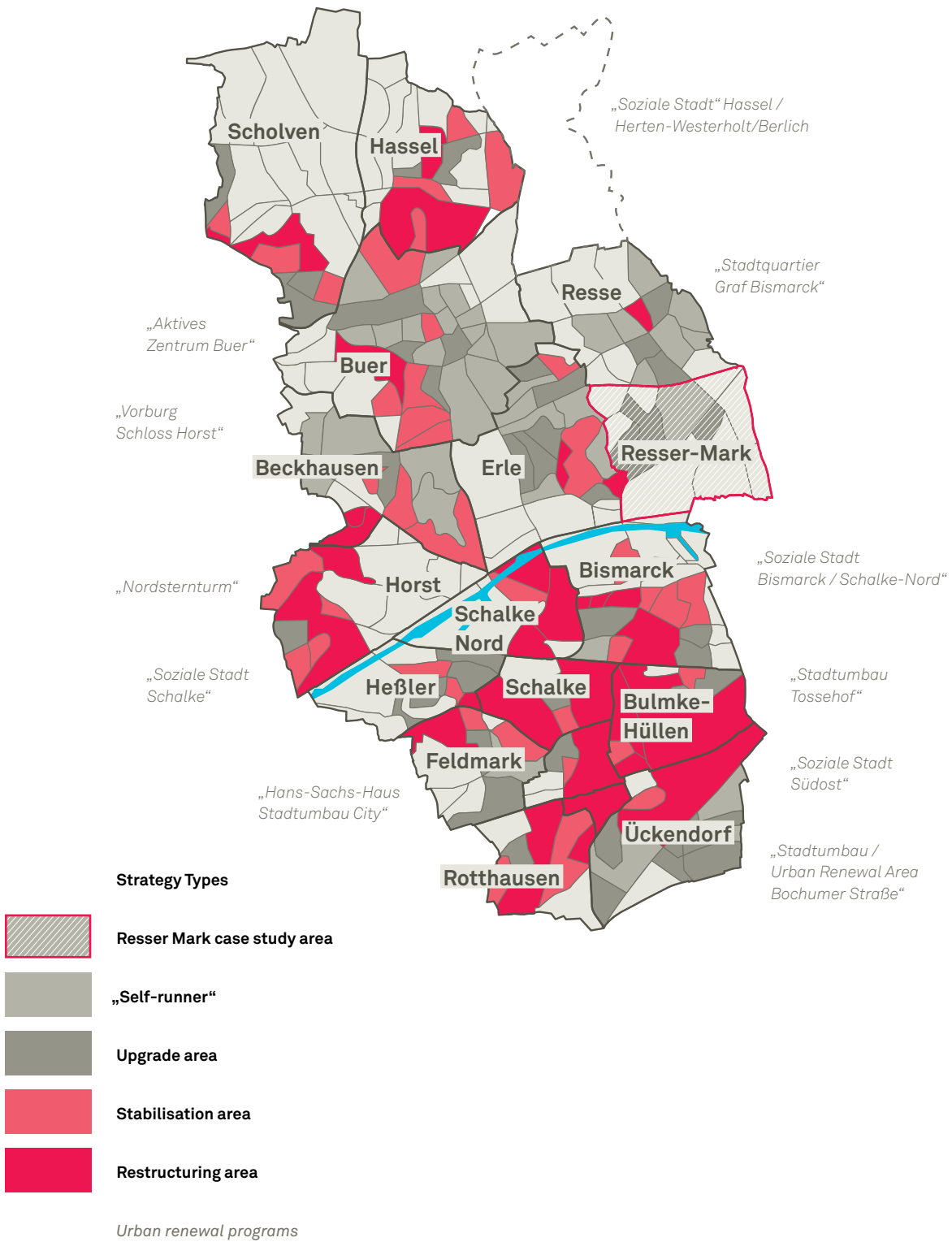
The total number of dwellings in Gelsenkirchen in 2006 was 142,704 (141,501 in 2002), with 118,900 housing units marketed on the open housing market. The portion of freely marketed housing units is growing not only due to new construction, but also due to the rent guarantees that were terminated in the already mentioned social housing segment. In 2015, the number of housing units on the open housing market reached 125,000, with some 15,000 social housing units left, or about 10 per cent of the housing stock. (Stadt Gelsenkirchen 2008; IT.NRW 2014).

Since the late 1960s, the number of one-person households has grown steadily, followed by two-person households; the highest decline is among four-person households, followed by three-person households. As the composition of housing units is in line with the regional average, a significant growth in demand for housing units for one and two persons appears. The concentration of low-income households in Gelsenkirchen is partly attributable to the reasonable rent prices within a city with ten per cent of all housing units vacant. The housing market is marked by a continuously falling share of social housing.<sup>83</sup> Generally, Gelsenkirchen mimics the regional trend in terms of rental apartments and owned housing, with the latter growing. In North Rhine-Westphalia, the number of constructed housing units dropped by one half between 1995 and 2006. In Gelsenkirchen, the share of newly erected detached and semi-detached houses climbed from 70 to 94 per cent

---

<sup>82</sup> The previous instance of a positive migration balance between 1990 and 1993 was mainly fed by immigration from former East Germany following reunification in 1990.

<sup>83</sup> Social housing in Germany is a state-subsidized program for households which are not able to accommodate housing demands within the free housing market. Together with the less co-financed 'housing subsidies' as a support for housing construction as well as state guarantees for housing credits, it is one of the main social housing tools. From the post-war period until the law was changed in 1988, social housing played a significant role. It has been assumed that up to 30 per cent of housing units should be co-provided by the state in order to guarantee a relevant housing supply. Social housing is mostly being built by private investors who are subsidized by public authorities in exchange for a guaranteed low rent for a certain period of time, mostly some decades. Since the 1990s, the amount of newly constructed social housing dropped significantly and gradually nearly came to a halt. As a consequence, due to the expiry of rent guarantee periods, the total number of social housing units dropped from 3.9 million in 1987 to 1.8 million in 2001. In 2014, most large German cities had a portion of social housing lower than 8 per cent of the total stock. In the past, many municipal housing companies invested in social housing, so that it was likely that low rents would remain even after the expiry of the low rent guarantee. However, many of the social housing estates have been privatized. As reurbanization had gradually become significant in German cities in the 2000s, social housing has experienced a partial revival since 2013, albeit by far not to the same extent as before. (Duvigneau 2001; Eick 2005; Wohnungsbauintiative 2012)



**Figure 32:** Gelsenkirchen city active renewal programs as of 2012. (Feldmann 2013) (adapted by author)

between 1995 and 2006. This marks a significant drop in the rental apartment sector, demonstrating the lower demand for rental apartments and higher demand for home ownership. However, this trend mainly relates to the wider middle class. Socially and economically weak households remain dependent on the rental housing market. Here, on the one hand, the surplus supply and public regulations prevent higher rents, which on the other hand would make rental housing in this segment an investment with attractive revenues. An additional factor is the relatively high share of apartment houses of 47 per cent, which is one of the highest among both the large cities in North Rhine-Westphalia and the total state-wide average of 22 per cent. The market prices for residential buildings remain constant over the long term, with a slight growth trend since 2011, as do apartment rental prices. This trend correlates with a more or less steady nationwide fall in real estate credit loan rates since the middle of the 1990s from over 7.5 to under 4.7 per cent. Land and real estate prices, however, remain extremely differentiated between particular areas. (Stadt Gelsenkirchen 2008).

A sophisticated urban redevelopment strategy concept defines four types of strategic areas according to the necessary intensity of public support: the 'self-running', 'reevaluation', 'stabilization' and 'restructuring' areas. This is based on local action integrated into a strategic urban renewal concept<sup>84</sup>, targeting the revival of the local economic basis and development of particular areas for residence and work, social and ethnic integration as well as the adjustment of social and cultural infrastructure to changing demands. The basis for the strategy is provided by the housing monitoring report, social spatial analysis and stakeholder workshops. These three steer the contents of the renewal process. The urban redevelopment strategy oriented to the inner city is supported by the Stadtumbau program. As far as they do not show significant social and functional problems, the less densely inhabited peripheral areas therefore remain monitored, but widely untouched by urban planning strategy. (Feldmann 2012)

---

see Figure 31

---

<sup>84</sup> „Vom gebietsbezogenen Handeln zum strategischen gesamtstädtischen Stadterneuerungsansatz.“ (Feldmann 2012, 4)

### Micro-area Resser Mark

The case study area in Resser Mark is situated on the Eastern suburban outskirts of the city. Due to its history of mining industry, similar to other cities, the areas outside Gelsenkirchen's inner city have also been spatially shaped in ways different to the classic compact European cities. Several settlement parts have evolved in an open landscape without a direct connection to the inner city, but rather beside one of several coal mines. The settlement structure provided housing for its workers adjacent to their workplace. The fragmented urban landscape thus creates a patchwork of settlement parts. (Polívka & Roost 2011)

Resser Mark is also one of such settlement area. Situated at the western boundary of the city, it is accompanied by greenery and forests on two sides. 3,500 inhabitants live across approximately 60 hectares. This is a typical suburban residential area, including only rudimentary services and nearly no commercial development. The mixture of morphologic types is typical for mature suburban areas: two thirds of its settlement space accommodates family houses, one third consists of low-density apartment housing.

---

see Figure 32

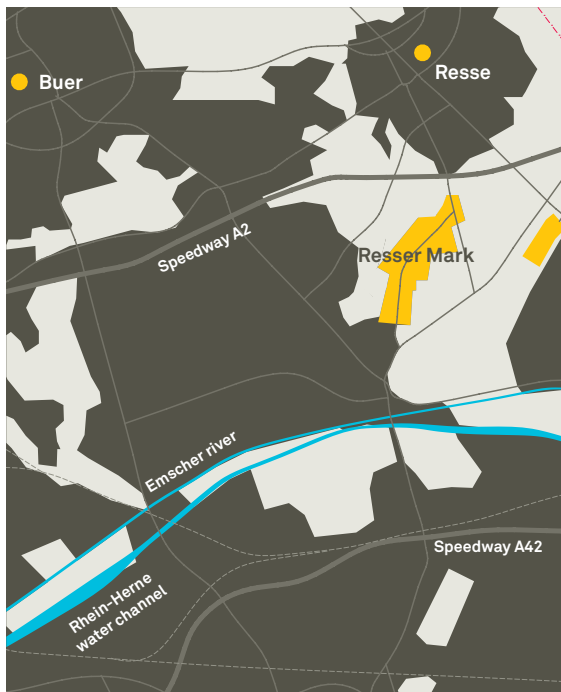
In 2014, the area was also home to two elementary schools (Experimental Waldorf School and the Catholic Elementary School 'im Emscherbruch'), one kindergarten co-managed by the local church, a two-days-a-week open air market, and an integrated local shopping area, a home for the handicapped, a serviced senior residence and a local youth club run by the Social Democrats, the politically strongest party in the region. After the protestant church was torn down due to its significant physical deficiencies, a common ecumenical parish of St. Ida was established at the center of the area. The parish plays a key role in a quite strong local stakeholder community. (SH8, 21)

Seen as social units, the area is struggling with an aging population, which in 2014 had an eight years higher per cent age of seniors (over 65 years) than the city average. Younger inhabitants enter the area mostly through the rental apartments, which are marketed by the owner company LEG<sup>85</sup> as low-cost housing, marked by high fluctuation. Within the family houses, a rather high demand exists due to the locational attributes of greenspace and good connectivity, but also because of its strong community. When examining the site rationally, the diverse development of the spatially interwoven apartment and detached houses bears the most conflict potential. (rha 2013, 12; SH8, 81)

---

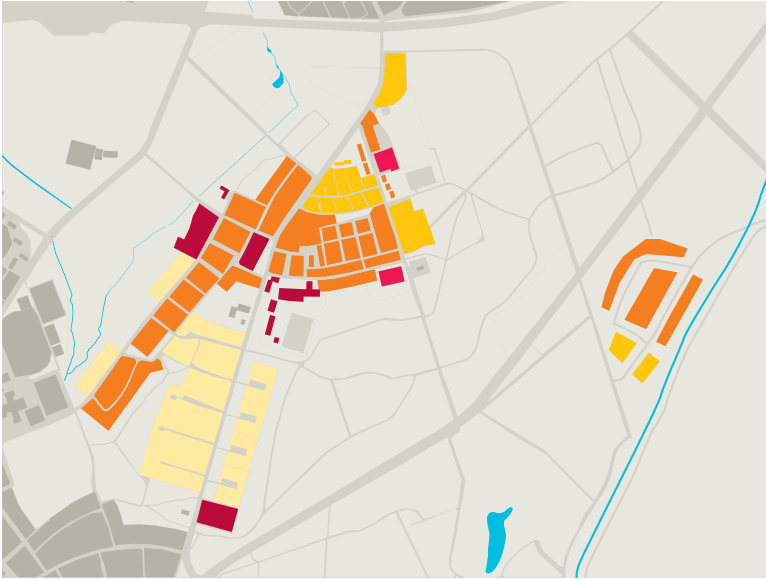
<sup>85</sup> LEG 'Landesentwicklungsgesellschaft' (State Development Corporation) was a limited liability company for land development and construction between 1970 and 2008. The main holder was the State of North Rhine-Westphalia. As developer, LEG GmbH owned up to 95,000 housing units, predominantly rental apartments in larger houses. The state sold the housing division of LEG in 2008 to the international Whitehall Real Estate Funds. The LEG as a Whitehall-affiliated company became listed in 2013. The development division retained ownership of the estate under the name NRW.URBAN.

The case study area designated by Hesse et al. (2013) in cooperation with municipal and local stakeholders includes a suburban mature residential settlement, which has evolved as a mining settlement area from the 1930s. During the first phase, the central core including twelve continuous blocks of identical apartment houses with around 720 housing units was built. Ten years later, another 100 unified housing units were constructed in semi-detached units and row houses in the southern part of the district. The area experienced its largest expansion during the 1950s, as a further 30 semi-detached mono-morphological houses were built in the south and another 93 housing units for the foremen were built in standardized miners' row houses in the north. Further construction during the 1960s included 81 apartment houses with more than 400 units and another 39 semi-detached and detached standardized houses between 1983 and 1993. During the 1980s, a senior residence with stationary care with more than 100 beds was also established. The latest project, the so-called Johanneshof, accounted for another 32 unified row houses on the former site of a protestant church building. The total number of dwellings in the area is around 450 housing units in family houses and around 1,000 units in apartment houses. The area includes nearly no mixed polymorphic areas; the typology correlates to a great extent with particular decades and their development steps.<sup>86</sup>



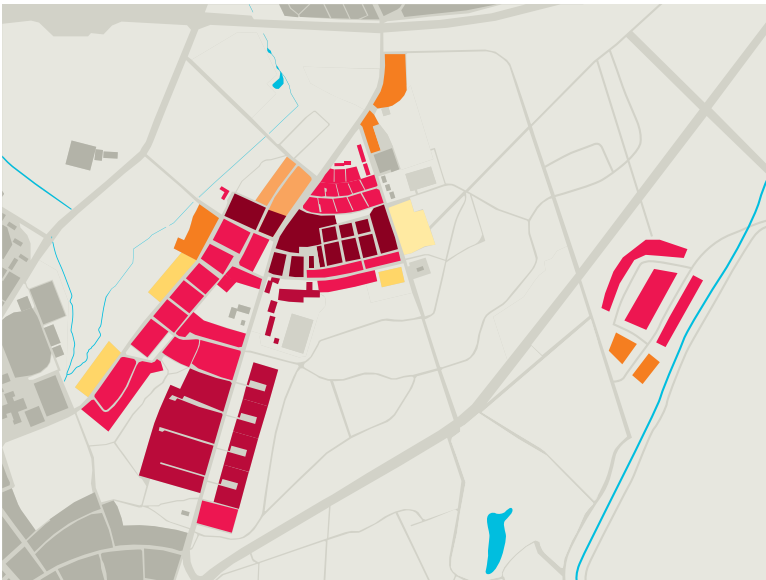
**Figure 33:** Resser Mark case study area, development phases, morphology, functions (Hesse et al. 2013, adapted and enlarged by author)

<sup>86</sup> Statistical data on housing are based on the data provided by the City of Gelsenkirchen's statistical and planning departments and completed by the author's survey in situ in August and September 2014.

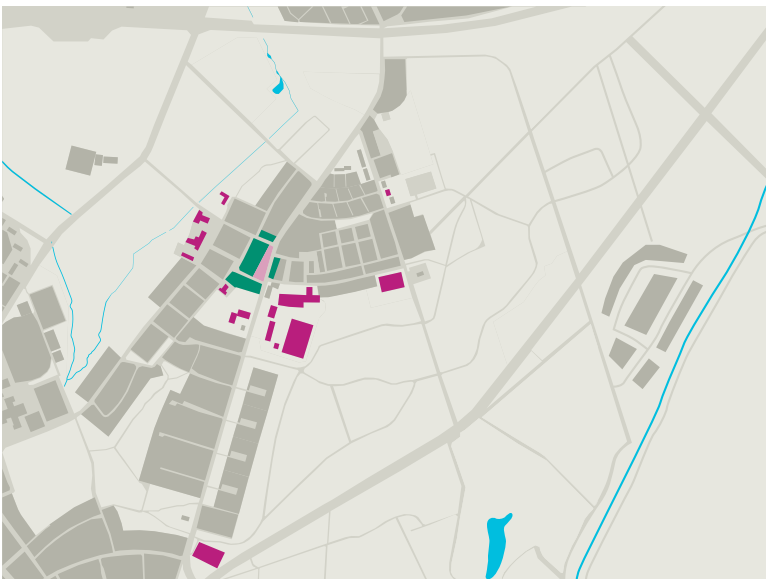


Legend:

- Detached family houses
- Row houses
- Apartments
- Solitaires
- Infrastructure



- 2006
- 1984 - 1993
- 1960er / 70er
- 1956 - 1960
- 1950 - 1955
- 1940er
- 1938



- Housing
- Services
- Central market square
- Social infrastructure





# 5

## INTERPRETING THE CASE-STUDY FINDINGS

## **5. INTERPRETING THE CASE-STUDY FINDINGS**

### **5.1 Diversification and path-dependent development**

Path dependency, divergence, lock-in and panarchy have been the main topics arguing for the attempt to reveal elementary mechanisms of maturation in suburban residential areas. The following chapters do not aim at an anecdotal demonstration of the development of particular quarters. As the general development has already been described in chapter 4.3, the focus here is instead on understanding the regularities and exceptions in the process of maturation via processes that stimulate maturation within a particular development path. The analysis hereby relies on the three fields of analysis generated in the theoretical part of the dissertation. Initially reflecting on the way the findings have been made, the diversification process is addressed and reflects the historical development of the areas and documents the corresponding development paths. Second, the stakeholders' panarchy is addressed in connection to their role within the different development paths. The chapter on systemic space follows this. Finally, systemic space in a combining overlapping of both of the previous topics is analyzed.

#### **Grimma Süd**

The initial situation is always given by the history of a place and its housing typology. The Grimma Süd area is on the one hand, one of the youngest and largest housing areas in the city, planned for some 5,000 inhabitants and accommodating around 3,000 in 2014. Generally, this new town area in Grimma is regarded as a comfortable and green district. On the other hand, its weak connection to the city center and lack of services on site have been criticized. 'Front yard talks' with citizens have pointed out deeper societal and economic shifts. These appeared during the years following German reunification, leaving many people in the area unemployed and without sufficient financial or career perspectives, thus forcing the younger people to move away and significantly weakening even those rarely functioning house-based neighborhoods. Even though the morphology is quite homogenous, the influence of such shifts differs according to particular segments and even buildings in the area. The situations within the three segments of Grimma Süd I, II and III thus show a divergent development path.

Grimma Süd I profits from its location close to the city center. The situation shortly after 1990 was determined by the fact that several buildings housed inhabitants who had already moved in some ten years earlier. In 1990, mostly families that had already settled and raised their young children of young age were living in the three-room apartments. Here, the initial growth phase was already finished during the 1990s; around 2000, the generation of children already entered elementary or secondary schools or even began to move out. Many of those who moved into the smaller apartments during the second half of their productive age or later remained as seniors. Grimma I thus managed to generally retain its stability during

the 1990s. However, there were two particularly exceptional cases. The first was a building in the ownership of the city housing company GBW that housed foreign workers in more than 110 one-room apartments, which were completely vacated soon after 1990, as well as two other multi-story houses directly owned by the industrial companies, which were later privatized. These buildings of a very specific use, directly connected to the factory's needs, indeed experienced what could be called a 'shock' induced by the threshold of German reunification, as the factory closed down soon after 1990. These were—although somewhat more slowly—completely vacated. Regarding its situation and perspectives, the development path of Grimma Süd I therefore became double-sided, including a relatively continuous maturation and a sudden break.

Particularly the latter development path forced stakeholders to immediate action at the beginning of the 1990s. To stabilize the residing inhabitants, partial re-assessments have been undertaken in both buildings owned by the GWB<sup>87</sup> and the WGG. Buildings with higher vacancy rates have been temporarily used as hotel and financial offices for the city. However, especially the 110 completely empty apartments in a high-rise building at the northern entrance to the area became a burden. A lack of housing from the socialist era still prevailed during the first half of 1990s, and thus the building offered potential for re-use. However, the small size of the apartments and the rigid physical structure of the building offered only a limited scope of alternative uses. Soon after 1990, the city administration came up with the concept of multi-generational housing<sup>88</sup> on the still-tight housing market. The building was supposed to be offered to those weakest: elderly, socially or otherwise deprived, and disabled people. The city put together a program that at least included a low-cost service point in the lobby. Due to the difficult housing situation of the elderly in the dilapidated inner city, the building could almost immediately be filled with senior residents as well as disabled youth. The stakeholders saw the quick success of this strategy as a starting point for the adjustment of Grimma Süd, which has continued over the last 25 years.

---

<sup>87</sup> After the GWB has been established as a derivate of a city owned institution, it became a financially widely independent company. (GWB 2015)

<sup>88</sup> In German: 'Mehrgenerationenwohnen'

*“In segment one, we had a high-rise building with nine floors and over 110 apartments, which had already been managed as a multi-generational apartment complex since 1990. Prior to this, it provided accommodation for Cubans and Vietnamese people who had worked here during the socialist era. The result of this was mostly one-room and a few two-room apartments. We looked at the demand in 1990—that a lot of single persons, especially women, wanted to have a small apartment—and established this multi-generational apartment complex with the support of the City of Grimma. Ms. von der Leyen<sup>89</sup> did not invent the term ‘multi-generational living’; but rather the City of Grimma did. The point of contact here was the director of the social department of the City of Grimma (...), who brought this into being and also always held discussions with politicians and was always invited to talks and to lectures. She is still presenting this model in this way today.” (SH3, 5)*

The conversion also determined further development paths within the Grimma Süd I segment as well as other adjacent areas in Grimma Süd II. During the following years, adjacent apartment buildings owned by GWB have been equipped with barrier-free access, bathrooms and apartment layouts were adjusted to the needs of the elderly. Other apartments of the WGG in Grimma Süd I were renovated soon after 1990. Most of these were family-sized apartments and therefore had more flexible layouts. Initially, these remained mostly without significant vacancies. One of the probably most important steps for Grimma Süd I was the establishment of a common space for gathering and exchange in one of the houses, which serves senior inhabitants in the surrounding smaller apartments in neighboring houses, who were profiting from the senior residence cluster and its services at the senior center and help desk. The area is further showing a growing number of senior members and has also began to cater to senior clients. Grimma Süd I is especially attractive to those who need barrier-free housing and further services on site as well as easy access to the city’s central area. While the vacancy rate in Grimma Süd I was around 7.4 per cent in 2002, in 2014, it showed nearly no vacancies beyond those caused by normal fluctuation. For senior housing, waiting lists with tens of applications exist. Within the adaption strategy, the path development has been switched from common core users of the housing—mostly families—to a previously peripheral user group of elderly. This corresponds with the changing demand on housing due to a shrinking and aging population.

---

<sup>89</sup> German federal Minister for family, seniors, women and youth between 2003 and 2009.

Encouraged by the success of the senior housing segment, GWB pursued the enlargement of this to the adjacent Grimma Süd II area. However, the general situation there proved different from the first segment. All of the apartment buildings in Grimma Süd II were WBS 70 housing type variations, which delivered a large number of similar, mostly three-room apartments, and were flexible in use but costly in renovation. For the elderly, the size of the apartments was partly inadequate: bathrooms were too small and included bathtubs, while there were too many small rooms as well as a large total floor space. Additionally, a demographic difference to Grimma Süd I became evident: the generation that moved to the second segment during the first half of the 1980s reached the peak of their family building phase in 1990. In 1990, these families had children just at the beginning of or under the school age. These younger families also showed a higher locational flexibility regarding their careers. This slight but significant age difference to Grimma Süd I also led to higher rates of family home purchasing and outmigration towards workplaces in western Germany, so that the vacancy rate rose significantly during the 1990s, reaching 9 per cent in 2001. In order to keep their housing stock competitive, the WGG reacted immediately by making its housing stock more attractive through renewal, thus already generally upgrading the housing standard prior to 2000. As the WGG is a housing association with designated members, fluctuation was generally lower, so that renovations were agreed upon in the organization's member assembly and mostly undertaken without the displacement of residents.

*“In the area of cooperatives, you can see very clearly that people moved in when the building was new and they still live there and can just barely survive. Moving into a seniors' home doesn't work, the finances don't allow for it. This is one reason why they moved into an apartment of the housing cooperative.” (SH3, 15)*

In the case of the GWB housing company, the tenants had to be individually negotiated with by the company's management in order to concentrate vacancies and implement renovations and reductions. The time period needed for the refurbishment process in Grimma Süd II was therefore relatively longer when compared to the WGG-held portfolio. On the other hand, the GWB strategy allowed at least partially to react to later developments in the local housing market—especially housing vacancies—and thus to more significantly reduce or adjust the existing mono-structured housing stock in order to attract edge user groups. As a result, the WGG portfolio in Grimma Süd II did not significantly differ from Grimma Süd I (with a rather stable tenant member pool). The GWB portfolio was changed and diversified in a more radical way in order to make the stock more flexible and thus attractive for alternative users to the usual core ones, which were traditionally conceptualized—including by stakeholders—as four-member family households. The buildings' top floors serve as an example of different approaches to the changing demand, since these are hardly demanded and therefore often vacant. (SH4)



Figure 34: Diversification process in Grimma Süd (own illustration and photos)



*“The second segment is a normal WBS 70 area. We have one half, while the cooperative has the other. Both parties renovated the roof, façade and windows. We did this within the last three to five years and noticed that the top floors were difficult to use or vacant, as people’s comfort rose over the years and enough living space was also available there. We therefore decided to take the fifth floor offline. We didn’t demolish anything, but said that they could use that as floor space and we could close it down. We have done this in two complexes in the second segment, which just has normal apartments, meaning mostly two-room and three-room apartments. (...) But that’s only for us. The cooperative still has its apartments (in the fourth story), which they had renovated beforehand. We renovated many years later, when the vacancy was already noticeable, and because of this, we went at it differently.” (SH3, 15)*

Meanwhile, two of the building were torn down in order to adjust to the lower demand of the market and thus to reduce vacancies. These were built along the street and offered less environmental quality than those near the forests.<sup>90</sup> Attractive houses near greenspace in the east were refurbished, and particular structures were only removed in the case of high densities. The situation in segment II showed differences to the segment I in terms of physical conditions, the demand situation and strategic options. In the first segment, no clearance for adaption was necessary, while in segment II some clearance had to be undertaken in order to adjust to vacancies. As one of the latest measures, a building that had already included barrier-free flats was changed into a multi-generational house similar to in the one in segment I. This happened due to growing demand for barrier-free housing within the aging population. However, this time, the concept did not only target on elderly, but according to the character of the second segment, also families and those with higher incomes in order to create an altogether mixed neighborhood. This also corresponds with higher rents, which oppose the relatively low-cost housing within the high-rise multi-generational complex in segment I. The service there will also serve elderly inhabitants of the second building as far as necessary.

In Grimma Süd III, the development path after 1990 was marked by several divergent scenarios. By that time, only 75 per cent of the houses had already been finished; construction of the remaining 25 per cent was completed in 1993. Regarding the context of the initial build-up lifecycle phase, since construction began, this area has been the most disadvantaged. It came onto the market at a time at which the demand had already begun to seriously decrease. Even though most of the apartments had been deployed first, soon afterwards, significant vacancies appeared as the youngest households were forced to move to regions with better chances for employment. After 2000, the area has reached a 15 per cent vacancy—the highest in the city—and a high fluctuation rate, as well as rate of renovated apartments of only 17 per cent. Even though the buildings were quite new, the housing standards changed rapidly after 1990, creating a highly competitive environment. Even after several measures, vacancies in some blocks still reached 40 per cent in 2014.

---

<sup>90</sup> Reference studies in Eisenhüttenstadt or Hoyerswerda showed a similarly selective logic. (RE1&4)



Situated at the very southern edge of the city, this segment depended on means of public or private transport instead of walking, and thus became unattractive, especially for elderly as well as families with children. Even though it offered at least a special school and a local shopping area, it struggled with conflicts in use between the school building and the housing area directly adjacent due to constrictions on density and the low quality of open spaces. The situation in Grimma Süd III, viewed against the background of general demand and functional challenges threatening the future of this area, has also been one of the main triggers for the city, WGG and GWB to come together and work on an integrated urban development concept<sup>91</sup>, which would allow the city to apply for funding through Stadtumbau as well as other related programs in order to invest in adaptive measures. In general, this concept was oriented towards external actors and created in order to enable the city to acquire money from these programs. Still, it remains an institutional tie between the main stakeholders, even though the city has retreated from everyday business in Grimma Süd. Due to high vacancies and limited perspectives within the core housing market, during the last decade, one fifth of the apartments have already been cleared. In the absence of other vital options, the remaining stock is consequently being diversified: WGG has invested in general renovations since 2000. A special project is the partial downgrading and refurbishment of 24 apartments in three neighboring houses into a higher quality of housing, including roof lofts, in order to meet the rare-but-existing demand in higher sectors. Even though it took nearly three years to fully occupy the elaborately renovated building, since 2014, the neighboring row of three buildings has been refurbished in a similar way.

---

see chapter 4.3

Adjusting the stock by GWB, a cluster near the forests in the east has been strategically maintained at the lowest level possible in order to keep rents low and thus to be able to offer them to the public social offices as social housing (the basic rents do not exceed €4.30 per square meter). Next to it, a block with some 60 apartments was sold in the 1990s according to a law that made housing companies from the socialist era write off debts for their construction costs. The owner later resold the apartments to a stock portfolio, which drowned out profits without reinvesting them in the housing stock. Local stakeholders are facing difficulties in getting in contact with the owner in order to discuss a coordinated strategy for segment III. This seems to be urgent, as the negative image of the buildings is also negatively influencing the surrounding real estates. Segment IIIa, which was constructed after 1995 and accommodates privately owned apartments, is largely exempt from the changes in the afore mentioned part of the area. The only direct connection concerns a facility maintenance contract between the owner's association and the GWB. The population has already reached an early phase the reduction in household size. However, because of the attractive location and high quality of apartments and the resulting demands in the housing market, downgrading has not been predicted, even though aging might become an issue again in the future.

---

<sup>91</sup> 'Integriertes Stadtentwicklungskonzept' (INSEK Grimma 2002)

## **Resser Mark**

In the case of Resser Mark, quite typically for a suburban housing area and similarly to Grimma Süd, the location within greenery was mostly mentioned as an advantage, together with the 'village-like' size of the area, the local central area with shops and services, and the sense of community, which were often seen as unique features.

*"This is a small neighborhood. All of the other districts are comparatively larger, for example, Resse. Resse also has a different character because of the prevailing apartment housing stock alone. People don't know each other there. Resser Mark has some 3,000 inhabitants, and nearly everybody knows each other. This is an attribute of Resser Mark. Besides the 'Luftkurort Resse' [the local spa], the settlement has a great location—in the middle of the forest while still well-connected to all kinds of services. Nobody needs a car in Resser Mark." (SH7, 72).*

The idyllic setting, however, incorporates the challenges of change and social and economic division between particular parts of the area. Historically, several groups have lived here, having several religions and cultural and social backgrounds. Partly, these factors can also be seen in the housing morphology. The southern part of the area, dominated by row houses, is mainly inhabited by Catholics, and is strongly connected to the Catholic part of the St. Ida ecumenist center. The adjacent elementary school is a strong anchor for the catholic community, but has also a citywide reputation. Even though the school is generally catholic, protestant children are also allowed to visit it. The protestant community is quite strong, mostly among the workers, who partly live in family houses and partly in rental apartments. Here, there is no division in the social engagement between those living in the apartments owned by LEG and those owning a family home in Resser Mark, at least when it comes to those engaged in the parish. Stakeholders see the reason for this in the history of the place, which was marked by social homogeneity.

*"It is necessary to see that the houses in the small segments are a product of the 1930s. At that time, people were not selected according to their budget. Everybody belonged to the common population of Resser Mark. The others who live in the apartments are more or less the same as those living in their small houses, they just originate from the mining generation. When people came over from Bavaria or Poland between 1945 and 1950, they were housed there. From the beginning on, there were no rich and only few poor areas." (SH9, 14)*

The protestant community is also strongly concerned with the ongoing social change in the apartment housing. While the family houses are in strong demand by both catholic and protestant Christian families willing to settle near a well-functioning parish and Christian school, in recent years, a strong influx of socially disadvantaged groups caused by the occupancy strategy of the LEG has taken place. Within the quite relaxed apartment housing market in Gelsenkirchen, the LEG as a single owner of the apartment buildings in the area decided to enlarge the por-

tion of housing units rented to socially deprived households living on state welfare. Such a program brings a low, but safe rent income paid directly by the state social institutions to the LEG. As low standards of housing are sufficient for such social groups, maintenance costs for the owner also remain low. While the situation in Resser Mark was, especially in the 2000s, marked by the influx of Turkish migrants into the older apartments from the 1940s, by that time, demographic change in the southern, younger houses from the 1960s had just begun. Five years later, the Turkish community moved to other parts of the city, in part in order to purchase their own real estate. Socially disadvantaged German citizens are replacing them together with the old generation. (SH9, 10).

*“Precarious living conditions are especially present where the elderly had lived. The apartments belong to the former LEG and a large portion of them are rented to welfare recipients—among other reasons because of their size, since they are mostly small apartments with less than 60 m<sup>2</sup> of floor space. (...) The elderly either died or moved into a seniors’ home, to their children or somewhere else. The district for elderly people doesn’t exist anymore. The residents would also be at least 90 years old today. (...) In the meantime, this part of the settlement has become quite loud thanks to regular parties, et cetera. As far as we can tell, those are mostly Germans (making the noise). (...) The people of Turkish origin still live in Resser-Mark, but aren’t as clustered and as concentrated as they once were. A change in owners took place in the commercial area near the marketplace. The barber shop sold its building to well-heeled people of Turkish origin, who have in turn very carefully and beautifully renovated it. It has become a purely residential house.” (SH7, 10)*

Such declared changes are, however, quite difficult to trace using the statistical data. There has been a slight decrease in the number of migrant inhabitants since 2006, but this has mostly been only at around 5 per cent per year. At the same time, the GDP of the inhabitants did not change significantly, as the rising incomes in newer young families in the family houses and the rising income of the Turkish community partly balanced the growth of the share of economically weak incoming residents of the LEG apartments. What did positively change is the process of aging. However, what all the statistics do not show is the growing social split between the apartment and family houses, which has by far never before been so evident (rha 2013, 8ff).

Regarding divergent path dependency, the situation in Eichkamp, an enclave of Resser Mark, shows a further example of differentiation by adaption, but also the indirect way of development with possible ups and downs. These are not necessarily final, and may continue to change according to the endogenous and exogenous situation. In Resser Mark, the change is mostly being pursued alongside the demography and social/economic change, and thus along quite fast trajectories. The change in Eichkamp, which was built as a miners’ housing area next to a coal mine in the 1950s for displaced Germans from Eastern Europe, detached from Resser Mark by a path that leads about 750 meters through a forest, shows a completely isolated suburban settlement area.

---

see Figure 34



**Figure 35:** Diversification process in Resser Mark (own illustration and photos)



LEG is the owner of all of the previous 268 apartments at the site, another 31 family row houses are located next to them. The bus service is infrequent, there are no shops or other services in the area. Eichkamp began to lose inhabitants especially after the closing of the adjacent Ewald mine in 2001. At the time, only elderly miners' families remained in the simple two-story apartment buildings. In 2012, the designated vacancy rate in some areas had already exceeded 40 per cent. However, 'front yard talks' with citizens and the stakeholders' statements indicate a vacancy of up to 60 per cent by that time (SH9). Eichkamp showed signs of a clear over-maturation, gradually turning to a general decline path caused by apartment vacancy and an aging population. As people left, dwellings remained, which are a general determinant for local resiliency<sup>92</sup>. Interestingly, classic refurbishment, including physical upgrade (façade insulation, central heating) even accelerated the loss in population, as many elderly households used the necessity to switch to another apartment during renovation to leave for other locations in more convenient areas.<sup>93</sup> In 2011, the City of Gelsenkirchen stated that it is in its future interest to clear the area of housing rather than to keep it. (SH9&11)

However, the physical resilience together with an alternative marketing by the LEG significantly changed the apparently fatal situation after 2012. Despite a further reduction in bus service by the city, the LEG began partial refurbishments and marketed the flats by a bottom rent of €2.50 per square meter, which is one of the lowest rates in the city. Additionally, in some (albeit marginal) cases, LEG has changed the narrow apartment layout, for instance, by connecting two apartments on top of each other, thus doubling the size of the apartment and reducing the total number of apartments by creating a family row house, including two-story lofts with direct access to a newly created private yard in the space between the houses. As a consequence, the vacancy rate has dropped significantly.<sup>94</sup>

---

<sup>92</sup> See chapter 3.5: Change dynamics within households as particular micro-systems.

<sup>93</sup> Information obtained in 'front yard talks' on 12.12.2014.

<sup>94</sup> Based on on-site survey from 12.12.2014. The survey was undertaken in two steps: during the afternoon daylight, checking occupancy via doorbells and mailboxes and signs of clear vacancy, and in the evening, checking signs of lights within the apartments. Also, the number of parked cars was checked, showing a significantly higher degree by doubling when compared to surveys by Hesse et al. in 2012.

Both Grimma Süd and Resser Mark show that the development path within defined residential areas have to be divided into those of particular segments and sub-systems, which include systems of particular housing blocks and households. This usual setting shows a particular and unique development path on each of its levels and their segments and sub-systems. It turns these residential areas into a complex and multilayered entity, with its own development background and interrelations. These lead to specific paths of change. At first sight, such a fact might support the canonical argument to define particular analytical areas along the level of morphologic segments, thus avoiding the systemic view, and to focus on particular buildings and the micro-systems within. This would then, for example, include surveys of particular families. As long as **change** is the topic of the investigation, such a conclusion can be agreed upon. Change is described by a consecutive path of individual history. Influences on other levels can be described as external, such as, for example, in the case of Grimma, when referring to German reunification. On the other hand, both case studies show that adjustment strategies and action are only understandable within the context in which a particular system—on any of the levels mentioned above—is embedded. In Grimma, both the BGW and WGG strategies for particular areas, segments and buildings are strongly rooted and therefore only discussable in the context of the whole system's change **and** adaption strategy. Adaptive strategies in particular segments of Grimma Süd are not only related to a place as such and its given features and characteristics; they are also always a deliberate choice in the context of the general strategy, including neighboring as well as other segments, both superior and subordinated, physically closed and detached. They further strongly reflect the circumstances in which stakeholders, especially owners, are nested and strategically act, and which by far are not related only to the particular area or segment, but strongly connected to the overall situation on the meso and also macro levels.

*“We also try to get families with children (into the multi-generational building), it should really be a young building. (...) We tried finding something like (support) in advance. They then wanted to set up a place for a dementia group there. (...) We had interested parties—even private people—who wanted to do that, but we then decided not to pursue it. That would've of course been easy for us, because we would've rented the ground floor for good money, but we didn't make it so easy for ourselves. We said, we want to have handicapped-friendly (...) rental there [because of local demand]. There are also a lot of people who come from the villages and a few who come from our stock who are also interested in a better apartment, but also a more expensive apartment. (...) The chance should be given to people in wheelchairs—they aren't always sick, they can simply not walk.” (SH3, 49)*

The strategy and marketing targeted toward elderly people thus coheres with the regional trend of urbanization. Besides the trend of concentration in metropolitan regions (SH15, 33), the migration of senior households from rural areas into regional and even smaller cities continues.

*“That has been researched and proven with numbers, that this so-called rural flight is starting. People say that they move into the city at their age because they have everything there. That is also a result of the study—that the children and the parents don’t live especially far from each other and there is still a certain amount of care. That will change. There are few families in which the children can find work locally. The generation that is there now, the children there are almost all close to their parents. (...) Because of this, the pressure is also higher with the older people. If the older people don’t have anyone who they can ask to pick something up while shopping or to clean up. No child will travel from Munich to Leipzig to do the weekly shopping. And to always take on help from a stranger—I don’t think that that works.” (SH16, 84f)*

In the case of Grimma, stakeholders regarded every particular adjustment strategy as an answer to the context within the whole portfolio, in which certain parts take on a specific function. In Resser Mark, similar area-wide strategies are also being realized, as the Johanneshof conversion project shows. Johanneshof is a cluster of 32 family row houses. It was built in 2006 on a plot previously used for a church building constructed in the 1950s and torn down in 2005 due to damages from mining subsidence. In 2004, the protestant parish had already moved to the newly established ecumenist center St. Ida, the previous catholic parish center. The union of the churches was been induced by lower numbers of faithful residents as well as lower church tax revenue and high renovation costs for the existing buildings. (SH8,9). The row houses at the previous church site were developed by the protestant church and co-financed by the state as ‘housing subsidies’. The rules of public co-financing determine the physical features of the housing, including the maximal living space per person. The row house size at the site only suits families with three or more children. This was explicitly desired by the church in order to keep Resser Mark a young neighborhood and thus prevent further aging. The staff of the parish community management emphasizes that there would have also been other possible and quite reasonable ways to manage the conversion of the previous church site, also economically. At the end, a more complex but long-term strategy was followed in order to rejuvenate the area. This approach partly parallels the case of the multi-generational building in Grimma mentioned above.

---

see Figure 32

*“The aspect of society was always more important to us, especially in Johanneshof. We could have also built seniors homes there, but we wanted to inject youth into the neighborhood. In addition, we really also needed to create extra sources of revenue, since church tax revenues will drastically fall in the middle term and the church will need to find a second mainstay for the maintenance of its work. The second aspect is that we wanted to ensure that people who had become handicapped would not have to move out of the neighborhood, but would be able to live there for as long as possible. For this, we wanted to create opportunities in the immediate vicinity. Planning was very important for us. If we only would’ve followed the physical strategy, we would’ve sold everything and let someone else build whatever they wanted.” (SH7, 54)*



Here, the cases of Grimma and Resser Mark again show that it would be quite difficult to understand the stakeholders' construction of particular development paths only by analyzing a particular morphological segment or structural cluster. The contextual understanding of a **system** and its development path is two-fold: it regards the general superior circumstances, which are mostly connected with the demographic and economic situation on higher levels as well as locally. Also, an examination guided by a particular morphological type alone proves similarly insufficient for understanding adjustment options that stakeholders actually take into account. The fate of a particular morphologic type always will depend on its contextual positions and strategies. This rather inconspicuous notion offers a valuably broader interpretational frame, for instance, for understanding particular household remanences: according to a contextual point of view, the reasons for households to remain in remanence might seem irrational when regarding the particular locational, demographic and economic situations at higher levels. However, it might sound quite rational if its individual contextual setting as a strategy arena is taken into account, in which decisions regarding action and thus the direction of a development path of a subsystem (here: a particular household) are made. This means that the whole mental world of a subsystem—including the understanding of decision backgrounds—must become a part of the investigation, together with the functional and strategic context of the particular area.

## 5.2 Shock or 'break', lock-in and equilibrium in the context of a diversification process

This initial overview of path-dependent development in both case study areas allows for at least some general remarks on the lifecycle and adaption process at this point. In conceptualizing change, a sudden **shock** situation causing a systemic break<sup>95</sup> is often discussed. Such breaks correspond with crossed thresholds, which take a system out of its state, or—seen within the process—out of its predictable or awaited development path, in a sudden way. In Grimma and Resser Mark, two specific developments of systems generally have to be distinguished. The first is the crossing of a threshold, which makes a particular system break down. Within the Grimma case, crossing thresholds is not a general matter, and therefore cannot be seen as general event. This applies even though the change generating them, such as the unification of two German states, apparently came along as a significant and sudden change. However, rather than generally, systemic breakdowns at the local level evolved under specific conditions and in specific structures, which were created solely for a situation that ended with an (abrupt) change. Here, 'specific' means specialized or so different that systems can generally not accommodate any other kind of function than those related to the previous regime in which they were specialized. It can be stated that, for the same reason, Setterfield (1997) and Martin (2010 & 2012) argue that only specific systems (such mining cities and re-

---

<sup>95</sup> In German: 'Bruch / Brüche'

gions) end up in lock-ins, which make the systems non-adjustable and thus not continuing. These systems react immediately to change by crossing a threshold, as their specialized path limits the range of variation and stability.

At the same time, the rest of the area shifted its development path gradually without systemic collapse. Within the theoretical concept of path systemic change, a system stands at a threshold when it is sufficiently resilient towards a concrete threshold, or does not if its resilience potential is limited, and a breakdown then follows. Strategic planning attempts to reach a perspective-based adaption, which would prepare the system against a specific kind of shock. According to this, the critique of the concept of resilience by Huning et al. (2014, 15) argues that resilience as an attribute of a system always remains shock-specific, meaning specific towards a concrete threshold, while adjustability is an attribute which includes the whole scope of adaptive potential inherent to a system. What both case studies further show is that once a system withstands a particular shock, it still needs to continue to adjust in order to re-accommodate enough stability and to respond to changed circumstances caused by external changes. In the period that follows, the capacity to adjust might be more crucial than the ability to withstand a shock while resilient.

German reunification is usually seen as a typical tipping point for eastern German cities. The case of the high-rise apartment building for foreign workers, which became completely vacant shortly after the collapse of the socialist state, is an example of a specific system dependent on very special external circumstances, and thus widely non-resilient when these external circumstances change. Here, a transition to a new system is necessary to maintain at least the physical shell of the house. In the example of Eichkamp in Resser Mark, it became clear that systems pronounced as general physical structures—here, a usual apartment housing type in a disintegrated but green exurbia—withstand a rather long-lasting change process even after a sudden change of decisive external circumstances, which the closing of the adjacent mine undoubtedly represented. As the example of housing in Grimma showed, depending on situation within particular segments of the study area, most of the buildings were able to be adapted or transformed instead of collapsing as a system. It can be stated that general types of housing structures, such as those with apartments of a standard size and layout for families that offer physical flexibility for layout changes are more resilient than special housing types that are locked into a particular systemic use. Such structures are quite resistant against shocks, as their use is first retained and then changes during the following time period. This offers the structure a chance to adapt within a further maturation process. However, ‘hollowing out’ and vacancies may appear along this adaption path. In Grimma, similar phenomena of slow change and adjustment after a shock can be recognized, especially in segments II and III.

*“You shouldn’t think that 1990 was the turnaround and then everything was gone all of a sudden. In 1990, there was even still a lack of housing. We have so-called ‘Wendebauten’ [buildings from the time of reunification] in segment 3, all the way back in Grimma-Süd. These were completed in 1990 and 1991, and we don’t need them nowadays because there is enough housing there, but at that time there was still a lack of housing; working in the western part of the country, as is the case today, was at that point a non-topic. That began to develop in 1996, 1997, 1998, and vacancies began to pick up at the end of the 1990s or the beginning of the 2000s. The integrated development concepts were then created in order to have a look at how we could proceed.” (SH3, 13)*

Viewed against the background of the two case studies, shocks leading to crossing thresholds do exist. Martin’s (2010) hope for a non-lock-in system in which lock-ins figure solely as hypothetical dimensions therefore could not be proven. However, the cases support Setterfield’s (1997) assumption that such a system attribute is quite rare and limited to very specific cases. Both the existence and rarity of shocks have been proven in the reference expert interviews, based on different examples, with a similar result:

*“300 row houses were vacant within a half year because of people moving away. One group—the British soldiers—went away, and that is more than a reserve for fluctuation. All of a sudden, there were 300 row houses on the market. The city (...) has a population of 60,000 or 70,000. That can normally be absorbed over five or six years. If you take a look at how many row houses are sold, then that would be absorbed by supply and demand on the market if we had five years’ time. And that isn’t the case right now (because all 300 units came onto the market at the same time).” (EX2, 46)*

However, there is a specific general narrative of ‘break’ among the stakeholders’ conceptual understanding of change. As it is related to the topic of generational change, which is perceived as coming repeatedly in waves that cause generational shifts, it is conceptualized as a ‘predicted shock’.

*“The quarter (Resser Mark) is very mixed. There are also many young people who facilitate generational change in particular areas. They buy or rent or inherit. The heirs usually sell or lend if their parents have lived for so long in the house that they have already moved somewhere else. But they are not necessarily settlers any more, meaning they are not catholic and protestant families. Now, many things may happen in the future. We were lucky until now that those who moved in were also christian, but they don’t have to be. The generational shift is now quite drastic. (...) The buildings are sold directly as soon as they come onto the market. (...) Continuous change is not the proper term here; it is more of a generation-induced shift.” (SH7, 41).*

*“(In Grimma West) we have all kinds of buildings. This is where I said that the WGC has too many seniors—over 300—and we also have a few old ones there. Here, we now have a building with a lot of older people in it. If you take a look at their birth years—the 1930s. There’s a break in there.” (SH3, 124)*

The extent to which a real ‘break’ will emerge in the future remains widely imaginative or theoretical. This is merely based on stakeholders’ expectations and purported based on experience. However, more important than the break itself for the stakeholders is the notion of an undesired development path: if a perspective-based adaptation is not started, or at least a ‘reactive’ adaptation strategy is not prepared, the development path perceived as negative may harm the managed system or its particular parts. In terms of generational shift, which is often perceived as a homogenous process within certain segments of an area, it mostly marks a concentration of elderly people while, however, disregarding the question of whether there is potential demand and thus a chance for a smooth generational change or not. Stakeholders in Resser Mark perceive generational shifts as equally disturbing as those in Grimma, even though the probability of vacancy in Resser Mark is minimal for now. In both cases, the concentration of highly aged people rather functions as a trigger for strategic action or marking a change. Such diversification strategies again differ according to the situation.

*“But this is a building that (we await vacancies soon, but) we want to retain, because we think that the poverty among the elderly will rise. We will get retirees who became jobless after reunification and will only receive a marginal pension (...). And this building, if you look at the floor space, always has relatively small layouts. Here, this two-room apartment only has 47 m<sup>2</sup> or even 40 m<sup>2</sup>. We want to keep these buildings for poorer people. I believe that they will be in demand one day.” (SH3, 125)*

This quote from Grimma shows that the real trigger is not the elderly people as such. Insofar as a house is full of elderly inhabitants, as it is the case in Grimma Süd I, the situation is seen as stable. The real trigger, however, is the existing or the potential vacancy, which correlates with fluctuation rates. Here, the high age of inhabitants functions as trigger for uncertainty, even though physical aspects are more evident due to the manifested overall age of the houses built after World War Two.

*“From the owners’ perspective, it is indeed the case that a physical trigger is present at the moment. The built stock is perhaps too old and a renovation might be discussed soon. But I can tell you that the actual implementation of renovation, maintenance or complete reconstruction of course significantly corresponds with the various users due to demography. In which stage of life are the users? How is their economic situation? This is quite decisive, generally.” (EX2, 51)*

This notion refers to what Aring (2012) and others deem the ‘double homogeneity’ of aged users in outdated structures. As this argumentation is used for family houses, the opinion describing homogenous generational change in Resser Mark’s family houses as strongly cyclic is also quite interesting. Put into contrast, the statements show that there is not a consensual view on the generational phase shifts—especially not in case of family houses—to continuous or concentrated change.

*“Everything isn’t haphazard, it happens over a particular time period. The phase of change can be focused over ten, fifteen, twenty years. A development that was built in the ‘50s or ‘60s then comes over a longer period of time into a quantitatively significant phase of change through significant sales. But not everything is sold. One person dies at the age of 60, the other with 95. It is drawn out. For this reason, the problem with the developments from the ‘50s and ‘60s isn’t focused on 2014 or 2014 to 2017, because simply from the perspective of individual demographics, from the perspective of individual families, that is a drawn-out process. Or let’s look at it this way: you can set cautious intervals. Not short intervals. You can, of course, say, the intervals for ‘50s, ‘60s or ‘70s are already here, but when do they end? Or are there 80 single-family homes in some neighborhood, but the change phase there also lasts, if you look closely, for 20 or 25 years. I would say that it’s gradual.” (EX2, 37)*

As one stakeholder admitted, fluctuation is a quite unpredictable matter, but if growing, it shows a generally declining demand. And so is change, which may happen continuously from the foundation of a neighborhood onward. This opinion fits quite well with the continuous change and adaption concept by Martin (2012). There are not many possibilities for owners to strategically prepare for that, as fluctuation to a high extent depends on exogenous circumstances, such as the situation of economic or housing demand on the macro level. Owners may increase investments in order to offer more attractive apartments to the core user group of middle-class families, or to enlarge their offering to alternative user groups. Both ways are connected with high investment costs, which are often difficult to bear in a market alienated by stagnation.

Generational change, however, remains a slowly progressing process, which enables diversification to happen over a long period of decades. As mentioned above, the current diversification of existing housing by age groups will be further even more strongly accompanied by social diversification.

*“I think that this is being talked about too much at the moment. I think that this will continue on more quietly, that there won’t be this abrupt breaking point, but that you will always be able to find a renter for one apartment or another, so that vacancies will perhaps rise and people will need to think about demolishing. For me, that’s the main point. (...) I think that will be the future and particular buildings will have a particular clientele—I just spoke about poverty in retirees (...). They need an apartment in the lower segment—under 500 euros—and the standard of living there will of course be lower.” (SH3, 208)*

## **Equilibrium**

A last topic to be addressed here is equilibrium. Even after observing the two case study areas, the question of whether there are phases of stability when no adjustment is necessary remains quite complex. Generally seen, the owners orient themselves on figures regarding vacancy, fluctuation and demand expressed in the concrete numbers of housing requests (SH1). Seen from this perspective, segments with no vacancies and stable fluctuation and demand could be seen as equilibristic, thus not demanding any adjustment strategies until the time when the data change. This would clearly be the case in Grimma Süd, segment IIIa, as well as large parts of the family housing in Resser Mark and the Eichkamp exclave. However, experience also shows that a strategic approach exists. In the case of Grimma Süd IIIa, no physical changes are occurring. If the point of view is limited to the physical 'shell', then, at least for a certain period, a phase of no visible change and adjustment might indeed exist, except for the inevitable aging of the physical substance. However, within the sub-systems of households, changes conditioned by demographic development continuously reshape the potential action frame into a diversity of development paths.

As long as such physical phase exists alongside changes in households that do not demand physical resetting, one could state that this is a state of equilibrium. At the same time, as not the physical substance as such, but rather the action of the users as sub-system actors is the most volatile systemic component, not only the knowledge of its current state, but also of the individual paths and even the perspectives that shape these particular actions have to be taken in account. Especially the latter two include knowledge, which helps to grasp future chances that particular areas have and enable to undertake according strategic measures. How these chances are understood by the stakeholders determines the future perspectives that they conceptualize, and thus how and when they plan and shape future development paths. Absolute equilibrium would include balanced stasis on all three levels: the physical, the systemic and the perspective-based, which, admittedly, is quite unrealistic.

To understand how and when stakeholders shape future development paths, a look at the management of existing urban redevelopment programs such as Stadtumbau might be illustrative. Here, stakeholders mostly do not rely on particular numbers, but rather on 'development chances' that they conceptualize as a desirable future option. The Stadtumbau cases themselves are a very striking example, as they document both strategic perspectives and the action of stakeholders towards already unbalanced systems. However, as has been documented in the example of Grimma, the stakeholders construct strategic perspective-based paths even in cases when a balance is still perceived, asking themselves what could be the next component of the 'break' in a situation currently seen as balanced, and thus to influence it or prepare the system in advance for the consequences of change. Together with the ongoing changes in subsystems, this strategic action of stake-

holders significantly limits the range of the state of equilibrium of a system. The stakeholders therefore do not rely only on formal monitoring, looking at particular systems not only within their development state, but also their perspective.

*“This point of view is in part too complex to force into a scheme and needs to be looked at on a case-by-case basis. The housing companies that need to implement it always say that the examination of indicators is only a glimpse in the past and that future perspectives are more much important for them. A mathematical scheme in that sense—if one indicator or another is available, then this or that will happen to us—wouldn’t be realistic. The housing companies of course also look for opportunities that can’t be perfectly extracted from such data results.” (EX3, 16)*

Stakeholders generally undertake adaption not according to the statistical data itself, which would limit them to a ‘reactive’ adaption, but interpret the data in order to steer perspective-based adaption and thus to avoid awaited or deduced undesired situations. Similarly as stated above (see citation SH7, 125), **strategic** decisions on adaptive investment and thus a perspective of a particular segment are ideally made before statistics demonstrate a significant ‘break’. As we know from real estate portfolio management, so-called cash cows exist, and there might be periods during which no adjustment is necessary or desirable in particular segments. However, such phases do not necessarily end by crossing a threshold; the de-locking of an equilibrium path may be initiated later on by a decision led by the perspective-based view of the stakeholder. Such an understanding also corresponds with the concept of the ‘break’ as has been argued above—a ‘break’ as a term for the consequences of failing to recognize negative trends in advance and to strategically react to them in advance by taking precautionary adjustment measures.

Another question regarding the perspective-based point of view concerns the carriers of strategic action within the stakeholders’ panarchy. In the analysis of change and adaption, this theme becomes essential for understanding development paths, especially because, in the argumentation within this chapter, the focus has been laid primarily on the diversified physical or spatial systems of mature suburban settlements. However, to conceptualize this in a whole perspective, the stakeholders’ side also needs to be deconstructed, especially regarding positions and roles within the stakeholders’ panarchy. The concrete question regarding perspective-based adaption then targets who is interpreting the data and how, who is creating strategic measures and who is finally implementing them. Not only in order to understand the role of municipalities in this process, this topic is the main point for the next chapter on human agency.

### 5.3 Human agency and human intent

Similar to other components of uniqueness, characteristics of path dependency also regard the stakeholder networks of a particular area. The stakeholder panarchy setting is rooted in historical facts, traditions and institutional networks. It may include the hierarchically systemized and physically divided administration of housing municipalities and regions, private housing and service companies, as well as citizen associations or religious organizations. The aim of this dissertation is not to analyze the emergence and societal patterns of such organizations, neither does it expand upon governance and governmental issues. The target here is to understand along which structures human agency is organized within mature suburban residential areas, shown by using the examples of two case studies. As elaborated in chapter 4, the interest focuses on the way in which stakeholders organize mature suburban areas, and in which way their structural settings interfere or influence the adaption of development paths. What lies at the core of interest in this analysis is the notion of institutional human agency components of such a self-adaptive system. These are seen as crucial for the discourse on strategic action in such areas.

When examining who activates adaption in a quarter, individuals, groups and their institutions and networks come into focus. The present case studies show that these may differ. This is also the main hurdle for establishing general knowledge about stakeholders in mature suburban residential areas. However, what can be done is to track particular systematics, in both cases looking for a systematic common denominator. One of the criteria for choosing these two studies was a state of relative demographic and economic stability despite declining superior systems, such as the city and region. At the beginning of the study, it was quite unclear if and to what extent the existing housing associations or companies, parishes, garden associations and others building coalitions outside and inside an area contribute to stability. Looking for entities representing an area, qualitative research based on a 'snowball principle' proved to be quite effective, as it allowed access to stakeholder networks at virtually any connection point in the panarchy and to map it along the existing network.

#### Regional and county level

A general trend to be observed throughout the study of Hesse et. al (2013) as well as the reference studies undertaken in this dissertation is that larger cities have a stronger standing towards counties and the regional planning institutions, and that weaker local areas have more strongly engaged superior levels in the panarchy.<sup>96</sup>

---

<sup>96</sup> In Germany, regional planning systems differ from state to state. Generally, there are regional administrations divided into counties. Large designated cities are at the same level as the counties. (cf. Schmitz 2005, 963ff)

---

see chapter 4

---

see Figure 35/  
Figure 36



Both micro-cases of Gelsenkirchen Resser Mark and Grimma Süd show a loose connection between stakeholders and the regional (macro) level. This is partly given by the stable situation in the study areas, partly also by the general focus in which regional stakeholders are involved. Closer to the core of the self-understanding of the regional level is agenda-setting in overarching topics that are in the strategic focus. These include general guidelines and thematic agenda-setting. The implementation is then viewed as being in the hands of the municipality. However, regional stakeholders and institutions are involved also in particular areas and projects, albeit rather indirectly.

*“The municipal level has different kinds of flexibility. As a county, we always need to see the whole. We see that as our task—to develop such concepts and then say that people can build on these. Of course, it doesn’t help anybody to lay these down and say: ‘go ahead!’. You do need to stay involved a bit. You really need to know that it isn’t over right away.” (SH16, 71)*

Regional stakeholders become involved in particular areas mostly in terms of the municipalities’ planning or institutional support. Institutions on the regional level are often in contact with the municipal (meso) level and gain their—often quite detailed—information on particular areas from them. Generally, a detailed picture at the regional level exists, especially in challenging cases such as significant disaster events (e.g. floods) or a long-term complicated development such as peripheralization in rural areas and challenges connected with providing basic infrastructure and services to the citizens. The reason why regional partners seek out contact to municipalities is to implement regional guidelines, as in the case of the ‘compact city’ development: that is, the support of the migration of older households from peripheral areas into cities with higher centrality and a sufficient infrastructure.

*“This is the our approach: on the one hand, that we can prove with numbers where we are headed and how things look in the region, and on the other, the question of what the regional plan does and whether we can rely on it. We also want to give the municipalities something in order to be able to think about other things—best-practice examples, et cetera. (...) This is a big topic in Grimma, where the older districts from the socialist area are and where the older population lives; here, we ask how we can ensure that people can and want to continue to live there. Sometimes they want to but can’t because the preconditions don’t exist—elevators and the like. Could we also make this a case for a funding application? With such a basis, you could prove that there is a need for funding and, if money came along, that this would suffice.” (SH16, 43)*

Besides the municipalities, regional stakeholders have recently increasingly sought direct contacts to organizations that manage the projects. These include project developers who enter a regional market with a specific supply concept, such as detached housing for peripheral user groups (e.g. senior households). These have to be specially approved by the regional government, as the general oversupply of housing usually permits no new zoning for housing. Here, the regional level directly

becomes involved in municipal, but also private development plans. The recent relation to private stakeholders is thus not only given by the fact that the privatization of the housing stock has overtaken significant shares of the previously public or publicly subsidized—and thus partly controlled—housing market (cf. SH15, 23). The regional level increasingly realizes that the contact to the municipalities is not sufficient and the direct involvement of private stakeholders is important for moving forward in the implementation of regional tasks.

*“But the implementation of the concept in itself—we also have a steering committee for this, in which we have already involved the housing corporation, and I think we now need to become active with the municipalities and the private and municipal housing corporations. In almost every larger municipality there is a housing corporation and they were also involved. They could also accompany the process. The one is more interested, and the other less interested, and then of course the next level—that’d be the regional planning authority, which can then bring certain things into its regional plan, certain recommendations.” (SH16, 75)*

*“That means that there is even a third group besides the municipal housing corporations and normal private citizens.” (SH16, 78)*

In order to coordinate these stakeholders, the County of Leipzig has established a steering committee.<sup>97</sup> This committee usually consists of regional and municipal experts and politicians. Besides its function as a direct informational link between the region, county and the municipalities, it also functions as a platform for non-binding planning consultations. Here, the interests of the counties (which do not include designated cities) are often pursued. There is an interest among smaller municipalities to join together on the county level in order to be able to lobby for their interests. This, again, especially regards the topic of new zoning areas for housing. Meanwhile, the enlargement of settlement areas also influences the situation in surrounding municipalities. Here, the county planning departments take the role of consolidating the opinions of different municipalities in order to create stronger common positions against the regional government. Such committees also exist between counties and the regional governments.

*“No, in general, those could be the regional planning offices, they could do that using their land needs [assessments]. That’s why this was an issue for us of bringing up a painful subject and then rounding everything off. We have been to the planning networks of the counties and have said (...) that we need to come together, otherwise we’ll lose as the Ruhr region or as the complete RVR. If we can’t agree, then the RVR will make a guideline and it’ll surely look differently than what we would offer the RVR from below. For this region, our perspective was the housing market in the Ruhr, that wasn’t the topic in the independent cities, since the topic has been represented*

---

<sup>97</sup> These committees are quite common. A similar one has been indicated in the reference study in Ennepe-Ruhr-Kreis and in the Ruhr region (SH7, 103), there led by the Regional Planning Association RVR, for instance within the preparation of the regional master plan RVR 2015.

*there for longer, but it hasn't yet hit any resonance in the counties. We have been to all kinds of planning conferences and that wasn't all rosy—the questions that we had to ask ourselves there.” (SH15, 51)*

The enlargement of the dichotomy between the municipality and the county or region by private project initiators becomes a need due to the projects based on the participation of stakeholders with different backgrounds. For instance, in the project ‘multiple houses’<sup>98</sup>, the county finances a conversion of vacant houses into multi-functional service areas which private companies or persons can rent temporarily or regularly in order to substitute for permanent infrastructure that diminished in depopulated or otherwise peripheral areas. Here, the public sector would be powerless if acting alone. Therefore, regional stakeholders attempt to include private actors into their steering committees (SH16, 49; SH15, 30). However, there are also distinct differences within the group of private stakeholders. A housing association is aimed toward providing housing for its own members without generating profit for third parties. Among housing companies, there is a difference between those owned mainly or completely by the municipality itself, or those privately owned and active on the stock market, as their attachment to local strategic matters is different. All of these network partners have different focal points (SH15, 30). Public access or a combination also allows the running of ‘soft’ measures not only on the basis of immediate profit.

*“Added value in the form of a rental apartment or networking with social services, meaning care at home. Those are the classic ‘soft’ [elements]. The associations deliberate over this, but only on a level where they can say that things are working there, where there’s a connection with the classic social aspects of municipal politics—meaning where the classic majority shares are still in municipal things and where social politics can therefore be done. Where this doesn’t work is where the sales have already taken place—where you only work with private actors. They have different focal points.” (SH15, 30)*

Seeking direct contact with organizations that manage projects in the private sphere, it seems as though regional planning institutions omit municipalities as well as local civil society. On the one hand, as has been shown above, project work based on current tasks shows the regional and county governments<sup>99</sup> and their own claim to not directly decide, but rather to also assist the municipalities (SH16, 17). It makes the regional instances and especially the underlying counties intensify their contact to municipalities **as well as** to other partners in order to have the guideline that has been agreed upon implemented. On the other hand, this fact

---

<sup>98</sup> ‘Multiple Häuser’ (Reichenbach-Behnisch 2010 & 2014)

<sup>99</sup> For the municipality of Grimma, the next-highest regional level is the County of Leipzig, which is one of three counties in the regional planning region of West Saxony. The Free State of Saxony is divided into four planning regions. (web RPWS, 2015). As a county’s large city, Grimma also has its own urban planning department. (web Grimma 2015a). In the case of Resser Mark, it is a part of the designated city of Gelsenkirchen, which is included in the regional government in Münster, one of five regional governments in North Rhine-Westphalia. Probably after 2017, the Ruhr region, which Gelsenkirchen is part of, should have an official independent planning region (web RVR 2015).

indeed shows the limits of the municipal role in adjustment activities at the local level. Civil society, however, is not targeted by the regional planning institution, as it lies outside of professional planning. In this sense, the steering committee established as a round table is based on planning professionals. Slowly, the understanding of planning is shifting from a directive and systemic to a project-oriented ‘muddling through’ (Lindblom 1959), realizing that project stakeholders from the private sphere might be quite similarly important as the municipalities. However, civil society based on citizen movements or associations had not yet the chance to be included into the round table processes on regional levels in the case of both study areas, with one exception: during the process of compiling the Ruhr regional master plan compilation process, the RVR regional planning association attempted to broadly include civil society in the regional process. However, this was the case within a—albeit far more than standardized—one-time participation process, and not as a general programmatic partnership, as it has been referred to as one of the ‘placemaking’ strategies in chapter 4. Besides the relevant arguments towards the difficulties of local civil society in grasping and co-shaping issues on a regional level, and even though the growing permeability of actual everyday regional institutions towards private stakeholders is becoming evident (as the case management committees in the case study of Grimma show), the regional level still remains disconnected from the local districts and stakeholders. The extent to which this particular detection is relevant within the whole context of the advocates of a (sub-)urban neighborhood will be explained next.

---

see chapter 3.7

---

see chapter 4

### The role of municipalities

Similar to shifts in the regional handling of local issues, the situation in residential areas is also continuously changing according to its own lifecycle process and the framing conditions on superior levels. Only seldom do particular suburban areas overlap with the institutional boundaries of a ward. More likely, a ward consists of several city districts. On the level of (sub-)urban neighborhoods, any standardized institutional frame might apply. The stakeholder situation is thus as diverse as the (sub-)urban areas generally are in terms of history, location, morphology, social and economical measures as well as function.

The context of the issue of mature suburban housing differs strongly according to the size of the city. In large cities with over 100,000 inhabitants (such as Gelsenkirchen), the housing issues are mostly concentrated on inner-city apartment areas and large apartment housing at the periphery. The city responds to these by renewal programs co-funded by the state. Statistically, suburban areas however do not get it into the group of the most disadvantaged areas. Even though there are certain opinions of suburban areas as the ‘problem child’ of the cities of the future, the statistical data do not show this yet. This is also connected with the experience of municipalities that low-density suburban residential areas are more likely to find a subsequent user than apartment housing, which in stagnating cities houses the weakest or most mobile citizens, and are thus likely to move somewhere else.

---

see Figure 31

On the one hand, there is a significant excess supply of rental apartments in stagnating cities, which diminishes only in peripheral small towns with an extremely high percentage of home ownership. On the other hand, if we oversee the peripheral areas, where family houses account for the majority of housing, suburbia inside the urban metropolitan areas, as several stakeholders and experts also stated in interviews, does not show significant challenges in vacancy, even in stagnating metropolitan regions.

*“I really believe that people have different problems in the large cities, but that the offering is different. There’s also a large portion of apartment buildings there. People say that there is still enough potential demand for single-family homes, and if the prices don’t block that, we’ll always have enough demand for the existing stock and that the apartment buildings are then a leftover problem as vacancy. And in the big cities, it’s easier to assume that the mobile masses are large enough so that there’s always a kind of demand thanks to people moving in, to households on the brink that are only dependent on a certain price level, and then we can say that the supply will someday be affordable enough again so that the demand can also be fulfilled again.”* (RE6, 16)

Statistical data also support this view. As for both stagnating cities of Gelsenkirchen and Grimma, housing statistics show a significant overhang of rental apartments and a stable or even developing market in the suburban detached family housing segment. This at least partially explains why cities usually do not see the priority of action in those areas. (INSEK Grimma 2002, Feldmann 2012, RE6 16)

However, there is also a **strategic** issue to the municipal government related to the suburban housing areas and their development. In family housing areas, two general interests of municipal stakeholders can be stated. First is the social stability of an area, which is based on the same general political claim for the city. In terms of the lifecycle development, it accords with the claim of a stable development and maturity or a positive or balanced change. Here, strategic measures are often being carried out through infrastructure projects, such as the decision to enlarge, keep or relocate schools (SH6,7). Second is the regulation of the change process in a particular area at the municipal or even regional level. This includes, for example, the municipal strategic decision to enlarge suburban residential areas by zoning versus the acceleration of demographic change in order to shorten the release phase within particular housing areas or types.

There are certain strategies that aim to emotionally help senior households to stay in the same area while moving into a smaller and perhaps also senior-friendly housing unit, thus enabling them to revert to support services when necessary, and leaving their family house or larger apartment for the disposition of younger generations. A further measure is the inducement of physical renewal, which is a quite normal strategy in central areas of the cities. The quite skeptical view of municipal stakeholders regarding particular house owners as local stakeholders is connected to the process of adaptive renewal, and the attempts of the municipalities to

enable households to undertake hard measures shows the difficulty institutional stakeholders are confronted with in local areas. Implementing hard measures such as physical adaption is also seen as an even more difficult strategy in areas of family housing. The situation is given by the fact that mature senior households are reluctant to invest in physical adjustments, and also remanent in their houses or apartments. Among those, the physical state of the house is seen through a different rationality, which—together with the remanence—makes it difficult not only to induce investment, but also to bring existing family houses to the market.

*“Emotionality is a factor that often leads to absolutely crazy price quotes. For the affected person, the construction by carpenter XY that was carried out with the husband is valuable. This leads to the fact that I will evaluate such things other than someone who objectively tries to value the situation. Against this background, this can't work in any other way. And the other point is that in the area of investments that are financed through mortgages, the granny around the way can't get a credit anymore 90 percent of the time. If there are no other securities in place, that never works, not to mention whether she even wants that (...). Ask the colleagues in [city in the Ruhr region] who are active in (a joint municipal/private program for the 'green' renewal of existing housing) and they'll definitely say that 100 advisory talks lead to a single implementation. Or at best three to four.” (SH15, 45)*

In Gelsenkirchen, the city has recognized the difficulty to animate adjustment in the double maturity of the house and owner, and developed a double strategy. The first part of the strategy is addressed on the level of planning instruments, as has been already explained above, and shown in fig. 34. The instrumental strategy is grounded in the 'citywide urban renewal report' (Feldmann 2012) and in citywide area monitoring. Studies often suggest that such monitoring is a measure to recognize the need to act (e.g., Nierhoff 2008, Wüstenrot-Stiftung 2012, Aring 2012, Kötter 2013). However, recognizing the need to act does not necessarily make it clear how one should act, and even less how to effectively approach particular stakeholders at the local level who are necessary in order to implement the strategic will. Therefore, the second part of the strategy is what could be called 'moderated engagement'. Rather than introducing 'hard' physical measures, the city takes on the role of moderating processes. For such an undertaking, the usual program renewal areas prove to be inadequate in size. As the specific situation of an area differs from neighborhood to neighborhood, program areas based on the borders of wards are usually too large in their spatial scope. This also corresponds with findings in both case studies, proving a high grade of diversity in development paths, thus rendering a universal and laminar approach widely baseless. (SH6, 15ff)

---

see Figure 34

The difficulty experienced by the City of Gelsenkirchen to act at the local level in mature suburban residential areas is strongly connected to the question of how to target particular stakeholder arenas that have the possibility to steer the development of private ownership within moderated engagement.<sup>100</sup> The main hurdle is the perceived “lack of a direct contact person” (SH6, 15) among private house owners. This is especially the case among scattered ownership in family housing areas, as in Resser Mark. The city attempted to establish so-called ‘ownership forums’, but these are hard to put together and also, later on, to keep active on their own power for the long run. The reasons for such weaknesses are not yet fully understood by the stakeholders and experts, and would certainly require further investigation. The notion that owners are mostly oriented towards their own situational setting rather than the common wealth, as defined by Putnam (2000) (see Fürst et al. (2006, 36) in chapter 4), is no more than an assumption. Owners may thus partly act as competitors, but mostly as systemically completely decoupled entities, so common interests remain very limited. This is again marked by disinterest in social capital accumulation. In his study on suburban life, Menzl (2007) even states that a prototype of a suburban house owner with a standard profile and common interest no longer exists. Meanwhile, the variety of social status groups among a new generation of users has significance. This happens regardless of the extent to which the primary inhabitant group, which in such areas mostly settled during the 1950s to 1980s, has made up a homogenous milieu according to the quite homogenous lifestyle of industrial society. These divergent standpoints are consequently manifested in divergent views and expectations on particular settlement areas. As both Resser Mark and Grimma show, the same divergence also appears in both users who belong to different status groups and in owners who are often nested in and steered by other things than local social capital benefits (e.g. the global stock market and investment rules). Only NIMBY or LULU engagement<sup>101</sup> remain an adequate arena for such interests, both being targeted at punctual resistance towards a particular concrete process or topic rather than at the continuous accumulation of social capital. These forms of episodic engagement, however, often work against institutionalized planning processes and are thus not an ideal basis for building a steady and common communication platform across the panarchy and based on trust and learning.

---

see chapter 4

The difficulty to come down from the municipal to the local level and thus to reach local areas and their direct contact to owners documents the gap in coordination between the arena of stakeholders at the level of the municipality as an institution and the stakeholders at the local level. Regarding what has been stated above, the question remains as to whether the partners for the municipality at the local level *can*, mainly or directly, be the owners or inhabitants of a quarter. Being also a part of the change process, in an advanced stage of maturity, they probably might be motivated to adjustments, while not necessarily being those who drive the change.

---

<sup>100</sup> Arena is here understood according to Benz (2004, 126) as a context defined by institutional rules where stakeholders come together to commonly fulfill particular tasks.

<sup>101</sup> NIMBY stands for ‘not in my backyard’. LULU stands for ‘locally unwanted land use’; see e.g. Schively 2007.

Consequently, the task is to activate or create a level in between or next to the municipality and the local owners and inhabitants. What local actors, including owners, expect of the municipalities is agenda-setting and coordination between its sovereign administrative duty and the possible consequences. Such a way also opens the arena up to further stakeholders in a process.

*“What happens in the existing stock is something that other actors (than the city) tend to see as their absolute central task—namely, the owners. But only the relationship between the two things—what the city has as its central task and the things that have consequences on other areas through its actions—(...) the coordination is too weak. If you talk with the municipalities, you’ll notice that they don’t have any regular, systematic coordination with actors on the housing market or private construction companies, housing corporations, real estate agents, banks, construction financing. They don’t speak with each other. They don’t even speak about completely superficial opinions.” (RE6, 14)*

It becomes clear that data monitoring and the consultation of owners alone cannot take the core position in the municipal strategy for mature suburban residential areas. The role of the municipality—besides monitoring—may rather remain within its institutional competencies and may be used to strategically steer the development regarding, for instance, the enlargement of settlement area, zoning and renewal programs. This might work well in areas with significant demand and low competition, such as in relatively prosperous rural areas on the fringes of metropolitan suburbia or between metropolitan areas. Nevertheless, a certain amount of housing demand can only be fulfilled through new housing, and existing areas may thus only contribute to demand satisfaction if old buildings are torn down and rebuilt instead. To a certain extent, this approach is being implemented in Gelsenkirchen within the double strategy mentioned above. But in both Gelsenkirchen and Grimma, even the institutional tools such as land use planning as the genuine steering power of the municipality remain limited due to generally narrow demand. In any case, the **strategic planning** component remains important, but untended in existing suburban mature areas. At the same time, strategic planning by the municipality is demanded by local stakeholders as well as the private sector. Here, the dichotomy between the municipality and the owner would be resolved within a system of stakeholder panarchy reaching far beyond the two key stakeholders. In Grimma Süd, real estate agents may not be engaged, as demand is low and marketing is effectively carried out directly by the GWB and WGG. In Resser Mark, the steady demand and the high percentage of inheritances in ownership change render real estate agents unnecessary. Nevertheless, the contact to further housing market stakeholders, including housing companies and associations, banks or housing consultants with specific knowledge, are also seen as insufficient. This applies especially to the agenda of further spatial development—also in terms of the relationship between renewal and adjustment, or rather the reduction and complementing of the existing housing stock through the exact amount of new housing needed as demanded in the local or regional market (cf. RE6, 12).



*“They need to get better involved strategically, they shouldn’t be allowed to just do piecemeal maintenance (...). Urban development at the moment is not enough for me. In part, you need closer cooperation so that you sometimes also know in advance which strategy the city [name of case study city] has planned for the new areas. I always have the feeling that they expect that from us, what we are planning in certain places, et cetera. But the city also has all the numbers and statistics and should also know how it would like to develop. It’s always a bit difficult to find a consensus in this case.” (SH3, 154)*

The experience from cities with a high degree of population loss shows that the municipal government is willing and able to steer the adaptation and transformation of entire areas. However, in such cases, the measures are almost always targeted at the housing stock with similar ownership structures to those in Grimma. Private global funds or scattered ownership is hard to target even there. However, such a constellation is normal in suburban residential areas in Eastern Germany or in family houses or otherwise mixed areas across the country (RE3, 109 & 134). This shows that classic tools such as *Stadtumbau* would be difficult to implement. Even the softer measure of urban renewal (**Stadtsanierung**) would probably have to be adjusted to the specific suburban setting. What remains in the toolbox of ‘special planning law’<sup>102</sup> is the program ‘Social City’ (**Soziale Stadt**). Even though it is close to moderated engagement, stakeholders would still need to be identified. Local initiatives show which local stakeholders besides the partners from the housing market are another potential partner group.

*“The city doesn’t have access to the housing, since almost all areas are in private ownership. The [name of the listed housing corporation] is interested in whether the apartments are being rented and it doesn’t matter to them if they are occupied by welfare recipients. The city could, for example, make suggestions in such (social) committees so that particular target groups are addressed in apartment sales, for example. The housing settlements are organized, for example, the Siedlerbund [‘settler’s union’] exists for people to meet up and talk about emerging problems. Other possibilities for the city to influence this might also emerge through talks with local clubs or with the seniors’ union.” (SH7, 103)*

---

<sup>102</sup> Germany’s special planning law is a part of the German Federal Building Code (BauGB), §§136-191. It includes four basic measures: the ‘development measure’ (Entwicklungsmaßnahme), mainly targeted at new town development, ‘urban renewal’ (Stadtsanierung), aimed at the physical and functional improvement of existing areas through renovation, ‘urban redevelopment’ (Stadtumbau), targeting the adjustment of the existing built stock in both quantity and quality to the existing market—especially in the case of market failure, and ‘Social City’ (Soziale Stadt), which aims at the improvement of the social conditions of inhabitants, mainly via inclusion and participative measures.

One more point is important for the deconstruction of the panarchic relations on the municipal level as well as for an understanding of the subsequent local level: the relationship of the administrative and political part of the municipal administration. The survey pointed out a certain discrepancy in the cooperation and coexistence of both. It showed that there are fields in which the administrations might be strongly involved without a direct involvement of the politics, and vice versa. In Grimma, the strong engagement of the social department for Grimma Süd area did not automatically induce the active engagement of politics or even of other administrative departments for the issue. This might also be one of the reasons why the citywide strategic agenda-setting is not as strong as stakeholders on the local and regional level would like to claim. In comparison to the reference areas, Gelsenkirchen seems to be an exception, bundling the political and administrative stakeholders in a prevention board, which incorporates both local policy and the municipal administration on a thematically broad level. Both situations are explainable as a result of the particular development paths, in Resser Mark especially by the strong political engagement for the firm political support of the ruling political party. However, the prevention board is not unique to Resser Mark, but rather covers most of Gelsenkirchen's municipal area. Still, the insight into the reference cities generally showed a discrepancy or even conflicts between the engagement of members of the municipal administration and politics.

---

see Figure 35

---

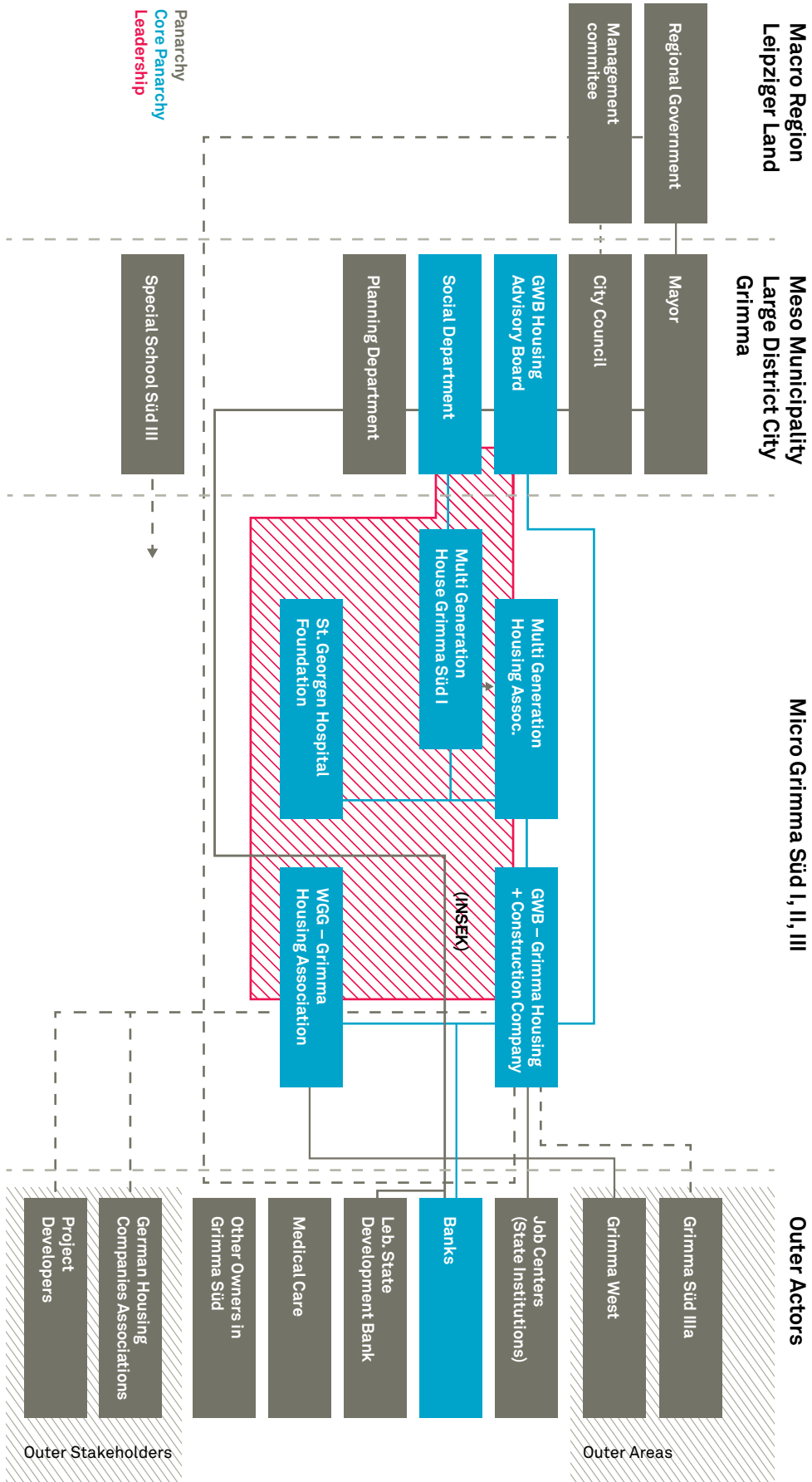
see Figure 35

*“At that time (...) this working group worked without political cooperation and, I must admit, I also found that good. But there is no silver bullet. We then had an election. (...) The mayor already said in her campaign that she wanted to make Stadtumbau more transparent, and ever since, the party leaders have participated in the meetings. I'd estimate, if I reviewed the entire process that I accompanied from the start, it is more superficial because of this and by no means as open. I think it's difficult, but there's no silver bullet.” (RE4, 23)*

The administration sees the potential for direct reflection on impulses from the citizens as a strength of the political arena (SH9, 25). A lack of strategic planning insight, including agenda-setting and especially the endurance to pursue it, is rather seen as a weakness. Similarly, the view on the topics of change and adaptation as a reaction to general trends, such as decline, as a negative message seems often not to be excluded from the discourse and consequently off the agenda.

*“From my own experience, I'd say that this action doesn't exist. Not enough is done and you still can't find an audience. For me, one part of the decline would be that people address the situation and how to deal with it (...). But this only happens in very small circles and isn't being discussed yet. In our working group, we dealt with this, but we are definitely a small circle and if we approached the politicians with it, we'd be heavily criticized.” (SH15, 68)*

The deficiency in the connections of the municipal stakeholders at the administrative and political levels prevents the enhancement of professional advantages into a synergy. The political wing shows a potential for connecting with citizens in particular areas and regarding several topics on a low-threshold level. The administration's power is in steering processes in administrative action. In many cases, this still seems to be an insufficiently exhausted potential. At the same time, claiming a harmonized approach might be far from the reality of settings in which most of the municipal administrations actually act. Additionally, local stakeholders in part learned how to get along with such characteristics of the municipal level. The next sub-chapter discusses the local level, its stakeholders' panarchy as well as the structures in which they act in order to react to local change and support adaption in the context of the lifecycle.



**Figure 36:** Grimma Süd panarchy (own illustration)

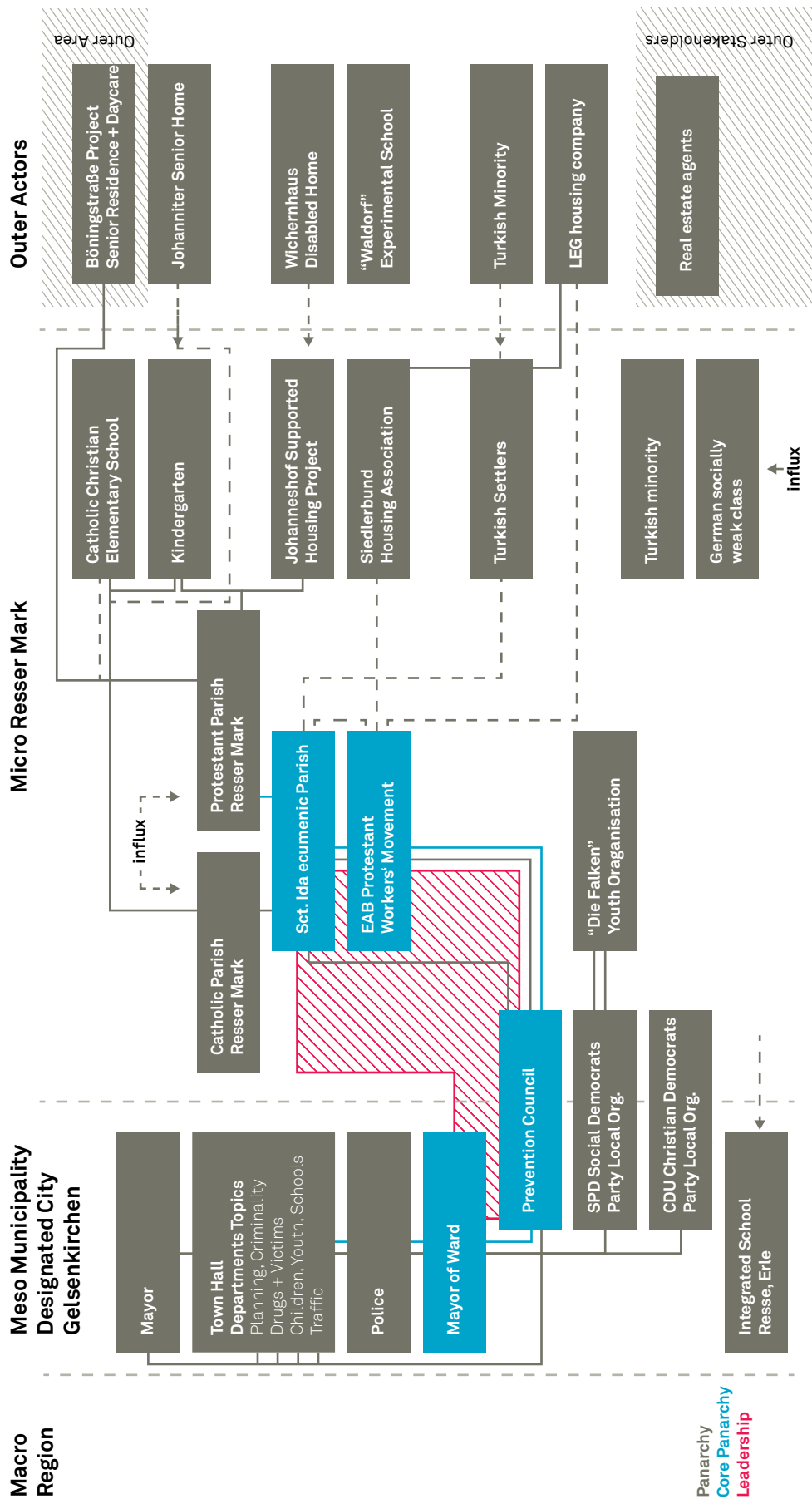


Figure 37: Resser Mark panarchy (own illustration)

## **Local stakeholders**

After having analyzed the stakeholder panarchy on the regional and municipal level, the tracking of stakeholders on local level follows. The core interest here is in the constellations in which local stakeholders organize themselves, in which fields are they active, how they manage social capital and to which extent they create episodic or enduring governance structures. As has been stated in previous chapters, the study by Hesse et al. (2013) proved that in any of the twelve investigated cases, there was always an advocate on at least one of the micro, meso and macro levels. The advocate is—if not emotionally attached—at least institutionally ‘in charge’. The two examples in this study have been selected with the notion that a relatively extended number of stakeholders on the local level exists. This approach was selected in order to practice sensibility in detecting such stakeholders and understanding their action and the organizational panarchy in which they act, including the connection to the meso and macro levels. It is assumed that most, although probably not all local suburban mature residential areas in Germany, have at least some potential stakeholders at their disposal. The argument is that respecting the possibility of their existence leads—in contrast to the assumption that no advocates exist—at least to the option of including them in the focus of an analysis. They are also seen as one of the keys for strategic planning action, as they play a particular role within the adjustment of such areas, thus influencing their development paths. Additionally, understanding the aims and motivations as well as the construction of stakeholder arenas is not only possible through the social-ecological approach towards settlement areas. It also might help to conceptualize the deliberate inducements of stakeholders and their networks as an additional option of strategic planning—by steering the development path in mature suburban residential areas.

Being often misprized as “well-meaning amateurs”<sup>103</sup> (cf. Binding & Pott 2003, 11), local stakeholders also play a key role in the life of residential areas. The recognition of the role of civil society on the local level in Germany has been constantly increasing over the last decades. In planning, the introduction of the Social City program in 1999 explicitly aimed at the activation or establishment and support of local neighborhood structures (cf. Difu et al. 2003). As has been shown in chapter 5.3, the concept of local stakeholders in residential areas is mostly limited by focusing on owners and inhabitants as the basic entity in a quarter. These, however, are not the only stakeholders. Even though owners and inhabitants play a key role, their organizations, associations and movements—especially those with a long-term existence—take on the role within the system of building social stability (Anheier & Toepler, 2003). The role of individuals within a neighborhood’s panarchy might even be quite limited. The individual perspective and subjective rationality is what makes individuals and their particular households as sub-systems of a quarter incompatible with the objectively rational targets on the meso and macro levels.

---

**see chapter 5.3**

---

<sup>103</sup> In German: ‘wohlmeinende Amateure’

Here, the neighborhood organizations and other locally acting organizations acting in connection with inhabitants may overtake the central function as a tool filling a gap between individual owners and inhabitants and the meso level of a panarchy. The potential of such a functional connection is related to their ability to appeal to individuals on a personal level, thus satisfying their personal need for contact, respect and self-realization. Meso-level organizations such as municipalities usually follow the common public interest, which in many cases might be quite abstract for personal engagement. As Funck et al. (2009) show in a study of Kobe and Berlin, even the owners and their organizations of large portions of the housing stock are often seen as non-individually focused, so that tenants organize in tenant associations that fill the institutional gap. In some cases, owners even support the emergence of these in order to ease the communication with individual tenants in an institutional framework. These organizational platforms are often used also by the municipal stakeholders. They might be also based in other organizations, such as the protestant parish in Resser Mark.

*“Access (to inhabitants without the local organizations) would be worst, also because the city now has the possibility to speak to the people through the church. For example, we regularly invite them to the weekly group meetings of the EAB—including city representatives. The mayor or the state representative have already held speeches there. The church offers the city a podium for the representation of municipal interests at neighborhood level. If this podium didn’t exist, it would be much harder to reach the people. We take advantage of this since our people also want to inform others about what happens in the neighborhood and what we can expect.” (SH7, 75)*

Here, the distinction between political and administrative powers on the meso level is evident. The neighborhood organization in Resser Mark is strongly connected with local politics, offering itself a platform and getting information and attention for its issues, thus resulting in a classic ‘win-win’ situation. The prevention board, in which representatives of four different city administration departments are directly involved, establishes contact to the administrative part of the meso level. For instance, in a case of prostitution at the Eichkamp exclave entrance road, which was a consequence of its isolated location and had a significant impact on its image and thus its possibility to recover from high vacancies, the concern of the inhabitants was communicated by the local protestant workers’ movement association (EAB)<sup>104</sup> and the prevention board directly to politicians and the city administration. The solution was the engagement of local politicians towards the city’s mayor and the regional government, which is co-responsible for prostitution regulations. The prevention board also activated the LEG owner of the apartments by urging investments in the outdated housing and thus had a direct impact on steering the development path of the location by advocating it (SH7, 87).

---

see Figure 36

---

<sup>104</sup> In German: ‘Evangelische Arbeiterbewegung’

This is a quite illustrative case of what has been referred to in chapter 3.5 regarding the fact that “*management actions can deliberately avoid or engineer the crossing of actual and perceived thresholds.*” (Walker et al., 2006, 7). This also means that the municipality itself does not actively organize meetings with citizens, but the local movement at the platform of the prevention board does in a bottom-up way.

*“No, we do that because we know what is happening on site and what the citizens bring to us. If the citizens call us, then we invite them to our prevention board and then invite the corresponding city representatives and already deal with this, if possible, beforehand.” (SH9, 11)*

*“First, the (citizens) come and explain their problems to us. Then, we refer them directly to the corresponding representatives in the group. We almost only delegate and aren’t active ourselves, in the sense of being a contact and a bridge between all actors.” (SH9, 6)*

*“I believe that no other city is socially as well-prepared as ours. You can seek advice, but you first need to actually take this step. Many people are scared of bureaucracy.” (SH9, 43)*

## 5.4 Leadership and hierarchy within the stakeholder panarchy

Panarchy systems need leading stakeholders who organize gatherings, collect and bring up ideas and topics and pursue their realization while creating coalitions to support them. Vice versa, organizations select leaders to represent and push forward issues they perceive as elementary to their living environment. To understand these structures, the following analysis concentrates on stakeholder interaction, leadership constellations and the construction of stakeholder networks. One of the main questions when analyzing panarchies of the case study areas was the location of its leadership. When undertaking qualitative surveys and interviews with an interest in a certain locality and issue, such as maturation in suburban residential areas, sooner or later one encounters personalities who are better networked and informed than others and who are equipped with a certain amount of authority, and thus involved in decisions. These persons might—but do not necessarily have to—be those making final decisions or bearing the main responsibility for action, and they may also act as catalysts or promoters. Together with the organizational entity in which such leaders are embedded, they become a part of the panarchy’s local core. In some cases, taking leadership is perceived or at least presented as a necessity to fill a certain institutional gap between the levels of citizens and the municipality, rather than as a personal career. In Grimma, the call for more engagement by the municipality repeats itself here, as many still see municipality as the formal strategic leader:



*“Since we’re right in the middle of things in Resser Mark and, back then, nobody was found who would take over the prevention board, we continued on with that. But I had already led this in two other districts, since we had our business in Hessler and were more involved there.” (SH9, 8)*

*“The city should ask what happens, since they are the planners of the city (...) and not us. We are just a part of this. Yeah, and if they don’t do that—I made all of the decisions myself.” (SH3, 123)*

Panarchy systems tend to rely on institutions, as institutionalized entities are able to take on responsibilities and mobilize material resources. The legitimation of taking responsibility differs with every entity of the panarchy. Mostly, legitimation is voted on, and thus based on the acceptance of democratic order. However, the system of institutionalization and legitimation might vary from fully institutionalized, such as in the case of municipal structures and publicly elected politicians, which are a matter of members’ voting in associations, to a system selected by supervisory boards. Leaders may, but do not necessarily, have a core management function within the organization they belong to. Generally, leaders might also be de-elected, but accepted by the public as a special person of trust based on reliability and transparency. The qualification for leadership is based mostly on the ability to lead, manage, bear responsibility, organize, invent and network as local agents. However, the most important characteristic is the ability to communicate.

*“I think that’s my advantage over many others—that I handle topics openly and bring partners for a certain time on board, no matter what the question is. Some people probably don’t do that, for whatever reason. They need people who like to make decisions, be deliberate and give orders. And who take the blame when things go wrong. (...) Every quarter year, I come and knock on their door. (...) And it works, (...) I can always call and get more information in order to keep working, and that’s important. If you don’t do that, you won’t have any contacts.” (SH3, 139f)*

*“At citizens’ level, we always ask where the problems are, and then we check to see if these problems affect many people. If this is the case, we check the professional bodies on the next level, whether problems have also been recognized there. Usually this is indeed the case, meaning that the need to act is also usually large. Then, we look at the political level, and check whether the problems have also been seen there and whether there are possibly already programs or projects to solve them. That means that we try to cover all levels, and if the need for action is there, we directly speak with all members of the network from these areas, with whom we can address these problems.” (RE5, 6)*

The qualification of leaders within a panarchy in the case study areas is connected to their institutional grounding in organizations that are active in the responsibilities within a particular area. The central organization in Resser Mark is thus the EAB and the church parishes. The EAB came into being in 1952 as an organization to unify local and immigrant workers. Since then, it has been fulfilling tasks of

community care in addition to the parishes and church organizations. As an open organization, it enables citizens to participate in activities and influence the life in the neighborhood. Despite the fact that it is a protestant organization, it is open to any inhabitant of Resser Mark and even surrounding areas (SH9). The social permeability is also quite high within the movement. The central position of the EAB is grounded in three points. The first is the strong role of the protestant church in Resser Mark. The second is the high concern in common wealth, expressed as local engagement. The third is the concentration of leaders in the organizations, who are simultaneously also active in other groups, such as the prevention board, and thus communicate between and bounding these together. This combination of institutional background, altruism and multi-anchored leadership is the main steering capital of the organization. In Grimma Süd, the leaders of the local panarchy are also institutionalized in leading positions within municipal or private companies, but are additionally active in other institutions within the panarchy network, such as foundations and welfare or citizen associations.

A further dominant organization in Resser Mark is the protestant church. It is strongly engaged in social charity in the area, but also in a strategic co-management of the area. As has been already mentioned above, the Johanneshof project, which includes housing for young families, is an example of strategic action in the area aimed at its rejuvenation. However, the project also has the goal of cross-financing social charity through the profit earned by renting the row houses in Johanneshof. This locally financed social model is connected to the current strategy of the protestant church, which plans to become widely independent from the diminishing church tax revenues. This is indeed a different business model from the LEG real estate owner who passes revenues on to the global stock market. As a stakeholder in the area, it generates respect. A second significance is the strong integration of the protestant church among further stakeholders in the quarter, such as homes for seniors and the disabled, kindergartens, schools and social contacts to minority populations.

---

see Figure 36

When comparing the panarchies, Grimma Süd shows both strong differences and similarities to the situation in Resser Mark. Due to its different history and ownership structure alone, Grimma's local panarchy is dominated by the two housing institutions, the GWB and WGG. The connection to the meso level is institutionally established by the municipal advisory board of the city-owned GWB housing company. Even though the GWB and the WGG both enjoy broad autonomy, on the level of concrete projects, all panarchy members closely cooperate. For instance the multi-generational house in Grimma Süd I, is owned by the GWB, was initiated in its current form by the city's social department, and is run by an association founded by the City of Grimma and the GWB. It is further co-financed by another member of the panarchy's core, the St. Georgen Hospital Foundation. This foundation historically enabled bright students from the city to attend higher education. Today, the foundation focuses on the care of handicapped or socially disadvantaged citizens.

---

see Figure 35

Despite the richness of the stakeholder panarchy on the meso level, the activity within the case study area itself generally depends on the housing companies. Contact to external stakeholders, such as employment offices that pay the rents of socially disadvantaged inhabitants in a part of the Süd III segment, or the senior medical care organizations as well as banks that finance investments, are also mostly directly undertaken by the housing companies. Here, the core company also takes a position between the municipality and the inhabitants. It keeps acquiring resources from actors outside of the local meso-macro system—especially urban renewal funds. In a different setting, but similar in function and role as Resser Mark, the components of local advocacy include the combination of institutional background, altruism and multi-anchored leadership as the main steering capital of the panarchy. Returning to Swanstrom's et al. definition of resiliency (2009, 8), the local stakeholder strategy within the specific panarchies in both case studies aim at:

- 1) *“redeploying assets or expanding organizational repertoires”* by building coalitions and connecting internal and external stakeholders within and outside the particular area,
- 2) *“collaborating across governments and across the public, private, and non-profit sectors”* as expressed by the connected, interwoven relationship with citizens, the municipality and other organizations, and
- 3) *“mobilizing or capturing resources from external sources”*, including administrative support, the internalization of revenues, as in the case of the protestant parish in Resser Mark that used revenues from Johanneshof and the Böningstraße Project in the neighboring Resser area to finance social work in the quarter, as well as cross-finance housing renovations or support for socially disadvantaged people within the housing company. In Grimma, federal and state funds for physical adjustment as well as from the St. Georgen Hospital Foundation were acquired.

Resiliency in this context is understood as the potential of the internal structure of the system to care for itself, and thus withstand changes, but also to adapt to them. The main point in Swanstrom's et al. argumentation is that systems are generally unable to survive as a closed system using their own resources, as the persistence of a system as such requires resources which have to be re-established by the measures oriented towards other systems, as mentioned above.

## **Role of inhabitants**

Applying this to the two case study areas, the aim of the action is adjustment, which means a reaction to changing internal and external framework conditions, such as demographic change, political will, the development of the housing market, or even the enlargement of the European Union with its consequences for migration. Resources and partners across systems and their hierarchies are necessary for such adjustments. The stakeholder core in both cases therefore complements itself through additional more-or-less-active but cooperating institutions that complete the functional variation and spread of the panarchy. This phenomenon is more pronounced in Resser Mark, which has a group of adjacent panarchy members including the Christian-secular kindergarten, the 'Siedlerbund' tenant organization, youth organizations and seniors' facilities (in figure 36, this is shown by the richness of the symbols on the right side of the central 'micro' zone). The cores of both panarchies also situated at the intersection of the micro and the meso level, thus confirming the assumption of their role as a 'gap filling tool'. In contrast to this, particular homeowners in scattered family home ownership and the individual tenants hardly play a direct role in connecting to the meso level. If they do, then they connect with local politics; otherwise, they connect through educational institutions and the stakeholders and organizations in the core panarchy. This forebodes how weakly these actors are connected with general issues beyond their own situation, including the question of the maturity of a quarter under certain global societal conditions and its consequences for their own property or situation. This again shows the crucial role of local stakeholder panarchies as a network between different organizations in an area based on a common understanding of societal responsibility for placemaking.

---

see Figure 36

*"The owners of single-family houses are by far not yet aware of their own meaning, even in the future. Not enough focus is given to the whole of relationships in the built environment, only to the individual object. The basic whole is seen at the cooperative or association level. The owners, however, don't even create this. (...) And there, of course, all the work there is voluntary." (SH15, 39)*

As long as processes that influence the lifecycle aspects of particular households are so individual that they need a specific personal handling, they also give particular organization the chance to satisfy them. There is an interest and endeavor among housing companies in Grimma to create close contact with the tenants through individual visits and consultations in order to learn more about their needs and the existing and future demand in housing, service or care as influenced by their stage of life. The strategy within an area of stagnating demand aims at encouraging remanence for particular apartments or locations. This is done, for instance, through physical features that encourage accessibility, as well as immaterially by offering local services and individualized tenant support. However, while tailored services are a part of conducted business, costs for individual 'life

perspective' consultations would need to be internalized, which is quite illusory to fulfill profitably for more than 1,500 housing units at once<sup>105</sup>. Similarly, this also concerns the owners of family houses in Gelsenkirchen Resser Mark.

*"Generally, the point here isn't explicit energy, construction or financial advisory, but rather that someone must be able to advise owners and residents about the respective life perspectives in order to find a customized solution. That could be a sale, move, lease, transferal or investment in the built stock. As an advisor, however, you'd really need to be a jack of all trades. Apart from this, the processes are getting longer; you need to have a lot of patience. Thematically, that would fall under housing supervision."* (SH6, 19)

In Resser Mark, the task of 'life perspective consultation' is therefore at least partly overtaken by the local civil organizations within the panarchy. Hereby, it is important to understand that trust as a value is not only necessary for building social capital within the panarchy between inhabitants and institutions, but also between inhabitants themselves. This means that neighborhood-based mutual help or multi-generational housing first needs to invest money and time into the building of common social capital.

*"There always needs to be a relationship of trust there. You try that again and again; I also know, that that's now the trend (...). We worked very hard in this direction, but the trend is simply not recognizable with us. All of that is too simply thought out, also politically (...) that the younger people will support the older people. That's not possible as it is. That might work in large families, because people are familiar with each other, but for strangers, it's difficult."* (SH3, 174)

The concern with the life perspective of inhabitants was also detected within reference studies in Bochum-Grumme on the 'Aging in Place' project, where a panarchy of local stakeholders consisting of the housing company, the local parish and the municipal government attempted to increase the remanence of senior households. In the Ruhr region, where demand is stagnating, prolonging the phase in which senior households are able to remain in an apartment and thus prolonging the late maturity phase is a part of a resilience strategy to prevent fluctuation and vacancies. Apart from the 'hard' measures such as those to increase accessibility, 'soft' measures play a role. They consist of a low threshold service, including social gathering in a self-run local café and shop, consultations, leisure activities or help with shopping. The project enables both young and senior citizens to participate in the social life of a neighborhood. The local stakeholder organization, financed by the church and municipal and federal funds<sup>106</sup>, on the one hand creates the

---

<sup>105</sup> There are only few of such social concept housing areas, and probably none in Germany. One of the most significant examples is the Yamaman Yukarigaoka housing company, which manages a private company community for more than 15,000 residents located between Tokyo and Tsukuba, Japan. The company is investing a remarkable amount into direct constant communication with all households or tenants and homeowners in order to be able to offer tailored suggestions for solving housing issues 'just in time'. (Yamaman 2015)

<sup>106</sup> The project is partially financed by funds from Social City, which are generally co-financed by the federal, state and municipal governments.

necessary link to the municipality or other stakeholders (such as social or senior services). Here, for example, sport associations, senior care, kindergartens and the municipal government are included. On the other hand, by creating local community and a chance and space for gathering, it creates the social capital of *trust*, which is necessary for including inhabitants into locally based activities. Interestingly, the 'Aging in Place' project, which was initially created for an apartment housing area, is also frequented by inhabitants of adjacent detached housing areas. (RE9; RE5, 7 & 24ff). Despite differences in social status and housing morphology, the demand for life consultations and services is—according to the stakeholders—the same as in apartment buildings. Regarding the strategy of steering lifecycles, the interest of the municipality would probably rather be to speed up the lifecycle in order to break the remanency and release the underused detached family house to the market by animating mature households to move. For this, the Grumme reference study stakeholders suggest a strategy of no systemic difference in how to approach inhabitants in such morphologically different areas.

*“Based on our method, the question arises of how to approach people (in single-family houses). If, for example, the matter is loneliness, you need to think about how you distribute individuals in fewer houses. So you need to look first at what the topic actually is, speak with the people in order to change their minds and then try to achieve this together. (...) The idea of externally influencing something or someone is in my opinion rather hopeless.” (RE5, 63)*

*“The special thing, I'd say, is that we asked where the problems in the neighborhood were. It's a simple question, and we asked the people here on site. (...) I think that is actually the core of our work—that we never externally tried to drive things forward, but rather always asked and tried to take steps through cooperation, to include people in the process.” (RE5, 5)*

The stakeholders' panarchy is thus constructed on the level of collective solidarity. This might be perceived as altruism, but is in fact a way of forming local attachment to a place by supporting the involvement of local capital. Once trust is created and mutual learning begins, it is easier to include and integrate individuals as well as marginal groups into the main context of the settlement and its development, which is a strategy for keeping particular settlement areas capable of acting and thus adjusting.

## **5.5 Panarchy networks**

Driven by human intent, the variety of human agency in mature suburban residential areas surely overreaches the topics and examples that have been introduced above in short via interviews, observations and analysis within two case studies and additional references. Despite the diversity of both case areas, the analysis showed common points in the stakeholder settings that are combined in stake-

holder panarchies. In terms of adaptive cycles, both of the areas are in a Back loop phase, and both are profiting from panarchic relations. In Resser Mark case, the collaboration across scales is showing a rich organizational diversity forming between the lowest systems of particular individual households and the institutional, hierarchical systems such as municipalities, cushioning the gap by the local church or citizens' organizations. In Grimma, the needs of the lowest system parts are triggered to be accepted by the incentive of low vacancy, and therefore advocated by the housing stock owner. These panarchies on the local level primarily concentrate on helping articulate and fulfill the needs of residents by pursuing these with further relevant levels and stakeholders. Second, they enable stakeholders from the meso level and outside the hierarchy to approach individuals, organizations and their resources, which otherwise would be difficult to reach.

The basic network of connections is established across hierarchies of administrative, political and partly even social economic lines. Administrative hierarchies remain institutionally fixed and in part even further authorized by other members of the panarchy. In both studies, as well as the reference studies, no hierarchy conflicts between panarchy members were perceived. Panarchy networks do not weaken, but rather symbiotically strengthen institutional players. Administrative stakeholders on the regional level seek the legitimation of their planning strategies through implementation. Hereby, planning institutions on the regional level still fulfill the task of a superior planning regulator. However, there is an interest among regional administrative players (county, region) to see themselves as a service organization for the municipalities—at least as far as could be shown. Such superior service institutions enlarge their role within the panarchy as an inductive as opposed to a regulative player based on administrative acts. This again induces an enlargement of the panarchy arena, which on the regional level was until recently mainly oriented towards the municipalities in a top-down planning principle. As new members in the panarchy, stakeholders in the private economy such as particular service companies, banks and suppliers are increasingly being included. The ongoing diversification of the network documents the diversification of particular planning tasks, as was described for the case study area by diversification in chapter 4.1. The endeavor to implement planning and thus to actively contribute to the adjustment processes is targeted at the realization of concrete and also experimental projects, which are used to test and introduce new approaches for administratively and politically grounded visions and programs. It remains unknown to what extent the representatives of civil society can and will be directly included into this strategic planning process in the future. As seen in the projects of multiple houses, which should enable private stakeholders and civil society to develop alternative solutions for community living in detached areas, there is a necessity to build on multi-levelled panarchies when adjusting settlement systems. A solely directive or purely public solution making is not possible. Probably also the interaction with private companies alone and without the interaction with the civil society seems to be insufficient.

---

**see chapter 4.1**

While the relatively weak connections between the macro and meso levels are widely being accepted due to the strong role of municipalities, the loose connections between the municipal and local levels have been a matter of repeated appeals. The argument of the 'advocatlessness' of mature suburban residential quarters is often connected to the inability of private tenants and scattered homeownership to cope with the planning of their living perspectives. On the other hand, however, there might be a quite similar challenge to cope with particular homeowners or tenants on the municipal (meso) level. The analysis showed the limited possibilities of both the tenants and the homeowners as well as the municipal administration to reach each other. In particular, the dialog on individual lifecycle paths between owners or tenants regarding where to live and how to deal with real estate ownership within the mature phase remains unsolved. According to the results of the case studies, there is a path that consists of two points. The first is the reform of the municipal administrative structures, as occurred in Bochum, a neighbor of Gelsenkirchen. There, as an example, seniors' offices were established in neighborhoods, the youth social help switched from individually targeted supervision to the mentorship of local youth groups within their own environment. Another important impulse was the spatial definition of action areas quite smaller than the administrative wards boundaries (which also took place in Gelsenkirchen) In this sense, the municipal administration copied or adjusted to the structures of local stakeholders. (RE5)

The second topic is the co-establishment and support of local citizen-based structures as a middleman between particular inhabitants and the municipal level. The reason for this is that citizens obviously demand a local coalition in which they can address topics that they are otherwise not even able to sufficiently formulate. However, such coalitions are based on common social capital, which is easiest to create at the community level. To put it shortly, citizens need to be equipped with local assistance to reach other within the panarchy, or to be reached by others. Therefore, if it is the target of the public administration and politics to participate in shaping the fate of mature suburban residential areas, it is necessary to create an environment in which citizens can express themselves and learn from others. However, it would be a mistake to believe that the meso level is able to directly meet the complete needs of the various inhabitants and steer their behavior towards a unified development path. Calling solely on the public sector to enter into action disregards that municipal administration and politics may reduce the gap by cooperating on creating local structures and moderated engagement, but will probably not be able to completely fill the gap. This gap is further not necessarily caused by the lack of basic potential of local stakeholders, as the inhabitants and the municipalities are mostly at least to a certain extent already in a place. What the stakeholders in the cited studies do is following the resilience rules summarized by Swanstrom et al. (2009, 8), accounting for *"redeploying assets or expanding organizational repertoires, collaborating across governments and across the public, private, and non-profit sectors, and mobilizing or capturing resources from external sources"*. It may be added that within the case studies, this is usually done by constructing a stakeholder panarchy.



## 5.6 Systemic space and adaption-making

The current general understanding of space is a result of an intense discourse throughout the previous decades. In the context of urban planning, it is connected to the critical movement around Jacobs in the 1960s (1961) that argued that the physical design and the shaped space as an environment do matter for the quality of urban life. As has already been mentioned, the work of Jane Jacobs and others has been influenced by the development of urban cores during the late modernity phase of the second half of the 20<sup>th</sup> century. The effects of urbanization, suburbanization, globalization, technological improvement and lifestyles, to name only a few, had a significant impact on the development of the urban environment from a locally based myriad of occurrences to a spatially distributed and universalized system of urban environment in function, capital distribution, accessibility or scale. The urban movement focused on critics of the functionalistic re-shaping of the urban environment. Since the late 1960s, this has been represented in Europe, for example, by Mitscherlich (1965), Bodenschatz (1983), Gehl (2012) and many others, finally bringing impulses to the definition of the 'European city' tradition as it is understood today in both the traditional physical (block, street, square) structure as well as a cultural, social and economic way of life (cf. Häußermann & Siebel 2004). On the societal level, Lefebvre's (1991) approach already mentioned in previous chapters was based on the context of a general change caused by modern urbanization, and thus not only pointed out the physical effects, but also incorporated societal aspects (Schmid 2005, 35). With Lefebvre, a general spatial discourse was already generated in the 1970s, in which the definition of space as a triad of dialectical-interdependent concepts indicated a multi-dimensional understanding based on spatial, mentally conceptualized and cultural understanding. It had a strong impact not only on the understanding of space in social and cultural sciences<sup>107</sup>, but also on the methodological approach to the interpretation and valuation of the qualitative analysis of both social phenomena and space. One of these effects can at least partly be seen in the assertion towards grounded theory as an antipode of structuralistic methods. An important point is made by the often-cited (e.g. Löw 2007, 82; Reutlinger 2008, 99; Mecklenbrauck 2015, 38) definition of 'societally specific space': "The space today is always a social space and as such not only a product of the society, but every society creates its own specific space" (cf. Lefebvre 1991, 31, here paraphrased by Löw 2007, 82).

---

see chapter 3.3

---

see chapter 3.3

'Systemic space', as constructed in this dissertation, is hereby not meant as a completely new concept or theory that endeavors to unify spatial and social meanings and implications. It is rather intended as a concept of spatial definition related to a specific interdependence between physical and societal space. The specific interdependence is based on the concept of stakeholder panarchies as analyzed in the previous sub-chapter. The panarchy is thus understood as a stakeholder

---

<sup>107</sup> To this impact, it is usually referred to as the 'spatial turn'. This includes the introduction of 'space' into the sociological science alongside 'time'. Time as a medium for incidents generated by social (inter)action and perceived and interpreted by social sciences has been accompanied by space as a social arena resulting from social interaction and defined by the interests of individuals or groups. (cf. Löw 2000)

network that steers adaption in certain parts of settlement areas, conceptualized here within the suburban mature residential areas. Recalling the eight basic conceptual approaches to defining quarter by Schnur (2008), all the definitional layers of a neighborhood inherently apply. Nevertheless, systemic space conceptualizes the factual areas of interest by a specific multi-layered approach. Systemic space is thus defined here by the merging of the following three definitions:

---

see chapter 3.3

### 1. Interdependency space layer<sup>108</sup>

The interdependency space layer attempts to resolve determining certainty in the definition of the perceived, conceived and lived space (Lefebvre 1991), and especially the discrepancy between them. It does so, for instance, by avoiding to be led exclusively by conceived space, which science and planning mentally conceptualize as an object of study. In the canonical approaches towards space as an object of study, institutional or administrative, morphological or social indicators are selectively used to define space. In some contexts, such as the deliberate focus on a particular administrative area, morphological type, social group or their combination, this approach might be quite reasonable. However, the main difficulty lies in the fact that the deliberate definition of space generally bears the threat of blending interdependencies that externally impact on the conceived object of potential interest. In case the object(s) of interest are to be understood within their interdependent complexity, the delineation of certain areas may lead to cutting off connections. An example is the probably most frequently undertaken delineation according to the building morphology.

*“If you look at areas and if you don’t have a clear delineation of the district from the beginning on, but if you instead consider what the built stock is and what exists to the right and left and so on, you’ll see that—especially in the older single-family home areas—there are all of a sudden various kinds of small apartment buildings with three or four apartments or a duplex, and if you go in you’ll notice that the two apartments are on top of each other and it isn’t a semi-detached house. Then you’ll notice that the people who live here are frequently renters. Or you’ve got these classic areas, these satellite cities in which you’ll find the row houses or atrium houses, but they are conceptually located directly next to high-rises, they belong together and the only real pure forms that I know of are the economically optimized row house districts on the periphery of large cities from the late ‘70s, early ‘80s. (...) There’s no wiggle room and that is the only suburban area where I could say that you have a very pure type of object. But even there, you’ll all of a sudden find some kind of old building in the immediate vicinity, which you only exclude because it looks different, but actually it’s directly across the street.” (RE6, 3)*

---

<sup>108</sup> In German: ‘Interdependenzraum’.

The concrete difficulty is thus where to draw the line between internal and external areas. To at least partially avoid this threat, defining the interdependency space layer therefore borrows its method from grounded theory. It approaches a selected area by only using a preliminary demarcation and specifies it in consecutive steps during the investigation according to information and knowledge gained through qualitative research. In the case study in Grimma, two general corrections on the initially pre-defined case study area were undertaken during the process of analysis.

- The first was the de-classification of the most southern segment from Süd IV to Süd IIIa. Even though historically, morphologically, socially and in terms of ownership it was completely different from any other segments in the case study, with the sole similarity being its residential use, all stakeholders as well as inhabitants interviewed perceived it as an integral part of the Süd III segment. As far as could be understood from the facts gathered, the reason lies in the fact that both significant parts of the segment III and the whole segment IV (or IIIa) were completed after the collapse of the socialist state in 1989 and German reunification in 1990, thus mentally belonging to another era than segments I and II, even though in terms of morphology, segments I, II and III all are industrially prefabricated housing, while segment IV (or IIIa) is not. There is a higher attachment among stakeholders to segments II and III, and a higher acceptance among the inhabitants. This putatively marginal difference in spatial definitions between the external researcher and the stakeholders and inhabitants in the area, however, reveals a background for logic by which the adaption of the particular areas is being shaped. It helps to understand why the GWB housing company and the WGG housing association were obliged by law to sell a part of their stock in order to redeem loans at the East German state bank after reunification in 1990 and the companies chose housing in Süd III. In this way, the attachment to certain parts of the case study area co-determined its development path.
- The second point is the functional interdependency with the Grimma West area, situated some 2.5 kilometers to the northwest on the western outskirts of the city and housing further residential estates owned by the GWB and WGG. Even though this area was not included in the detailed investigation, stakeholders repeatedly pointed out the financial and strategic interconnections between those two areas, especially regarding the diversification of senior housing supply.
- In Resser Mark, the Eichkamp exclave initially excluded from the investigation due to its remote location proved to be functionally and societally integrated with Resser Mark, and its difficult situation—despite the municipality's standpoint of a possible clearance—was a topic of concern among the local stakeholders. This was also shown by the solidarity of the Resser Mark residents during the difficulties with prostitution.

---

see Figure 35

---

see Figure 36

## 2. Institutional relation arenas<sup>109</sup>

The second layer adds an institutional interdependency to an area. Referring to Benz (2004), Reimer (2012) distinguishes between layers as a term of spatial reference, while an arena stands for functional connections. While administrative institutions are defined by spatial responsibilities in a hierarchical order, their interconnection between the territorial layers happens within particular arenas: *“There is a close interconnection between government and governance, as is typical for postmodern steering processes. Arenas should be seen as a connecting element between the levels, since they lead actors across levels to one another.”* (ibid., 98). It is the connection to the panarchic system of stakeholders as agents who intentionally cross the hierarchically and governmentally defined responsibilities and reconnect their powers within a new network. The institutional relation arenas are structured within the stakeholder panarchy. In its role within the development path of an area, the formation of the institutional relation arena is motivated by human intent and driven by human agency with the goal of affecting the development of the area by adjusting it within one or more of its (sub)systems. An example of this is the foundation of the EAB association by the members of the protestant parish, thus unifying inhabitants of Resser Mark and Eichkamp, or the creation of the prevention board by the city of Gelsenkirchen and its interconnection to the EAB association. In Grimma, the interrelation between the multi-generational housing association, the BWG housing company, the municipality and the St. Georgen Hospital would be a second example of such an arena. The life span of arenas as well as their nesting (cf. Simon 1972) within a particular setting of institutions and stakeholder groups may vary in time and constellations according to the tasks that need to be fulfilled. As has been shown in Grimma, even though an arena was formed around 2000, including the city planning department, the WGG housing association and the GWB housing company with the goal of working together on an integrated urban development concept (INSEK Grimma 2002) in order to be able to apply for state urban renewal funds, after fulfilling this task, direct contacts within the arena were not continued. In Resser Mark, ad hoc arenas for particular projects addressing challenges to be solved, such as the prostitution issue, let arenas evolve as temporary ‘spaces of engagement’—in this case, also including the city mayor. Arenas may develop faster and remain latently and absolutely stronger within the nested structures. It is thus of significant help to create arenas with highly ranked municipal politicians when these are already known, for instance, through political party meetings.

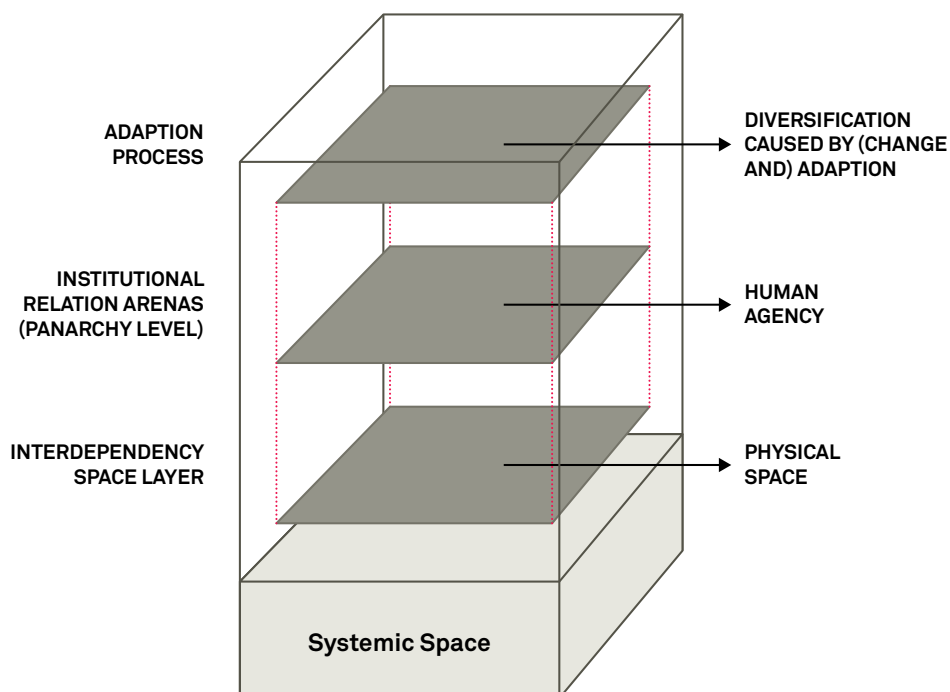
---

<sup>109</sup> In German: ‘Institutionelle Bezugsarenen’

### 3. Adaption processes<sup>110</sup>

The adaption process is the third and final layer constituting systemic space. It includes the actual measures of action undertaken by the stakeholders in order to reset the development path of an area as a system, and thus to influence its development within the lifecycle. Often, the adaption process takes on the form of particular adjustment projects. Here, the diversification plays the main role, as adaption in its natural character does not change the particular system—as the transformation of a system would—but mainly just its particular parts or functions. There are several examples that can be taken from the case studies. One of the most evident is the refurbishment of housing in Grimma Süd I and II as the multi-generational complex. The next is the amalgamation of the catholic and protestant parishes into a common ecumenical center St. Ida in 2004 in Resser Mark, which on the one hand enabled both parishes to react to the diminishing number of members, and on the other hand to optimize and intensify their services.

Systemic space thus represents a flexible and comprehensive non-canonical system of defining analytical areas and conceptualizing their development. The concluding chapter will, among others, attempt to include this concept into the lifecycle discourse.



**Figure 38:** Systemic space (own illustration)

<sup>110</sup> In German: 'Adaptionsprozesse'

## **5.7 Conclusive remarks on the case studies**

Within the coming years, both Grimma Süd and Resser Marks suburban residential areas will be facing a forthcoming significant change. In Grimma, the process of diversification and reduction of the number of apartments will be continuing, especially in Grimma Süd III. It is to be awaited that the share of senior inhabitants will further increase due to the continuing immigration of seniors from adjacent villages, who will not be able to live in two or especially one person households in the peripheral rural areas characterized by not barrier free housing and affected by diminishing social and other infrastructure. A further change will include a continuing social diversification of the inhabitants. On the one hand, a portion of wealthy seniors will be continuing to ask serviced apartments of higher standard of living. On the other hand, there will be a growing portion of those coming into senior age from unemployment, thus living partly or full from state help and demanding more reasonable housing. Further, the current trends within the family house sector profiting from low interest loans may soon be redeemed by the growing supply of family houses among those maturing. Lower prices for family houses would then again have an impact on the falling share of middle and lower middle class households in the apartments, as many of those households would seek for investing into their own house. Instead, the share of the lower class and of immigrants will be growing. This process will merely affect the GWB company housing stock. The WGG housing association will not that strongly be affected by the social downgrade, as the hurdle to join the housing stock is higher due to the membership fees. Therefore, as it is already happening in Grimma Süd III, the association will continue to rebuild its stock into a higher level housing and thus to differentiate its supply towards higher housing quality. It also might be possible that the business model of the association will have to be adapted when vacancies will rise and a certain portion of the stock will have to be changed into rental apartments for non-members, so that the association at least to a marginal portion will become also lending apartments to non-members. In both cases of GWB housing company and the WGG housing association, the strategic diversification of the housing stock will have to continue, even though the numbers of the inhabitants in Grimma will fall only moderately during the next years. Here, the main task will remain in combination of a social diversification strategy with the physical diversification, both leading to a the target of possibly low vacancies and fluctuations and towards keeping the numbers of apartments stable as far as possible at the same time.

What remains unclear is the role of the Grimma city within the process of diversification of the area. As could have been asserted from the stakeholders' panarchy deconstruction, the role of the city within the adaption process in Grimma Süd is quite moderate, also on the strategic levels. The city's strategic planning activity within the area since the accomplishment of the integrated urban development concept (INSEK Grimma 2002), which has been motivated by the GWB and WGG in order to allow them to access state housing development funds. The municipality's next and currently last planning activity has been the last planning issue in this area between 2002 and 2014, when a city wide retail capacity study and concept

has been accommodated in order to obtain the permission for a shopping center in the city center (CIMA Beratung + Management 2014). It e.g. remains unclear in how far the city is willing to pursue the re-zoning and reuse of areas remaining empty after vacant houses have been torn down in Grimma Süd. It also remains to be seen in how far the municipality will be enlarging the capacities of family home zoned areas in other parts of the city thus competing with the existing housing stock, or into which extent further immigrant housing will be accepted. Fully unclear also remains the fate of the blocks which have been privatized in the 1990s and are now in the ownership of global stock funds. To cover this area conceptually, the stakeholders' arena of house and land owners in Grimma Süd and the city departments will have to be adapted by the stakeholders towards a stronger connection. The reference studies clearly showed that there is a necessity of a strategic and moderating role of the municipal government as a step towards such local areas (EX1). In Grimma, this, however, is not evident yet.

In Resser Mark, the current and future challenge lies in adapting towards the ongoing aging and the influx of socially weak groups into the rental apartment segments. Within the family houses, a dropping portion of inhabitants of Christian faith and thus bound to the local church may be awaited. These changes will impact the power of organizations at the core of the local panarchy, the EAB Protestant workers movement, which is already today signified by a high average age of its still stable sized membership group, and the parishes as such. Finding an innovative open-inclusion model of the local panarchy arena to re-juvenile and to re-orientate towards the needs of those younger but also socially weaker in the quarter has been already attempted, e.g. by a kind of EAG 'open days'. To cushion the impact of profit externalization and cost internalization for a social housing policy carried out within the privatized apartment housing stock will, together with organizing local senior as well as family services care and interest advocacy, become one of the important tasks. This endeavor will probably become one of the key profiles of the local activities. Another core point is the necessity to deepen the connections between local care and societal work integration with the local generation of financial funds. As the outer sources based on taxes and public funds are not going to rise at least in medium-term, an internally sustainable 'quarter based social economy' will be necessary to keep social work and panarchy management alive. This marks the growing importance of the civil society role and its local structures within suburban quarters generally.

On its systemic level, the results of the case study analysis supports the advance by Menzl (2007, 396) to concentrate on the establishment of a 'collective counterpart'<sup>111</sup> to the municipality as a local part of a micro-meso advocacy arena connecting the local level mainly towards the municipal but also other levels. In Resser Mark, the task remains how to adapt the existing collective structures to the societal frame condition changes in the area. In Grimma, it is to ask how a successful tie to the area among the inhabitants can be realized in long-term perspective

---

<sup>111</sup> In German: 'kollektives Gegenüber'

without their participation on the area development. This especially regards the wide ranged but in share of inhabitants of the location steadily decreasing “middle class”. Less than a strategic approach, the needs of the inhabitants should be put into the core focus. This claim is not only being emphasized by Menzl, but also has been underlined by the experts in the case study areas, as well as by particular stakeholders in the reference studies (RE5 & 9).

Regarding the topic of lifecycles, the picture shown in the studies is a differentiated one especially in the field of diversification:

- The life cyclic maturation of the physical housing substance and the demographic aging of inhabitants are relevant, but by far not the only determining processes. Especially the interrelated changes on micro, meso and macro levels are co-influencing the systems. The adaptive strategies are thus strongly interrelated to the trends on superior levels. Diversification then becomes a broadly induced natural change based process, as well as a deliberated choice of stakeholders.
- Regarding the shock as an impulse for breakdown or change, the case studies show that the capacity to adjust along changes might be more crucial than the ability to stand a shock while resilient and remaining in the same constellation. For stakeholders, a perspectivistic adjustment towards awaited future ‘thresholds’ is the way of acting. If a negative trend is faced or awaited, the adjustment usually does not target on changing the general trend itself or to wait until the effects of it allow crossing a threshold towards a breakdown of a system. Usually, the adaptive measures are taken in advance to a threshold. The ‘break’, as the threshold crossing is usually being called by stakeholders in both studies, is thus a rather imaginative term indicating a non-desired future situation or development with negative consequences for a system. A further attenuation of the ‘shock’ as a central concept of development is supported by the notion that the basic indicators of a residential quarter—the housing as physical object on one hand and the inhabitants as humans and their households on the other—are quite resilient to several thresholds. Even though a house may become empty due to sudden change of household-related circumstances, such as in the case of foreign workers housing in Grimma Süd I, the building still remains existing and offers the possibility for alternative concepts. These concepts, as this example as well as the one of Johanneshof in Resser Mark shows, does not necessarily lie within the particular house itself, nor within the designated physical space, but emerges from strategy and demand on the local, or municipal or even regional levels within the systemic space. Even though a house is not needed at all any more, its reuse or clearance is not an immediate necessity of immediate action and can be planned before or after within a wider urban strategy, as is being done e.g. in the ‘Stadtumbau’ projects (RE1-3). Admittedly, such strategy then needs to come into being and for its realization usually a stakeholder’s panarchy with an appropriate arena needs to arise, including the engagement of the municipal level.



- Also, the demographic aging and the changes in individual households are relatively long lasting and individually differentiated processes as to its consequences could be called a 'shock'. A 'gradual decline' is a more adequate term to describe its possible process and consequence. Regarding the question in how far a so weakened residential area may 'break' while not standing the next shock, it has to be admitted that such situation might occur only in quite extreme cases, such as sudden fundamental changes on the local market (e.g. the retrieval of a military base or a sudden closedown of the main employer within a smaller town, such as it was the case in East German cities, e.g. Hoyerswerda or Leinefelde. Another case is a long lasting and extremely intense peripherization process, as it is being experienced in some peripheral areas, which however, first, is not to be seen as a part of the suburban discourse, second, has to be seen as a quite specific case even in terms of morphology of single family or apartment houses, and, third, is in most cases a long-lasting, slow change process, rather than shock-like event.
- Regarding the 'equilibrium' state, the case studies show that, similar to 'shock', equilibrium is an imaginative concept of an ideal state. Such state of a harmonic development characterized by compliance to the ideal lifecycle, however, is nothing more than a 'guide value' for action on adjustments of the planned development path. Social ecological systems, marked by human intent projecting the consequences of action towards an imaginative state in the future, in fact requires such 'projection screen' in order to come from the current to the target state. However, similarly as the current state is not a rigidly stable one and thus a snap-shot of immediate reality, so does the target state not stand for a state of definitive balance, stability and status, but rather for a desired direction of a state which as a next snap-shot serves as a base for further adjustments. In this sense, both thresholds and equilibria can be confirmed as mental concepts in the development path building of the case study areas, but not as a real state of suburban residential systems.
- For the human agency, which is strongly related to the human intent as mentioned above, the importance of the panarchy system based on the local level and crossing the administrative meso and macro levels proved as crucial for the adjustment processes within the case study areas. The analysis further showed that municipalities have to take a strong strategic lead in development of particular settlement areas. However, both cases also showed that it is quite difficult for municipal administration to reach the level of particular sub-systems, meaning inhabitants or households. For this task, a 'collective counterpart' on the 'quarter' level, based on civil society, and a functional system of a panarchy is necessary.

Finally, the case studies revealed an interrelation between the diversification of particular areas, their stakeholders and the definition of the area as such.<sup>112</sup> The concept of 'systemic space', however, still has a more exemplary character and certainly needs to be further developed on behalf of additional studies and discussions; it reflects the complexity of space-based approach towards particular areas and their definitions. It is thus directly influencing the scope of knowledge on interactions and contexts of particular adjustments as well as the whole development paths, which, as argued above, are embedded within a multi-levelled setting of the micro-meso-macro panarchy, with arenas widely overcrossing the local spatial definitions.

---

<sup>112</sup> Insistently, this puts a further question mark under prevailing morphology-based concepts of settlement (and thus also study) areas.





# 6

LIFECYCLES AND ADAPTION:  
DISCUSSION, CONCLUSIONS AND PERSPECTIVES

## **6. LIFECYCLES AND ADAPTION: DISCUSSION, CONCLUSIONS AND PERSPECTIVES**

### **6.1 Approaching mature suburban residential areas**

The aim of this dissertation was to examine the process of lifecycle change in mature suburban residential areas. As a central point of view, the adaption towards changing endogenous and exogenous circumstances was chosen, focusing on adaptive processes and their physical and stakeholder structures on local, but also municipal and partly also regional levels. The underlying question was how particular mature suburban residential areas manage to adjust to negative situations under conditions of stagnation in order to remain demographically, socially and economically stable. The assumption was also that, under certain conditions, mature suburban residential areas as specific social ecological systems underlie strategic adaptations driven by human intent nested in panarchic networks. Due to this, such areas are, in reaction to external and internal conditions, able to generate their own specific intrinsic strategy and power to adapt. According to the research question, the cognitive interest focused on *capacities, patterns of action and processes of adjustment* rather than on describing the process of maturation as such on the basis of statistical indicators. Nevertheless, the role of maturation within the lifecycle of an area has become one of the cognitive concerns. In the center of interest were actor-oriented and process-oriented approaches to reveal who and how is driving the adaption. Against the theoretical background, three main areas of interest were identified in order to approach the aforementioned task.

- First, it was asked in how far decline is an inevitable development alternative for mature suburban areas. Decline is, according to the basic neighborhood lifecycle theory (Hoover & Vernon 1962), the main option for a development path. Alternative paths of adaption, such as those conceptualized in the context of the ecological resiliency system (Holling 1996 & 2001) or social ecological strategies by Walker et al. (2006) and the resilient behavior of human systems (Holling & Gunderson), broadened the possibility for conceptualizing a deliberate transformation or adjustment of particular settlement areas as systems, targeting the enhancement of their resiliency. Led by this systemic approach, the mature suburban residential areas have been conceptualized as social ecological systems. Given the fact that prepositions on strategic adjustment of social ecological systems have not yet been sufficiently explored, further analysis focused on Walker's central argument of the key role of the *human intent*. Social ecological systems include both spatially projected change in terms of demographic and economic development as well as deliberate strategies of adjustment pursued by stakeholders on the municipal and regional administrative levels, or other stakeholders from the economy and civil society. Furthermore, the theoretical discussion was related to the notion of decline within the 'waves' defined by the urbanization theory of van den Berg et al. (1982), and contrasting it to the development discourse on post-suburban diversification as a form of adaption. The analysis suggested an alternative view on the

---

see Figure 6

development of metropolitan areas, conceptualized outside the dualistic concept of core city versus suburbia by showing the growing interconnections between the putatively different systems.

- Second, the analysis aimed at exploring the maturation process itself. It revealed the underlying 'suburban static fatality' narrative creating the general decline-led assumptions on suburbia along to the underexposition of the dynamic aspects of systemic adaption during the Back loop phases (cf. Holling et al. 2002, 73). It came to the conclusion that these are merely based on broadly accepted and interconnected attributes of morphological, functional and demographic as well as social 'homogeneity'. Further, it indicated the assumption of the 'advocatelessness' of suburban residential areas, which leads to a situation in which the human agency premise for a mature area to adapt is not fulfilled. And, it issued the suburban residential areas as characteristic of 'episodic development', which e.g. argues that after fulfilling the lifecycle of settling down, raising a family and aging, the area loses its principal attractiveness and inevitably starts to decline. These points delivered further argumentation based on questioning the components of suburban static fatality and asking to which extent and by which drivers the development of suburban mature areas may escape a lifecycle headed for decline.
- Third, the aim was to discuss the phenomena of path-dependent development in the context of lifecycles. Particular questions resulted from the theoretical discussion of the lifecycle concept based on a non-linear (Martin & Sunley 2010) concept of development. This concept shows that the development path is to a great extent driven towards adaption by human intent instead towards decline. It stands as an alternative to the canonical concept of lifecycles defined by change along the growth-maturity-decline pattern. The non-linear concept regards the development path as an open-end trajectory. By taking an alternative position to the classic lifecycle trajectory, this concept also re-settles its position to canonical phenomena connected to resilience and path dependence, such as the role of equilibrium, lock-in and threshold in adaption. These are the phenomena which are the key to the question of when and how systems enter an adaptive phase, as well as when and why they collapse. The task here was thus at least to a certain basic extent to map the process of adaption, asking in how far it is a clearly determined, deliberately steered or rather an ad hoc process.

In the context of mature suburban residential areas, the main challenge was to establish a conceptual approach that would allow for analyzing particular areas using an open-end concept. Such a concept, on the one hand, needs to be stable enough to define a concrete and tangible area of investigation. On the other hand, it has to leave a certain space for accommodating interdependencies and interconnections towards outside circumstances during the analysis. Furthermore, it has to leave enough space open for interpretation of various development paths. Besides the open-path concept of Martin and Sunley (2010), this approach has been motivated by Swanstrom's et al. (cf. 2009, 8) definition of 'reactive fields' the systems use to fulfill a resiliency stabilizing action, such as the use of external asThe methodical approach towards building process was thus tackled on three main phenomena resulting from the theoretical analysis. Its basis is epitomized by

---

see Figure 18

---

see Figure 37

the concept of sets and mobilization of external resources, creation of innovative organizational repertoires and collaborating across governments, public, private, and non-profit sectors. 'systemic space', which defines space for a particular system not only as a physical area, but also as including its institutional arena created by human agency, and reflects the processes of adaption undertaken by the stakeholder panarchy acting as 'advocates of place'. The interdependent space layer on its physical level then includes not only the core case study area, but may include also adjacent areas or further 'exclaves' that are functionally and strategically connected to the core area.<sup>113</sup> The institutional relations include stakeholders and institutions that are also situated outside the physically designated area, but that are connected to it within particular arenas within the panarchy network. This analytic system was flexibly developed during the investigation, together with the growing knowledge of the relations between space, stakeholders and adaptive action connected to the investigated area. For case studies, as a general situation, suburban residential areas that were situated in demographically and economically stagnating metropolitan areas or their adjacent interconnected spaces were chosen. Regarding the analysis, the task was to ask in how far the characteristic of suburban static fatality was to be found in areas that are doing better in comparison to other areas within a particular metropolitan region. 'Doing well' is hereby related to the ability to manage adaption leading away from decline even within a municipal and regional context of stagnation, and without having any significant location advantages compared with other suburban areas in its surroundings. The main part of the interest thus was to identify structures and processes keeping such areas from decline.

### **What is a 'suburban lifecycle'? Homogeneity and diversification as Fore loop and Back loop characteristics and the stable maturity**

While suburbia in a regional context and beyond theoretically underlies the general urbanization cycles as defined by van den Berg (1982), discussed and alternated among others by Ourednicek & Spackova (2013) for suburban areas as 'suburban development', the suburban lifecycles are mainly addressed to physical and demographic indicators projected into the particular space and its particular settings. On the regional level, post-suburbanization as a diversification process creates more differentiated and interwoven roles between the urban core and the metropolitan settlements. In this sense, not only does a functional and physical diversification of suburbia take place, but also its development into a particular urban landscape, which to a certain extent eludes the phases of the urbanization trajectory. Regarding the maturation of suburban residential areas, a similar trend or at least tendency of diversification can be observed. The studies undertaken in this dissertation have proven a quite differentiated picture of morphology, demography or social milieus in both study areas. By a casual view, both areas seemed homogenous in terms of physical structure and inhabitants. However, also here, a ho-

---

see chapter 2.1

---

<sup>113</sup> In Resser Mark, this was the case of Eichkamp, in Grimma Süd, it was the case of Grimma West.

---

see chapter 5



mogenous development becomes relativized during a more detailed analysis. Summarizing the findings, the following three points seem to be crucial from the methodical point of view.

- A first issue is that even morphologically diversified areas may be quite homogenous in other measures. This applies to both externally monomorphic but internally polymorphic areas, such as the Grimma Süd case, as well as to generally polymorphic areas like Resser Mark. In Grimma, the residential area Grimma Süd was developed merely for workers of the adjacent factories, and in Resser Mark, most of the inhabitant in the initial phase between 1940 and 1960 were miners. Initially in both areas social differences existed, but were merely moderate. Also other signs of homogeneity such as socialized normativity were distinct. Within the years, this has been changed due to closedown of the dominant employers as well as political, structural and societal changes, into specific heterogeneous local societies.
- A second issue evolving is the spatial definition of the area under consideration. The homogeneity of an area is directly depending from how it is spatially or otherwise defined. Even though a definition of a reference area in geographical terms proves to be necessary in order to concretely tackle issues of change and development, as has been shown in the case study analysis, definitions based solely on morphological arguments usually disregard further functional as well as panarchic interconnections towards the broader settlement space. In this sense, it struggles with quite similar argumentative challenges as the regionally argued core city-suburbs dichotomy, but on a local level. In order to avoid these difficulties, for this study, a multi-leveled concept of 'areas' was established, mentioned within 'systemic space' concept.
- The third point is the change of the characteristics of a system during or because of its maturation process. Seeing it from a lifecycle perspective, a part of the problem of the canonical view is that it does not distinguish between the different properties of systems in the Fore loop and Back loop phases. The main argument here is that young and mature systems are different and especially the latter don't follow universal lifecycle patterns. This is also one of the facets that Martin and Sunley (2010) by arguing for an open-result concept point out when criticizing the fatalistic and deterministic view that simply interpolates the state of a system into its future while disregarding the possibility of change and adaption within its development path. It is also including the underexposition of dynamic and adaptive nature of systems as stated by Holling et al. (2013).

---

**see Figure 29**

---

**see chapter 4.3**

In this context, the homogeneity of a system becomes relative when regarding its lock-in/stasis and change attributes against the background of different development phases. Seen generally, while homogeneity during the lifecycle Fore loop stands for laminar growth, within the Back loop it stands for laminar decline. During the Fore loop, the establishment of lock-ins in a particular state and routine of development patterns is possible, and partly also necessary for build-up and stabilization tasks. By that time, for example, particular households are struggling with settling themselves in everyday life configurations while maintaining growth, building professional careers and creating values necessary as resources for growth, but also as accumulated resources for the later period of life in the maturation cycle of the Back loop. During the Back loop, lock-ins and stable development lead to prolonging maturity, enabled by consuming accumulated resources, such as financial cushions in form of pensions or through the continuing use of a house built and equipped during the Fore loop phase by keeping investments low. At the same time, during the Back loop, the potential development paths might already significantly differ in internal settings of individual households (number and career of children, divorces, deaths, lifestyle etc.). Therefore, while external attributes of the systems such as demography and housing situation seem to be homogenous and stable, the development options within particular households in the Back loop are already settled along individual development paths and possibly even locked into particular values and life perspectives. This means that, while homogeneity is a sign of stability during the Fore loop, it might become an attribute of rigidity during the Back loop, where lock-ins extend the risk of thresholds and minimize the possibility of adaption. If these are to be animated of being reshaped by human intent, outer influences changing the attitude become crucial. Here, as has been realized in the analysis, panarchic connections beyond the particular sub-systems (= households) become necessary.

Generally, one thus can assume that—at least during the Fore loop—no particular adjustments are necessary, and also no need for ‘advocates of place’ is existent. At least within suburban mono-functional residential areas, both physical and demographic homogeneity to a certain extent can be seen as dominating during the Fore loop. This applies for rental apartment housing, and even more for ownership units, regardless of whether these are in mansions, apartments or family houses. However, Menzl (2007, 397ff) shows that even in phases of building up and raising children, within particular sub-systems, a demand for the adjustment of local functional area settings and thus for local adaption advocacy usually become evident, not including the challenges of maturity (such as remanence, vacancies, aging and others), but challenges of child care, social integration, commuting as well as gender equality regarding family roles as well as the use of women in the workforce. This also corresponds with findings on physical and functional adjustments within development trajectories by Hesse et al. (2013) on the spatial level, stating that in cases of disturbing influences on the area development, such as a significant drop in demand for housing in a particular area, adaptive strategies may automatically arise together with adequate advocates.

Diversification in mature areas may concern every aspect of the particular settlement, but it especially includes the diversification of households as a fast changing matter. In contrary, overall demographic and physical changes are accounting for slowly, even though steadily developing changes. As the lives of those living in the area take individual paths in time, the mature households become to differ in household sizes, age and dates to which they are restructuring or even being dissolved. Here, the argument is often put forward that due to the demographic and social homogeneity during the Fore loop, the aging of households continues relatively homogeneously despite the maturation diversification process. Even though this might be true in statistical terms when aggregating for a particular statistical area, Hesse et al. (2013) proved that this is especially the fact in Resser Mark), there are several points that relativize this assumption for a detailed view on the level of particular households.

Here, sudden laminar decline needs to be distinguished from laminar decline. Although both may theoretically lead to a complete breakdown of a (sub-)system, they are advancing at very different speeds. Sudden laminar decline is a matter of a rare case limited to very specific situations, such as natural catastrophe, the closing of a dominant employer with no alternatives or the fundamental closing of a military base leaving enormous numbers of housing vacant at once. Continuing laminar decline has mostly only been described in connection with areas of peripheralization as defined by Beißwenger & Weck (2011), Kühn & Sommer (2012), Bernt & Liebermann (2013) and Kühn & Weck (2013). As already stated in chapter 2.2., in Germany, most suburban areas are appendixes of existing settlements and situated within metropolitan areas. Within this spatial pattern of suburbanization, a fatal combination of internal and external circumstances leading to a laminar decline resulting in a significant vacancy within suburban areas of metropolitan areas as defined by the methodology of the National Spatial Survey (web BBSR 2015) might be possible in theory and is often being conceptualized as a potential threat, but have not yet been empirically shown, not only within the case studies presented here, but also not in any other studies quoted<sup>114</sup>. In any case, if laminar decline progresses, then in a slow pace taking several years, and it allows stakeholders to adjust or transform their strategic roles the area and its structure. Laminar decline is not only differentiated by individual fates of households (such as a particular number of children and their educational and job careers, divorces, deaths or illnesses). 'Hidden differences' such as available financial background, individual family social and spatial constellations, health, lifestyle and life values, visions and targeted perspectives in particular households might also play a diversifying role of the same importance by shaping decisions of households of spatial relevance. In rental apartments, these decisively influence the fluctuation. Thus, the prospects of mature households regarding further use of a house or apartment also differ, as well as the actual point of time and way of handling it.

---

see chapter 2.2

---

<sup>114</sup> e.g. Zakrzewski et al. 2011, Wüstenrot-Stiftung 2012, Kötter 2013, Hopfner & Simon-Philipp 2013, ILS 2014.

Regarding 'double homogeneity', which is present in both case studies, the situation is similar. Even though some stakeholders perceive concrete phases of change, most of them admit that phases in which the inhabitant generation is changing usually take several years and do not have a form of a sudden shock. As has been stated in the conclusion chapter on the findings based on the case studies, stakeholders often conceptualize change as 'breaks', marking a generally influential—meaning system-relevant—rather than a sudden change. Interestingly enough, the stakeholders and experts did not highlight the relevance of the physical condition of family houses in connection with such changes, even though, for example, in Resser Mark the existing family housing stock dates from the period of the 1940s to the 1960s, and on-site finding proved a general need for energetic as well as other physical refurbishment. Additionally, many houses—both family and apartment houses—do not meet current living standards in several ways, including size, ground plot and technical or energetic standards. Even though this issue needs a further investigation, the physical state of housing units in diversified private ownership in general and family houses in particular are most likely weighted as quite over-estimated in the common maturity discourse. In reality, it is not valued solely but in connection with other attributes, such as locations or personal preferences, and they rather mirror themselves in a final comprehensive value and the market price. This corresponds also with recent surveys which point out that physical attributes of family housing are often overestimated in the context of their actual role for the purchase decision, mainly determined by the trinity of location, size and price (e.g. Forsa 2013). By connecting locational with functional attributes as a specific characteristic of the settlement and the general demand perceived in the area, the stakeholders in the Resser Mark study indirectly stated that, to a great extent, locational preferences connected to the living environment and accessibility, but also to the existing social infrastructure and the image grounded in the stable community play a significant role for newcomers and are the central reason for no vacancies in the area. As long as a physical structure is adaptable, differences in the quality and conditions positively support social and physical diversification of the area on the real estate market.

---

see chapter 5.7

Rental apartments display a different situation. In their case, the immediate physical condition of the apartment, the building and its surrounding play a significant role, as this cannot or should not be directly influenced by the user. Therefore, within the panarchy of the case studies, in Grimma and Resser Mark, and especially in the Eichkamp exclave, the physical refurbishment and adjustment of the housing stock towards the changing demand has been a central issue to the stakeholders. Especially within rental apartments, diversification is not only a matter of natural development. It may also occur by a deliberate adaptive shift or enlargement of the scope of potential users. In this way, apart from the diversification taking place alongside maturation, the enlargement of target groups proved to be a quite usual strategic measure within stagnating areas, as it makes more sense than competing for the increasingly limited core group of young families. The specialization, however, often includes the need to adjust the supply of physical housing in the market and services according to the demand of specific groups, such as the renovation

for accessibility and the development of daycare and other services in the case of the senior target group. Therefore, the accommodation of socially weak groups is often seen as an option in which physical refurbishment and thus investment is not urgently needed.

Coming back to the question in the title of this chapter, the answer on what is a suburban lifecycle. On the background of the differentiated picture of particular area settings, it is first necessary to state that the concrete lifecycle careers may be quite diverse. The significant regularities lie at the beginning of the path, the Fore Loop, when a (settlement area as a) system has been established and begins to develop. This is also visible in the model mentioned in fig. 18. In this point, the model by Martin and Sunley (2010) is conform with the model of Holling et al. 1986 and Holling 2001, which classifies the lifecycle into a Fore and Back loop. A difference to both models becomes evident in the Back loop, namely the adaption phase. Holling et al. (1986) and partly also Martin and Sunley (2010) act on the assumption that a system as a whole is changing either into one or the other direction; in the first case towards transformation or adaption, in the second towards stable state or path dynamic process with the possibility to switch or 'oscillate' between them along the development path. The analytical approach based on the systemic space concept however shows the layers of which a system of a settlement area (in this case of a suburban residential area) consists. These overlapping layers of the interdependency space, institutional panarchies and adaption processes, which are grounded in the inner constellation of the system as well as external influences as a frame, may develop into different directions at the same time. What is crucial for its modelling is the intersection of the different states, which is represented by and connected to the panarchy network ties. It is defining the narrowness and directness of a development path, or its multi-directionality and reluctance. The running state in which different layers and particular levels of one system may develop into divergent directions and thus remain tangent or intersected within a panarchy, can be marked as ***stable maturity***.

This understanding of development leads to different theoretical and practical implications. Among the theory issues, it could be stated that if social ecological systems are seen as multi-leveled entities, it thus becomes necessary to approach them as systemic spaces already in the analysis. Particular layers may differ from system to system. The combination of internal development directions within the layers may lead to a number of intersections, which mark the diversification process.

Among practical implications, the implementation of a multi-layered concept leads to the notion that even though some basic interdependencies may exist, it is not correct to define a state of one level by the attributes of the other. More concretely, this means that a bad physical state might be conditioned by a correspondingly passive situation on the levels of human-agency and adaption. But on the other hand, the high percentage of elderly people in an area does not necessarily mean

---

see Figure 18

---

see Figure 12

---

see Figure 12

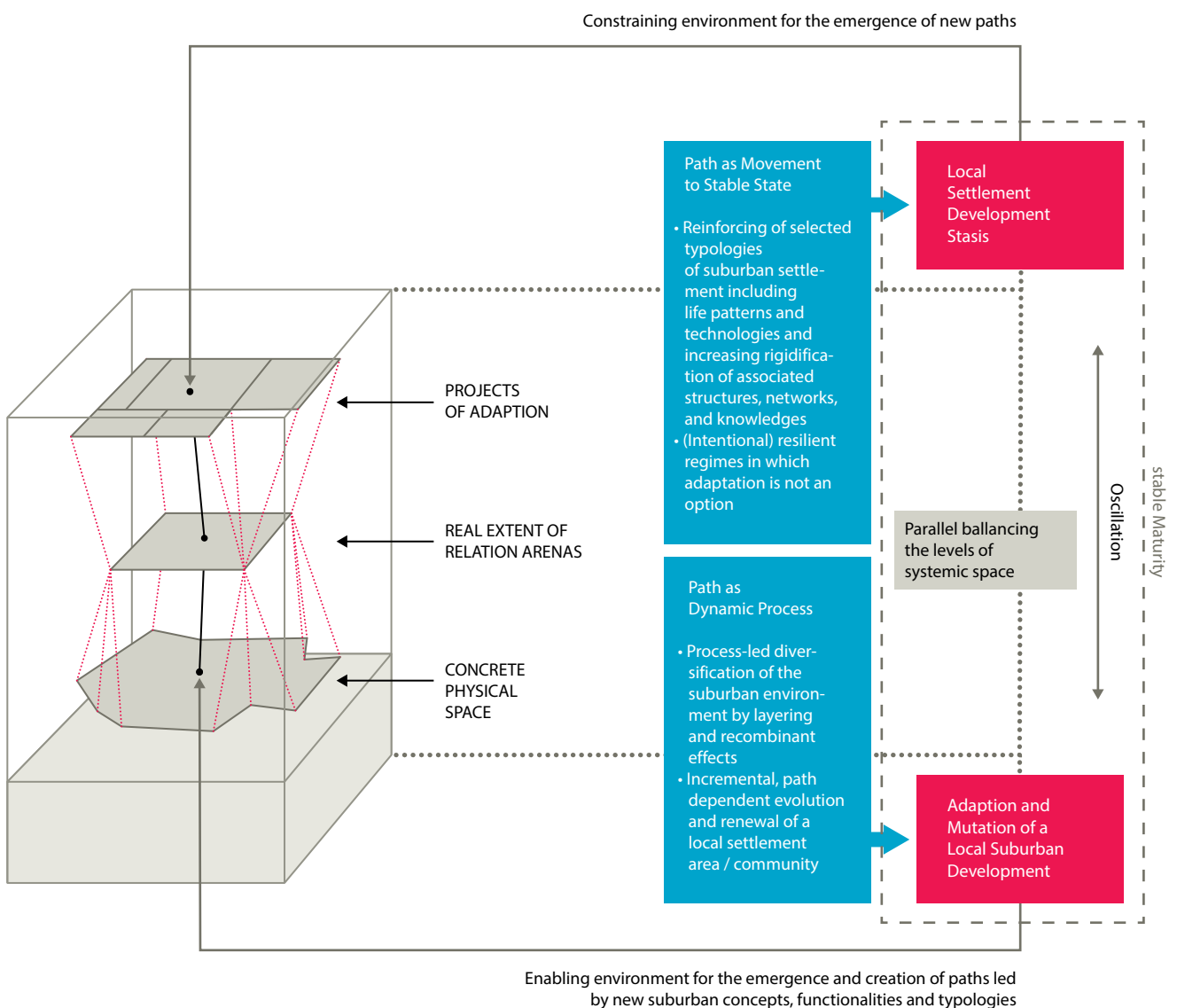
---

see Figure 18

---

see Figure 37

an aging-induced stasis on the level of human agency or a general spatial unattractiveness for young people, as far as the concentration on an elderly clientele is a part of a strategy within an adaption process.



**Figure 39:** Model of evolution in stable maturity state in suburban residential areas (own illustration)

see Figure 22 /  
 see Figure 37

As the findings have shown the crucial importance of a panarchy network for adaption within mature suburban residential areas, in following the panarchy as an interconnection of the particular layers is being finally discussed. Within the panarchies, connections mostly evolve consciously by deliberate, moderated contact and communication. Leading a position and the establishment of particular topic-based arenas is being achieved through proactivity within the panarchy network, including both the maintenance and the enlargement of connections. The panarchy network may therefore become unbalanced or limited by reservations or particular limitations of institutional stakeholders to enable interconnections. An example of such a limitation is the weak connection within the municipal administration and politics on the one hand, and the external private housing market stakeholders, such as real estate banks or agents, as well as to contracting business in housing construction and renovation on the other.<sup>115</sup> Even though there might be certain professional contacts conditioned by everyday working tasks, public service officers are apparently reluctant to form alliances, especially with the private sector. This fact is reflected in the disconnection of these two stakeholder groups in the panarchy descriptions. As has been evaluated in more detail in chapter 5.3, ‘mutual learning’ mostly requires the establishment of trust, which is conditioned by closer ties. The therefore understandable reluctance of the public sector to enter into common arenas with private stakeholders is still difficult, as these are nonetheless a relevant part of the local panarchy. Especially regarding the monitoring as well as perspectives of housing, with some exceptions, there often is an absence of a safe but effective exchange modus with the relevant partners. For both sides, it yet seems to be difficult to find a transparent format for a direct exchange.

A further and more often articulated challenge is the often missing interconnection between the municipality and the individual inhabitants, respectively—similar to the disconnection mentioned above. This gap is caused by a missing appropriate format to link them. Similarly to the communal and business partners, the arenas of the institutionalized meso-level of the municipal administration and the individual households do not overlap enough to create direct ties. Therefore, intercessory structures are necessary to establish these ties. The ‘missing link’ to local governance and self-supporting structures on the local level are argued as the ‘advocatelessness’ of mature suburban residential areas, described as a phenomenon in chapter 3.2. The connecting function can be fulfilled by local stakeholders of the panarchy as ‘advocates of place’. Their existence and activity is crucial for the ability of municipalities to act on the local level of particular settlement areas. Mature suburban residential areas are not an exception. Such a level however requires the development and support of local governance structures (cf. Wüstenrot-Stiftung 2012, Kadono 2013), which can be tackled in different institutional

---

see Figure 35/  
Figure 36

---

see chapter 5.3

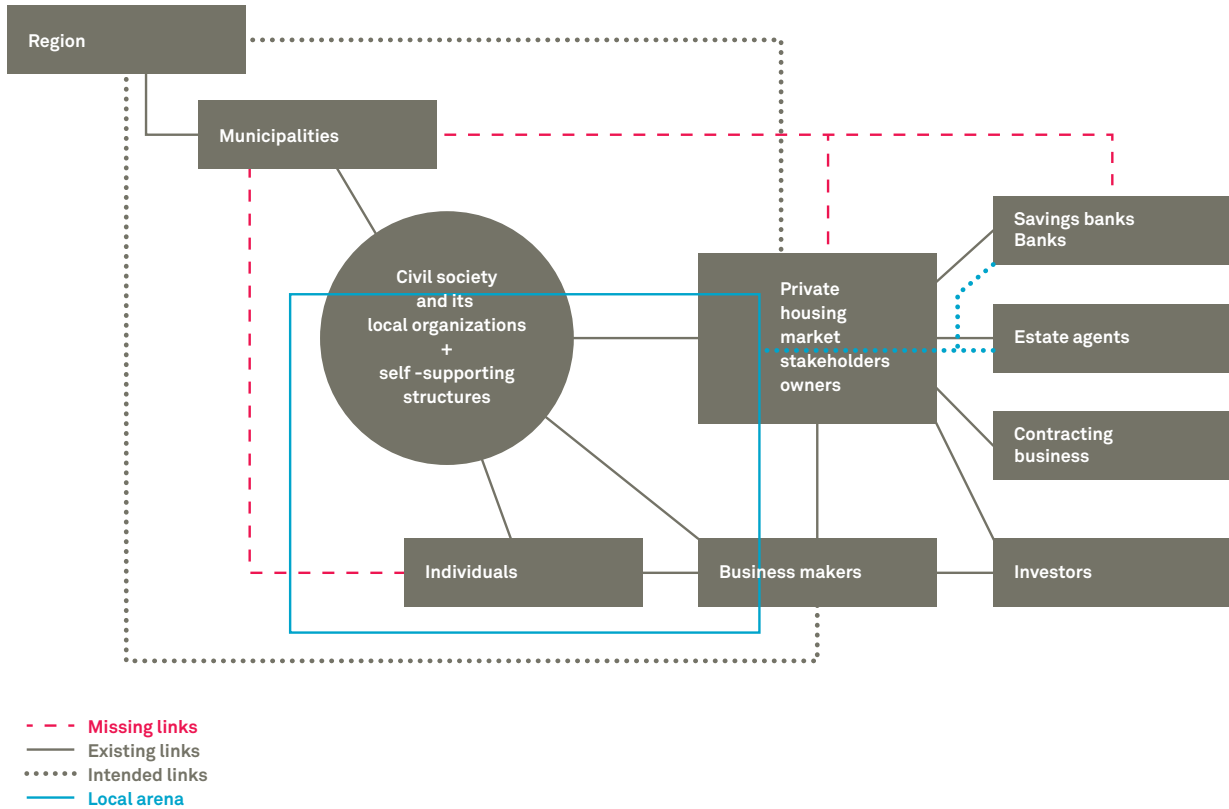
---

see chapter 3.2

---

<sup>115</sup> This further applies to state employment agencies, which have actually a detailed overview of particular social phenomena in a neighborhood due to their role as the payers of rent for socially weak households.

forms and moderating between particular inhabitants and their households on the one hand and other institutionalized stakeholders on the other. Both the activity of local inhabitant groups and the support from the municipality are necessary to establish them. The two case studies analyzed here also show how different these ties might be in their form: in Grimma, it is the conglomerate of both the dominating housing company and housing association, a municipal foundation and a non-profit association. In Resser Mark, it is the local parish and its Protestant workers' association, connected to a municipally organized ward prevention board. Both examples, however, show a similar pattern in principle: to a certain extent, it is a non-profit based network of locally active organizations with local participating citizens, complemented directly or indirectly by municipal institutions, private stakeholders, and their funding. To a high extent they copy Kadono's types of social system supporting core functions within settlement arenas (see fig. 9).



**Figure 40:** Model of panarchy (dis)connections (own illustration)



These more or less institutionalized organizations are not only self-supporting structures of citizens, but bear the potential for governance functions. Partly, these are already fulfilled within the political work and agenda, as the case of Resser Mark shows: the local citizens' structures are also acting as basic political arenas for local agenda communication and participation within a multi-level and network governance that spans the local and municipal level. Here, the connection with the institutionalized top-down or command-and-control municipal administration is reshaped towards a local agenda setting based on agreements established in communication with local citizen representatives. In Grimma, where a broad participative activity of the inhabitants is missing, the communicative structure is held by housing market stakeholders, who are most directly interested in the fate of the area. Even though this might not be a 'classic' governance structure based on more direct citizen participation, it still bears at least the basic governance functions as are being fulfilled by the citizen organizations elsewhere: these are accounting for the communication of local demands and the participation in shaping and implementing planning strategies as well as the social and other politics of the municipality. However, in the context of lifecycles, the governance issue is not a topic *per se*. It merely becomes meaningful as a driver of local adaptation. When asking who is responsible for initiating and moderating adaptation in mature suburban residential areas, viewed through the analyzed cases, this is not the municipality or the particular citizen alone.

The engagement of the municipalities for and in such networks thus needs to include much more than monitoring and issuing a model-kit list of recommended measures, as in such case the question remains unanswered to whom this is targeted. The task is rather to be engaged in sharing responsibility for the local panarchy structure, which would also mean co-financing and supporting it institutionally, and in bundling this into a comprehensive planning agenda on the meso level. Still, this all seems only to be a part of the task in case the adaptive process is aimed to be *actively* steered. In such a case, beyond the measures of participation, the local advocacy and strategic measures of key stakeholders steering the diversification of the mature residential quarters, a consultancy of life perspectives within a kind of 'life perspective management' is needed in order to influence persistence and remanence in particular households and thus to co-steer their Back loop phase. Nevertheless, stakeholders and experts admitted that such tasks would need multi-talented 'Swiss army knife'-like moderators who would be able to combine particular life scripts and the strategic level of particular residential areas as well as the integrated city management. Within the case studies investigated here, both of them did not show such a consulting function. In how far this is manageable in the reality of planning is a task for both further analysis and conceptual work.<sup>116</sup>

---

<sup>116</sup> Even though many stakeholders and experts admit demand on this, probably because of its complexity, examples for such management concepts are still quite rare. However, they also remain merely unappreciated by scientific analysis. As for housing companies, the Yamaman example, and for housing neighborhoods, the Bochum Grumme social work program, has been referred to.

However, here again, a connection with the consultancy of particular stakeholders from the housing market, such as estate agents, might also already be one of a meaningful strategies. The housing improvement district (HID) approach, as it is being implemented in Hamburg, has only partly been a step towards this direction; seen through the argumentation above, the interrelation between the house owners, the municipality and the citizens remains—partly despite cooperative proclamations—still weak (cf. Wiezorek 2011).

## **6.2 Towards adaptive strategies**

The maturation process of suburban residential areas proves to be a highly diverse and also diversifying one. Additionally to the findings on regularities and irregularities of lifecycles, it also became clear that regarding particular development directions of a system, the constellations of exogenous and exogenous influences merely based on framing circumstances such as economic or demographic development are influential. Hereby, the role of panarchy networks and its stakeholders as advocates of a place has been highlighted, putting the question how and by whom adaption is being initiated and realized on the forefront. The particular direction which takes such development in mature suburban settlement areas therefore depends on a concrete situational setting. The lifecycle model presented here proved to be as quite flexible in accommodating adaption. Based on above findings, in following the central remarks regarding conceptualizing, analyzing and adaptive management of mature suburban residential areas are summarized in statements marking an alternative approach.

### **Role and tasks on the meso level: beyond the monitoring and toolbox-'strategy'**

It already has been concluded that the locational advantages are seen as a complex of many hard and soft indicators, in which a functioning local community may play a role. But, the role of what has been called 'local advocates of place' is also crucial for designing and implementing ways of internal adaption. There is no doubt that in many areas such an organizational network of advocates is yet missing. However, this is by far not a unique character of suburban residential areas, e.g. if compared to most urban and rural residential areas. The more important point than the instant existence of advocating networks is the potential to establish them. In this context the municipal role can be seen in three main fields.

- First is the enabling agent towards citizens by co-founding and supporting local organizations advocating inhabitants' matters and also locally satisfying demands in self organization.
- Second is the role of a strategic planning leader in the stakeholder panarchy, moderating processes of growth, decline and adaption on the meso level and communicating it towards both local and regional levels.
- Third comes the role of monitoring, which however cannot be seen as an aim in itself, but as a collection of information in order to satisfyingly process the two above mentioned tasks. Monitoring as data collecting is rather a subordinated exercise. The most actual information base on exchange with stakeholders and can be gained within an active panarchy network.

The strategic position within a multi-levelled system as described in the conclusions to chapter 6.1, is the panarchy, which is based at the core between the levels. Communicating and co-shaping the life paths of particular mature households is possible when relevant consulting structures based on trust are established. These need to act locally, but require to be supported institutionally by the municipality. In turn, the municipality may co-moderate the options of decision making within households and thus implement its strategic agenda, regarding among others the coordination of social infrastructure projects according to the demand or influencing household behavior relating to remanencies.

---

see chapter 6.1

What is important for understanding and conceptualizing adaption in both research and application is to recognize the Back loop of a lifecycle as a self-standing part of a settlement area career. Practically, this means a shift in conceptualizing research on suburban development from projecting future options solely on the parameters of the Fore loop phases of growth and maturity. These are the container-approach based mono-morphologic (same type and age) and mono-demographic (same-age and life-phase) delimitation of space to a case study area. Such projection leads to assumptions summarized afore as the 'static fatality'. First, it cannot be focussing solely on interpolation of age of housing, infrastructure and their inhabitants, in order to explain the current situation and development perspectives, and options of steering planning action. The reason is that thy dynamics during the release and adaption phases are not following the canonical path of development, which is conceptualized as to result into a collapse in order to delock and change. Within late maturity phases of release and adaption, the Back loop, and the development paths is becoming multi-optional and dynamic. The real extend of the options is only to a limited extent driven by the parameters mentioned above. Stakeholder networks and its cross-level and cross-systemic panarchy plays the dominant role in creating resilient development options and thus shaping the development path. Second, however the mono-structuralistic (means mono-morphological and mono-demographic) seems reasonable for conceptualizing space for objective case-based research, it stands in contrary to the panarchy concept of systemic space. Within the systemic space the physical and functional delimitation of the study

area is being undertaken 'situatively', taking in account the floating borders of pan-archic networks and responding on them by defining the physical space of the case study according to functional interconnections, and not the morphological ones.

### **Creating places of enabling character in advance**

Connected to the question how to make mature suburban residential areas more resilient, it becomes clear that self-enabling systems generate the most effective stabilizing and adaptive power. A locally anchored panarchy supports an area in a double way. It connects it to the networks of stakeholders on the meso and macro level and delivers its interests towards those who co-decide about satisfying them. It also raises the attractiveness of the area as one with a functioning social context. Of central importance is that it influences local identity, image and advocacy of the area. As has been shown in the studies, socially active areas offer, even though often limited to certain even partly closed arenas, a broader variety of social, cultural and functional opportunities. The assurance of local advocacy further raises the stability, perspective and long-term safety of the location, thus making it more resilient and attractive than those without. These correlations are widely known from the place-making discourse.<sup>117</sup> In terms of lifecycles, however, in both case studies the local stakeholders' network, even though not formed into an active stakeholders' arena, has evolved from local society based structures. These were existing already prior to the beginning of regular adaptive processes in form of a fundamental refurbishment and management of the areas' adjustment to maturity. Within the local level of panarchy, the leading stakeholders have been among those who are the longest existing and active at place. This correlates with the notion of social capital accumulation in leadership by creation and enhancement of networks. Such rooted structures proved to become an advantage to the maturing area in terms of scope and speed of adaptive action as well as acceptance within the panarchy, tributing to unofficial leadership. The establishment of local structures before an area enters the Back loop might therefore be considered as meaningful. This means that building a panarchy and thus integrating particular suburban residential areas into the complex of e.g. municipal decision making, agenda setting and strategic control, might be easier and more effective than starting only when maturity and its consequent challenges have already arrived.

---

<sup>117</sup> see e.g. Hesse et al. (2013, 108)

## Diversification as an adaptive tool

Creating resilient areas is, besides establishing locally based stakeholder structures, based on functional, physical and social differentiation. Even though in the Fore loop typical homogeneity might be a dominating and even strengthening point<sup>118</sup>, keeping up homogeneity in certain areas during the release phase leads to reinforcing of selected typologies and increasing rigidification of associated structures, network and knowledge. This, however, is a way towards the direction of local settlement development stasis. Even though mostly never reached absolutely, it may significantly reduce the adaptability of a system. Therefore, diversification of mature suburban residential areas should become a strategic development task on the municipal level. Fulfilled in connection with inhabitant participation, it does not necessarily lead into changing, loosening or otherwise undercutting of zoning rules. Even though this might also be a relevant strategy in some areas, mostly the extension of the scope of users including specific age groups as well as diversifying social infrastructure or encouraging younger families to move in and senior families to move out, or even the introduction of non-disturbing businesses to settle, this all contributes to an enabling environment for the emergence and creation of paths led by new suburban concepts, functionalities and typologies. Hereby, physical measures such as of energetic efficiency upgrade in family houses in private ownership play a less significant role than in the rental segments, where physical refurbishment is being used also for diversification measures targeting particular user groups.

---

see Figure 22

## Panarchy process and networks to further stakeholder groups

It has been already stated during the evaluation of the case study results—initiating adaptive processes is possible within locally settled and institutionally rooted networks. These networks are based on the principle of generating common capital, which then, to paraphrase Sorensen (cf. 2010), is used to generate and attract external resources. One of the underlying principles of the accumulation of adaptive capital is the fact that open systems with networks overreaching their local 'nest' are more successful in adaption than those closed. The accumulation of capital is including but not limited to financial matters. Likewise, external contacts, inventive power know-how and synergy potentials play also an important role. Adaption is a collective matter, as it touches different thematic levels as well as different levels of panarchy. Therefore, panarchy building stands at the core of the strategic agenda for adaption.

---

<sup>118</sup> In the context of suburban residential areas, Menzl (2007) points out also further components to the physical and demographic ones: life-cyclic and normative. These, however, are rather derivatives of physical and demographic issues. Menzl among others indirectly points out the relevance of these components in connection to the building of common interest, which is underlying the formation of local arenas.

The following closing remarks serve the reflection of the theoretical approach. Their methodological approach and regards to the theoretical contents of this dissertation serve also as an impulse for further research on the topic of adaption in suburban mature residential areas.

### **Systemic space - as stakeholders do it**

A non-fatalistic approach towards mature suburban residential areas allows opening the view onto particular processes within the neighborhood. Such however are also beyond the indicators of physical and demographic state of an area, which may be an initial recognition of the overall circumstances at best. The notion of the actual development path lies also behind the surface of visible and statistic matters. To analyze the process of change, statistic surveys help to classify certain areas according to their status. However, the current data are only a starting point for both analysis and strategy. To analyze the *process* of adaption, the 'systemic space' model delivers a comprehensive possibility to grasp a particular area including its spatial, functional, administrative and panarchic connections, and thus to describe and explain its specific development path. Implementation of it, however, means also to shift concepts based on solely demarcation morphologically homogenous areas and their consideration and examination within these borders, and thus enlarging the contextual view from a purely statistic towards the spatial, functional and societal context at place. It is to be admitted that such an approach requires a differentiated analytic design when coming up to particular areas, based on the ground of statistical information and enlarged by qualitative insights into both the multilayered system and the processes within. The advantage lies in the fact that analytic steps and following recommendations bear a certain chance to become less general and more targeted and therefore compatible within the discursive fields of the particular levels as well as remaining comprehensible within its multi-levelled reference on the greater strategic level.

---

see Figure 37

### **Updating the transformation pace and directions**

A yet widely juvenile field of knowledge are the principles of modelling development paths during the adaption phase. Especially in planning sciences, the view still remains quite limited to traditional theories of urban sociology, disregarding the progress that has been made in other disciplines in the meantime. The need for reviewing the approaches towards change in urban systems is though given by several shifts in both society and its understanding since the basic theories of the Chicago School of Sociology as well as traditional economy sciences have been introduced to planning. Today, conceptualization of development paths in urban settlement areas underlies the conditions of a structurally changed environment and its circumstances; physical, functional social, as well as functional. An important point here is the way in which the spatial (re)settings are being initiated and negotiated. No 'paper-planning' or top-down authority itself is able to generate

significant influence beyond the traditional 'hard tasks' of spatial planning; this is one of the crucial messages on adaption planning and steering. Today's planning routine is based on consensual and pragmatic partnerships, negotiating ways across institutional and hierarchical levels as well as complementing authority by trust and the action-reaction principle by common acts. These changes of course also are mirrored within the way as the lifecycles of particular settlement area develop; the way they are being established, conceptualized and analyzed. It thus remains a further task for debate to follow the above described adaptioin analysis and approach and to connect and implement them within the planning discourse.

The most advantageous property of the panarchy-based systemic approach remains the multilevelled view on complex task of maturity. Approaching maturity in urban quarters requires, as has been shown above, a particularly differentiated theoretical approach based on presumption of irregularities and different possible outcomes. It is therefore to ask in how far the lifecycle-based research on mature urban settlement area would profit from a further interdisciplinary approach. The multi-levelled construction of the methodical approach as well as the broad implementation field also in other disciplines offers at least positive expectations. The peculiarity of the implemented research design was its openness. What remains as a question to be explored next is in how far the initial concept developed here for analyzing mature suburban residential areas in the context of lifecycles can prove itself to be further implemented and developed on additional spatial settings and related thematic tasks.







## REFERENCES

- Aalbers, M., Beckhoven, E. van, van Kempen, R., Musterd, S., Ostendorf, W.,** 2004. Large Housing Estates in the Netherlands, Policies and Practices. Utrecht University: Faculty of Geosciences, Utrecht.
- Ahlbrandt, R., Brophy, P.,** 1975. Neighbourhood revitalization. Heath and Company, Lexington.
- Ahlbrandt, R., Cunningham, J.V.,** 1979. A new public policy for neighbourhood preservation. Praeger, New York.
- Alonso, W.,** 1960. A theory of the urban land market. Papers and Proceedings of the Regional Science Association 6, 149 – 157.
- Altrock, U., Huning, S., Kuder, T., Nuissl, H.,** 2014. Die Anpassungsfähigkeit von Städten. Zwischen Resilienz, Krisenreaktion und Zukunftsorientierung, Planungsrundschau. Altrock, Berlin.
- Anheier, H.K., Toepfer, S.,** 2003. Bürgerschaftliches Engagement zur Stärkung der Zivilgesellschaft im internationalen Vergleich, in: Bundestag, Enquete-Kommission "Zukunft des Bürgerschaftlichen Engagements." (Eds.), Bürgerschaftliches Engagement im internationalen Vergleich. Leske + Budrich, Opladen, pp. 13 – 56.
- Aring, J.,** 1999. Suburbia - Postsuburbia - Zwischenstadt: die jüngere Wohnsiedlungsentwicklung im Umland der großen Städte Westdeutschlands und Folgerungen für die regionale Planung und Steuerung., Arbeitsmaterial. ARL, Hannover.
- Aring, J.,** 2012. Einfamilienhäuser der 1950er bis 1970er Jahre in Westdeutschland: Eine neue Herausforderung für die Stadtentwicklung, in: Eichenlaub, A., Pristl, T. (Eds.), Umbau Mit Bestand. Reimer-Verlag, Berlin, pp. 68 – 85.
- Aring, J., Herfert, G.,** 2001. Neue Muster der Wohnsuburbanisierung, in: Brake, K., Dangschat, J.S., Herfert, G. (Eds.), Suburbanisierung in Deutschland - Aktuelle Tendenzen. Leske & Budrich, Opladen, pp. 43 – 56.
- ARL, Aring, J., Blotevogel, H.H., Danielzyk, R.,** 2006. Gleichwertige Lebensverhältnisse; eine wichtige gesellschaftspolitische Aufgabe neu interpretieren. ARL position paper. ARL, Hannover.
- Arthur, W.B.,** 1988. Self-reinforcing mechanisms in economics, in: Anderson, P., Arrow, K., Pines, D. (Eds.), The Economy as an Evolving, Complex System. Addison-Wesley, Reading, Massachusetts, pp. 9 – 31.
- BBR,** 2004. Suburbia. Perspektiven jenseits von Zersiedlung. Bonn.
- Beauregard, R. A.,** 2009. Voices of decline: The postwar fate of US cities. Routledge, New York.

- Becker, U., Beckmann, K.J., Würdemann, G., Köller, M., Wegener, M.,** 2011. Postfossile Mobilität und Raumentwicklung. 89 der Akademie für Raumforschung und Landesplanung (ARL), ARL Position paper. ARL, Hannover.
- Beckhoven, E., Bolt, G., van Kempen, R.,** 2005. Theories of neighbourhood change and neighbourhood decline: Their significance for post-WWII large housing estates. Paper for the ENHR-conference "Housing in Europe: New Challenges and Innovations in Tomorrow's Cities", Reykjavik, 29. 06. – 02. 07. 2005. 25.
- Beilein, A.,** 2012. Mature residential suburbia in lifecycles. Congress Dortmunder Konferenz Raum- und Planungsforschung 2012: Mobilitäten Und Immobilitäten. Menschen – Ideen – Dinge – Kulturen – Kapital. Paper Presentation, 09.10.2012, TU Dortmund, Dortmund.
- Beilein, A.,** 2013. Process of transition on single owned family houses as framework for local interventions – case of the Ruhr region, in: Scheiner, J. (Ed.), Mobilitäten Und Immobilitäten. Menschen – Ideen – Dinge – Kulturen – Kapital, Dortmunder Beiträge Zur Raumplanung. Springer, Dortmund, Frankfurt, pp. 295 – 309.
- Beilein, A.,** 2014. Eigenheimsiedlungen in der gereiften Suburbia. Übergangsprozesse und kommunaler Interventionsrahmen im Umland des Ruhrgebietes. Dissertation Paper Presentation, 12.08.2014. u\_raum, Dortmund.
- Beilein, A., Kadono, Y., Polívka, J., Reicher, C.,** 2015/2016. Maturity and regeneration of the residential suburbia - trends and interpretations in Japan and Germany. An introduction., in: Beilein, A., Kadono, Y., Polívka, J., Reicher, C. (Eds.), A Maturity and Regeneration of the Residential Suburbia - Trends and Interpretations in Japan and Germany. (in print).
- Beißwenger, S., Weck, S.,** 2011. Zwischen Abkopplung und Erneuerung. Umgang mit Peripherisierung in Mittelstädten, ILS trends. ILS gGmbH, Dortmund.
- Benz, A.,** 2004. Multilevel Governance - Governance in Mehrebenensystemen, in: Benz, A. (Ed.), Governance - Regieren in komplexen Regelsystemen. Eine Einführung. VS, Verl. für Sozialwiss., Wiesbaden.
- Berger, B.,** 1961. The Myth of Suburbia. Journal of Social Issues 17, 38 – 49.
- Berndgen-Kaiser, A.,** 2014. The future of mature housing estates in Germany - Recommendations for municipalities to support the long-term sustainable use of houses built from the 1950s to the 1970s, in: ILS – Institut für Landes- und Stadtentwicklungsforschung (Ed.): Single Family Housing Estates of the Post - War Era – A European Comparison of Opportunities and Risks, Workshop Documentation. ILS gGmbH online, Aachen, pp. 8 – 23.
- Berndgen-Kaiser, A., Bläser, K., Fox-Kämper, R., Siedentop, S., Zakrzewski, P.,** 2013. Demography-driven suburban decline? At the crossroads: mature single family housing estates in Germany. Journal of Urbanism 6.

- Bernt, M., Liebmann, H.**, 2013. Peripherisierung, Stigmatisierung, Abhängigkeit? Deutsche Mittelstädte im Umgang mit Peripherisierungsprozessen. Springer, Berlin.
- Beuka, R.**, 2004. Suburbanation: reading suburban landscape in Twentieth century American film and fiction. Palgrave, New York.
- Binding, L., Pott, L.**, 2003. Bürgerschaftliches Engagement im internationalen Vergleich - Einleitung, in: Bundestag, Enquete-Kommission "Zukunft des Bürgerschaftlichen Engagements." (Eds.), Bürgerschaftliches Engagement im internationalen Vergleich. Leske + Budrich, Opladen, pp. 9 – 11.
- Birch, D.**, 1971. Towards a stage theory of urban growth. Journal of the American Institute of Planners 78 – 87.
- Bizer, K., Dappen, C., Deffner, J., Heilmann, S., Knieling, J., Stieß, I.**, 2008. Nutzungszyklus von Wohnquartieren in Stadtregionen. Modellentwicklung, Neopolis. Hamburg.
- BMBau, Empirica (Eds.)**, 1998. Die Zukunft der Stadtregionen. Dokumentation eines Kongresses in Hannover am 22. und 23. Oktober 1997. Bonn.
- BMVBS (Bundesministerium für Verkehr, Bauen und Stadtentwicklung), BBR (Bundesamt für Bauwesen und Raumordnung) (Eds.)**, 2008. Einschätzung der Marktchancen von Reihenhäusern, Einfamilienhäusern und kleinen Mehrfamilienhäusern aus den 1950er und 1960er Jahren, 13. BBSR online, Berlin.
- Boas, T.C.**, 2007. Conceptualising continuity and change: the composite-standard model of path dependence. Journal of Theoretical Political Science 19, 33 – 54.
- Bodenschatz, H.**, 1983. Schluss mit der Zerstörung?, Stadterneuerung und städtische Opposition in West-Berlin, Amsterdam und London, Bd. 11, 1. Auflage, ed, Werkbund-Archiv. Anabas, Giessen.
- Bölling, L., Sieverts, T. (Eds.)**, 2004. Mitten am Rand: auf dem Weg von der Vorstadt über die Zwischenstadt zur regionalen Stadtlandschaft, Zwischenstadt. Müller + Busmann, Wuppertal.
- Borchard, S.**, 2010. Kommunale Wohnungspolitik als Urban Governance der Dortmunder Weg - ein Modell mit Transferpotential? Rohn, Detmold.
- Boschma, R., Frenken, K.**, 2010. The emerging empirics of evolutionary economic geography. Journal of Economic Geography Working Paper 1 – 10.
- Bourne, L.**, 1996. Reinventing the suburbs: old myths and new realities. Progress in Planning 46, 163 – 184.
- Brake, K.**, 2012. Reurbanisierung -Interdependenzen zum Strukturwandel, in: Brake, K., Herfert, G. (Eds.), Reurbanisierung: Materialität Und Diskurs in Deutschland. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 22 – 33.
- Brake, K., Dangschat, J., Herfert, G.**, 2001. Suburbanisierung in Deutschland - aktuelle Tendenzen. VS Verlag für Sozialwissenschaften, Wiesbaden.

- Brake, K., Herfert, G.**, 2012a. (Reurbanisierung): Diskurs, Materialität und offene Fragen, in: Brake, K., Herfert, G. (Eds.), Reurbanisierung: Materialität Und Diskurs in Deutschland. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 408 – 422.
- Brake, K., Herfert, G. (Eds.)**, 2012. Reurbanisierung: Materialität und Diskurs in Deutschland. VS Verlag für Sozialwissenschaften, Wiesbaden.
- Burdack, J., Hesse, M.**, 2006. Reife, Stagnation oder Wende? Perspektiven zu Suburbanisierung, Post-Suburbia und Zwischstadt: Ein Überblick zum Stand der Forschung. Berichte zur deutschen Landeskunde Band 80, H.4, 2006, 381 – 399.
- Burdack, J., Hesse, M.**, 2007. Suburbanisation, suburbia and “Zwischenstadt”: perspectives of research policy. Territorial Cohesion German Annual of Spatial Research and Policy 2007, 81 – 100.
- Burgess, E.W.**, 1925. The growth of the city: an introduction to a research project, in: Park, R.E., Burgess, E.W., McKenzie, R.D. (Eds.), The City. Chicago University Press, Chicago, pp. 47 – 62.
- Caplan, N., Nelson, S.**, 1973. On being useful: the nature and consequences of psychological research on social problems. American Psychologist 28, 199 – 211.
- Castells, M.**, 1989. The informational city: information technology, economic restructuring, and the urban-regional process. Blackwell, Oxford.
- Champion, T.**, 2001. Urbanization, suburbanization, counterurbanization and reurbanization, in: Paddison, R. (ed.): Handbook of Urban Studies. Sage Publications, London, Thousand Oaks, New Dehli, pp. 143 – 161.
- Cheng, A., Kruger, L.E., Daniels, S.E.**, 2003. “Place” as an integrating concept in natural resource politics: propositions for a social science research agenda. Society and Natural Resources 16/2, 87 – 104.
- Cheshire, P.**, 1995. A new phase of urban development in western Europe? The evidence for the 1980s. Urban Studies 32,7, 1045 – 1063.
- Cheshire, P., Hay, D.**, 1989. Urban problems in western Europe. Unwil Hyman, London.
- Choldin, H.M., Hanson, C., Bohrer, R.**, 1980. Suburban status instability. American Sociological Review 45, 972 – 983.
- CIMA Beratung + Management**, 2014. Einzelhandelskonzept der Stadt Grimma. Leipzig, Grimma.
- Connell, J.**, 1974. The metropolitan village: spatial and social processes in discontinuous suburbs, in: Johnson, J.H. (Ed.), Suburban Growth: Geographical Processes at the Edge of the Western City. John Wiley and Sons, London, pp. 77 – 100.
- Czok, K.**, 1979. Vorstädte. Zu ihrer Entstehung, Wirtschaft und Sozialentwicklung in der älteren deutschen Stadtsgeschichte, Sitzungsberichte der Sächsischen Akademie der Wissenschaften zu Leipzig, Philologisch-Historische Klasse. Akademie-Verlag, Berlin.

- David, P.A.**, 1988. Path dependence: putting the past into the future of economics, in: Institute for Mathematical Studies in the Social Science (Ed.), Economic Series Technical Report, 533. Stanford University, Stanford, California.
- David, P.A.**, 2005. Path dependence in economic processes: implications for policy analysis in dynamical systems contexts, in: Dopfer, K. (Ed.), The Evolutionary Foundations of Economics. Cambridge University Press, Cambridge, pp. 151 – 194.
- David, P.A.**, 2007. Path dependence: a foundational concept for historical social science, in: Dopfer, K. (Ed.), The Evolutionary Foundations of Economics, Cliometrica 1.2. Cambridge University Press, Cambridge, pp. 91 – 114.
- De Temple, N.**, 2005. Einfamilienhaussiedlung im Wandel: Eine Untersuchung zum Generationswechsel vor dem Hintergrund des soziodemographischen Wandels am Beispiel der Stadt Dortmund. Technische Universität Berlin, Berlin.
- Deutscher Bundestag**, 2002. Schlussbericht der Enquête-Kommission: demographischer Wandel – Herausforderungen unserer älter werdenden Gesellschaft an den Einzelnen und die Politik, Drucksache 14/8800. Deutscher Bundestag, Berlin.
- Difu (Deutsches Institut für Urbanistik)**, 2003. Strategien für die soziale Stadt: Erfahrungen und Perspektiven: Umsetzung des Bund-Länder-Programms “Stadtteile mit besonderem Entwicklungsbedarf-die soziale Stadt”: Bericht der Programmbegleitung. Deutsches Institut für Urbanistik, Berlin.
- Dittrich-Wesbuer, A., Knapp, W., Osterhage, F.**, 2010. Postsuburbanisierung und die „Renaissance der (Innen-)Städte“ Neue Entwicklungen in der Stadtregion, Reihe Metropolis und Region des Stadt- und regionalwissenschaftlichen Forschungsnetzwerks Ruhr (SURF). Rohn, Detmold.
- Dittrich-Wesbuer, A., Osterhage, F.**, 2014. Veränderungen in der Arbeitswelt: Geht Suburbia das Personal aus? SURF-Kolloquium “Neue Suburbanisierungsforschung: Wandel und Perspektiven von Suburbia.” TU Dortmund, SURF, Dortmund.
- Dobriner, W.**, 1972. The natural history of a reluctant suburb, in: Kramer, J. (Ed.), North American Suburbs: Politics, Diversity, and Change. The Glendessary Press, Berkeley, pp. 47 – 63.
- Drahokoupil, J.**, 2012. Beyond lock-in versus evolution, towards punctuated co-evolution: on Ron Martin’s “Rethinking regional path dependence.” International Journal of Urban and Regional Research 36.1, 166 – 171.
- Dransfeld, E.**, 2010. Spezifische Probleme und Zukunftsperspektiven von Einfamilienhausgebieten der 50er bis 70er Jahre. Flächenmanagement und Bodenordnung 3/2010, 110 – 116.
- Dransfeld, E., Pfeiffer, P., Platzek, C.**, 2010. Boden 2030. Anforderungen an die kommunale Bodenpolitik und den Umgang mit Einfamilienhausgebieten der 1950er, 1960er und 1970er Jahre. Forum Baulandmanagement (Ed.). Dortmund.

- Drews, B.**, 2013. Einfamilienhausgebiete der fünfziger bis siebziger Jahre als Gegenstand der Stadtentwicklung. *Forum Wohnen und Stadtentwicklung* 3, 149 – 152.
- Dunham-Jones, E., Williamson, J.**, 2011. *Retrofitting Suburbia. Urban Design Solutions for Redesigning Suburbs*. Wiley, Hoboken, NJ.
- Duvigneau, H.J.**, 2001. Die neue Rolle der Wohnungsunternehmen Vom Instrument der Verteilungspolitik zum wirtschaftlich agierenden Dienstleistungsunternehmen mit sozialem Anspruch – Kann das gutgehen? Schader-Stiftung, Darmstadt.
- Dyos, H.J.**, 1961. *Victorian Suburb: A study of the growth of Camberwell*. Leicester University Press, Leicester.
- Eick, V.**, 2005. Sozialer Wohnungsbau, Arbeitsmarkt(re)integration und der neoliberale Wohlfahrtsstaat in der Bundesrepublik und Nordamerika: Erweiterte Dokumentation der Arbeitstagung "Public Housing and Work (Re)Integration - Lessons from Germany and North America" im Tagungszentrum der Helle Panke e.V., 19. - 21. 11 2004. John-F.-Kennedy-Inst., Abt. Politik, Berlin.
- Farley, R.**, 1964. Suburban persistence. *American Sociological Review* 29, 38 – 37.
- Feldmann, J.**, 2012. Sozialraumorientierung und strategische Stadtentwicklung in Gelsenkirchen. beitrage zur fachkonferenz Sozialraumorientierung und Interkulturalität in der Sozialen Arbeit, FES. Berlin.
- Fielding, A.**, 1982. Counterurbanisation in Western Europe. *Progress in Planning* 17, 1 – 52.
- Fina, S., Planisek, S., Zakrzewski, P.**, 2009. Suburban crisis. Demand for single family homes in the face of demographic change. *Europa Regional* 17, 2 – 14.
- Fisher, T.**, 2003. Differentiation of growth processes in the peri-urban region: an Australian case study. *Urban Studies* 40/3, 551 – 565.
- Fishman, R.**, 1987. *Bourgeois utopias: the rise and fall of suburbia*. Basic Books, New York.
- Flyvbjerg, B.**, 2001. *Making social science matter why social inquiry fails and how it can succeed again*. Cambridge University Press, Oxford, New York.
- Fogelson, R.M.**, 2001. *Downtown: its rise and fall, 1880-1950*. Yale University Press, New Haven.
- Forsa**, 2013. Kriterien für Hauskäufer zählen, dem ist das Meinungsforschungsinstitut Forsa. Deutsche Energie-Agentur, Gesellschaft für Sozialforschung und statistische Analysen mbH, Berlin.
- Forsyth, A.**, 2012. Defining Suburbs. *Journal of Planning Literature* 27(3), 270 – 281.
- Frank, S.**, 2013. Innere Suburbanisierung? Mittelschichteltern in den neuen innerstädtischen Familienklaven, in: Kronauer, M., Siebel, W. (Eds.): *Polarisierte Städte. Soziale Ungleichheit als Herausforderung für die Stadtpolitik*. Frankfurt, New York, pp. 69 – 89.
- Friedrichs, J.**, 1990. *Methoden empirischer Sozialforschung*. Westdeutscher Verlag, Opladen.

- Fujii, T.**, 2010. Changes in family structure and generational balance of the population in Tokyo's metropolitan suburbs. Presented at the Urban Affairs Association 40th Conference Sustaining Cities in a Time of Globalization: Social, Economic and Political Realities, Honolulu, p. 63f.
- Funck, C., Kawada, T., Yoshimichi, Y.**, 2009. Bürgerbeteiligung im Stadtteil: ein Vergleich von Kobe und Berlin, in: Foljanty-Jost, G. (Ed.), Kommunalreform in Deutschland Und Japan: Ökonomisierung und Demokratisierung in vergleichender Perspektive, Stadtforschung Aktuell. VS, Verlag für Sozialwissenschaften, Wiesbaden, pp. 151 – 167.
- Fürst, D.**, 2010. Placemaking, in: Henckel, D., von Kuczowski, K., Pahl-Weber, E., Stellmacher, F., Lau, P. (Eds.), Planen - Bauen - Umwelt. Ein Handbuch. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 360 – 363.
- Fürst, D., Lahner, M., Zimmermann, K.**, 2004. Neue Ansätze integrierter Stadtteilentwicklung: placemaking und local governance. IRS, Erkner.
- Gans, H.**, 1959. The Lewittowners. Pantheon, New York.
- Gans, H.**, 1962. Urbanism and suburbanism as a way of life, in: Raymond, E.P. (Ed.), Readings in Urban Sociology. Pergamon Press, Oxford, pp. 95 – 118.
- Gans, H.**, 1968. People and plans. Basic Books, New York.
- Garreau, J.**, 1991. Edge City: Life on the New Frontier. Doubleday, New York.
- Gehl, J.**, 2012. Leben zwischen Häusern. Jovis Verlag, Berlin.
- Geyer, H.S.**, 2002. Urban systems - theoretical fundamentals, in: International Handbook of Urban Systems. Edward Elgar, Cheltenham, Northampton, pp. 3 – 85.
- Geyer, H.S., Kontuly, T.**, 1993. A theoretical foundation for the concept of differential urbanization. International Regional Science Review, 12, pp. 157 – 177.
- Giddens, A.**, 1984. The constitution of society. University of California Press, Berkeley.
- Giddens, A.**, 1987. Social Theory and Modern Sociology. Polity, Cambridge.
- Gilham, O.**, 2002. The limitless city: a primer on the urban sprawl debate. Island Press, Washington, D.C.
- Gladwell, M.**, 2001. The tipping point: how little things can make a big difference. Little, Brown, London.
- Glasmeier, A.**, 2000. Manufacturing time: global competition in the watch industry, 1795-2000. The Guilford Press, New York.
- Goldberger, P.**, 1987. When suburban sprawl meets upward mobility. New York Times 26.07.1987, p. 14
- Griffiths, S.**, 2009. Persistence and change in the spatiotemporal description of Sheffield Parish 1770-1910, in: Koch, D., Marcus, L., Steen, J. (Eds.): Proceedings of the 7th International Space Syntax Symposium. KTH Royal Institute of Technology, Stockholm.



- Gunderson, L., Holling, C.S.**, 2002. *Panarchy: understanding transformations in human and natural systems*. Island Press, Washington.
- Gunderson, L., Holling, C.S., Pritchard Jr. L., Peterson, G.D.**, 2002. Resilience of large-scale resource systems, in: *Resilience and the Behavior of Large-Scale Systems*, Scope. Island Press, Washington, Covelo, London, pp. 3–20.
- Haase, A., Steinführer, A., Kabisch, S., Grossmann, K., Hall, R. (Eds.)**, 2011. *Residential change and demographic challenge: the inner city of East Central Europe in the 21st century*. Ashgate, Farnham, Burlington, VT.
- Hacker, J.S.**, 2004. Privatizing risk without privatizing the welfare state: the hidden politics of social policy retrenchment in the United States. *American Political Science Review* 98.2, 243 – 260.
- Hall, P.**, 2001. Global city-regions in the twenty-first century, in: Scott, A.J. (Ed.), *Global City-Regions. Trends, Theory, Policy*. Oxford University Press, Oxford, pp. 59 – 77.
- Hall, P., Pain, K.**, 2006. *The polycentric metropolis: learning from mega-city regions in Europe*. Earthscan, London.
- Hall, S., Murie, A., Knorr-Siedow, T.**, 2005. Large housing estates in their historical context, in: van Kempen, R., Dekker, K., Hall, S., Tosics, I. (Eds.), *Restructuring Large Housing Estates in European Cities*. Policy Press, Bristol.
- Harlander, T. (Ed.)**, 2001. *Villa und Eigenheim: Suburbaner Städtebau in Deutschland*. Deutsche Verlags-Anstalt, Stuttgart, München.
- Harrell, R.**, 2011. *Understanding modern segregation. Suburbanization and the black middle class*. Proquest, Umi Dissertation Publishing, Michigan.
- Harris, R.**, 2010. Meaningful types in a world of suburbs. *Suburbanization in Global Society. Research in Urban Sociology* 10, 15 – 47.
- Harris, R., Lewis, R.**, 2001. The geography of North American cities and suburbs, 1900 – 1950: a new synthesis. *Journal of Urban History* 27/3, 262 – 292.
- Harris, R., Vorms, C.**, 2014. What's in a name? Talking about "suburbs," in: Harris, R., Vorms, C. (Eds.), *What's in a Name? Talking about "suburbs."* Toronto University Press, Toronto, pp. 1 – 23 (in print).
- Harvey, D.**, 1978. The urban process under capitalism: a framework for analysis. *International Journal of Urban and Regional Research* 2/1, 101 – 131.
- Häußermann, H.**, 2007. Suburbia im Umbruch. *archithese* 37(3), 28 – 31.
- Häußermann, H., Siebel, W.**, 2004. *Die europäische Stadt*. Suhrkamp, Frankfurt am Main.
- Hayden, D.**, 2004a. *A field guide to sprawl*. W. Norton and Company, New York.
- Hayden, D.**, 2004. *Building suburbia: green fields and urban growth, 1820–2000*. Vintage Books, New York.

- Healey, P.**, 2001. Towards a more place-focussed planning system in Britain, in: Madanipour, A., Hull, A., Healey, P. (Eds.), *The Governance of Place: Space and Planning Process*. Aldershot, pp. 265 – 286.
- Healey, P.**, 2007. *Urban complexity and spatial strategies. Towards relational planning for our times*. Routledge, London, New York.
- Herfert, G., Osterhage, F.**, 2012. Wohnen in der Stadt: Gibt es eine Trendwende zur Reurbanisierung? Ein quantitativ-analytischer Ansatz, in: Brake, K., Herfert, G. (Eds.), *Reurbanisierung: Materialität und Diskurs in Deutschland*. Springer VS, Wiesbaden, pp. 86 – 112.
- Herlyn, U.**, 1990. *Leben in der Stadt: Lebens- und Familienphasen in städtischen Räumen*. Leske + Budrich, Opladen.
- Hesse, M.**, 2012a. Suburbaner Raum - Annäherung an Gegenstand, in: Schenk, W., Kühn, M., Leibenath, M., Tzschaschel, S. (Eds.), *Suburbane Räume Als Kulturlandschaften*, ARL Schriften. ARL, Hannover, pp. 13 – 24.
- Hesse, M.**, 1999. Der Strukturwandel von Warenwirtschaft und Logistik und seine Bedeutung für die Stadtentwicklung. *geographische Zeitschrift* 223 – 237.
- Hesse, M.**, 2009. Mobilität im Zwischenraum, in: *Urbane Mobilität. - Verkehrsforschung des Bundes für die Kommunale Praxis, Handbuch Verkehrspolitik*. BMVBS, Bremerhaven, pp. 449 – 471.
- Hesse, M.**, 2010. Suburbs: the next slum? Explorations into the contested terrain of social construction and political discourse. *Articulo – Journal of Urban Research* 2010/3, 1 – 20.
- Hesse, M.**, 2012. Sprachspiel Reurbanisierung - Formationen, Kritik und Potentiale eines urbanen Diskurses, in: Brake, K., Herfert, G. (Eds.), *Reurbanisierung: Materialität Und Diskurs in Deutschland*. Springer VS, Wiesbaden, pp. 69 – 84.
- Hesse, M.**, 2014. Just dump and boring, or “over”? Lifecycle-trajectories, the credit crunch and the challenge of suburban regeneration in the U.S., in: O’Donoghue, D. P. (Ed.): *Urban Transformations: Centres, Peripheries and Systems*. Routledge, London, pp. 151 – 160.
- Hesse, M., Hoffschröer, H., Mecklenbrauck, I., Polívka, J., Reicher, C., Tries, D.**, 2013. Suburbaner Raum im Lebenszyklus. BBSR, Bonn. Available also at <http://d-nb.info/1047025914/34>.
- Hesse, M., Kaltenbrunner, R.**, 2005. Zerrbild “Zersiedelung.” *DISP* 160, 16 – 22.
- Hesse, M., Scheiner, J.**, 2007. Suburbane Räume – Problemquartiere der Zukunft? *Deutsche Zeitschrift für Kommunalwissenschaften* 46(2), 35 – 48.
- Hillier, J.**, 2002. *Shadows of power an allegory of prudence in land-use planning*. Routledge, New York.
- Hirohara, M., Kadono, Y., Narita, K., Takada, T.**, 2010. Toshin, machinaka, kougai no kyousei. *Keihanshin daitoshiken no shourai (City centre, inner city and suburbia*

symbiosis – future of the Kansai metropolitan area). Kouyou Shobou, Kyoto.

- Hollander, J.B., Nemeth, J.**, 2011. The bounds of smart decline: a foundational theory for planning shrinking cities. *Housing Policy Debate* 21/3, 349 – 347.
- Holling, C.S.**, 1973. Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics* 4, 1 – 23.
- Holling, C.S.**, 1986. Resilience of ecosystems; local surprise and global change, in: Clark, W.C., Munn, R.E. (Eds.), *Sustainable Development of the Biosphere*. Cambridge University Press, Cambridge, pp. 292 – 317.
- Holling, C.S.**, 2001. Understanding the complexity of economic, ecological, and social systems. *Ecosystems* 4, 390 – 405.
- Holling, C.S.**, Gunderson, L., Peterson, G.D., 2002. Sustainability and Panarchies, in: Gunderson, L., Holling, C.S. (Eds.), *Panarchy. Understanding Transformations in Human and Natural Systems*. Island Press, Washington, pp. 63–101.
- Homburg, A.**, 2001. Jung kauft alt – Junge Menschen kaufen alte Häuser. *Forum Wohnen und Stadtentwicklung* 3, 139 – 140.
- Hoover, E.M., Vernon, R.**, 1959. Metropolitan areas. *Anatomy of a metropolis. The changing distribution of people and jobs within the New York metropolitan region*. Harvard University Press, Cambridge, Massachusetts.
- Hoover, E.M., Vernon, R.**, 1962. *Anatomy of a metropolis*. Anchor, Garden City.
- Hopfner, K., Simon-Philipp, C.**, 2013. *Das Wohnungsbauerbe der 1950er bis 1970er Jahren: Perspektiven und Handlungsoptionen für Wohnquartiere*. Wüstenrot Stiftung, Ludwigsburg.
- Howard, E.**, 1902. *Garden cities of tomorrow*. Forgotten Books, London.
- Hoyt, H.**, 1939. *The structure and growth of residential neighbourhoods in American cities*. Federal Housing Administration, Washington DC.
- Huning, S., Kuder, T., Nuissl, H., Altrock, U.**, 2014. Die Zukunftsfähigkeit von Städten, in: Altrock, U., Huning, S., Kuder, T., Nuissl, H. (Eds.), *Die Anpassungsfähigkeit von Städten. Zwischen Resilienz, Krisenreaktion und Zukunftsorientierung, Planungsrundschau*. Uwe Altrock, Berlin, pp. 7 – 23.
- ILS gGmbH**, 2014. Documentation “Single Family Housing Estates of the Post - War Era – a European Comparison of Opportunities and Risks”. Workshop 5th September 2013 AGIT mbH Aachen. ILS gGmbH online, Dortmund.
- INSEK Grimma**, 2002. *Integriertes Einzelhandelskonzept der Stadt Grimma*. Grimma.
- INSEK Grimma**, 2009. *Integriertes Einzelhandelskonzept der Stadt Grimma - Fortschreibung*. Grimma.
- IT.NRW**, 2014. *Zensus Bevölkerung 2011. Landesbetrieb Information und Technik Nordrhein-Westfalen (IT.NRW)*. Last access 07.10.2014.
- Jackson, K.T.**, 1985. *Crabgrass frontier: the suburbanization of the United States*. Oxford University Press, New York.

- Jacobs, J.**, 1961. The death and life of great American cities. Random Publishing Group, New York.
- Jäger, S.**, 2005. Jäger S. 2005. Diskurs als "Fluß von Wissen durch die Zeit". Ein transdisziplinäres und politisches Konzept. *Aptum. Zeitschrift für Sprachkritik und Sprachkultur* 1, 2 – 72.
- Jessen, J.**, 2001. Suburbanisierung, Wohnen in verdichteter Landschaft, in: Harlander, T. (Ed.): *Villa Und Eigenheim. Suburbaner Städtebau in Deutschland*. Deutsche Verlags-Anstalt, Stuttgart, pp. 350 – 381.
- Jessen, J., Siedentop, S.**, 2010. Reurbanisierung zwischen Wunsch und Wirklichkeit. *disP – the Planning Review* 180/1, 16 – 23.
- Just, T.**, 2005. Bestimmungsfaktoren der Wohnungsnachfrage Brauchen wir die öffentliche Hand? Konrad Adenauer Stiftung, Schloss Eichholz.
- Kabisch, S.**, 2014. Die Anpassungsfähigkeit von ostdeutschen Großwohnsiedlungen aus Bewohnerperspektive - das Fallbeispiel Leipzig Grünau, in: Altrock, U., Huning, S., Kuder, T., Nuisl, H. (Eds.), *Die Anpassungsfähigkeit von Städten. Zwischen Resilienz, Krisenreaktion Und Zukunftsorientierung, Planungsrundschau*. Uwe Altrock, Berlin, pp. 177 – 197.
- Kadono, Y.**, 2010. Kougai Juutakuchi no Hensen to Yukue (Development and Future of Suburban Residential Areas), in: Hirohara, A., Kadono, Y., Narita, K., Takada, T. (Eds.): *Toshin, Machinaka, Kougai No Kyousei. Keihanshin Daitoshiken No Shourai (City Centre, Inner City and Suburbia Symbiosis – Future of the Kansai Metropolitan Area)*. Kouyoh Shobou, Kyoto, pp. 107 – 128.
- Kadono, Y.**, 2013. Transformation and regeneration of the suburbia in Osaka metropolitan area. Workshop mature suburbia in stagnating metropolitan regions in Japan and Germany – current trends and interpretations. Paper presentation. 13. 03. 2013. Dortmund.
- Keil, R.**, 2011. Global suburbanization: the challenge of researching cities in the 21st century. *Public* 43, 54 – 61.
- Keil, R., Young, D.**, 2009. Fringe explosions. Risk and vulnerability in Canada's new inbetween urban landscape. *The Canadian Geographer* 53.4, 488 – 499.
- Keller, S.I.**, 1968. The urban neighborhood: a sociological perspective, *Studies in Sociology*. Random House, New York.
- Klaasen, L.H., Seimeni, G.**, 1981. Theoretical issues in urban dynamics, in: Klaasen, L.H., Molle, W.T.M., Paelinck, J.H.P. (Eds.), *Dynamics of Urban Development*. Gower, Aldershot, pp. 8 – 28.
- Klug, S.**, 2012. *Urban Sprawl and Local Infrastructure in Japan and Germany*. Fraunhofer, Stuttgart.
- Kneebone, E., Berube, A.**, 2013. *Confronting suburban poverty in America*. Brookings Institution Press, Washington, DC.

- Koizumi, S.**, 1991. Shugo jutakuchi no rekishi (History of apartment housing), in: Koizumi, S. (Ed.), Shugo jutaku (Apartment housing). Ichigaya Books, Tokyo, pp. 3 – 16.
- Koppelman, U.**, 2000. Produktmarketing: Entscheidungsgrundlagen für Produktmanager. Springer, Berlin.
- Kötter, T.**, 2013. Weiterentwicklung von Einfamilienhausgebieten, in: Kummer, K., Frankenberger, J., Kötter, T. (Eds.), Das Deutsche Vermessungs- Und Geoinformations-Wesen, Themenschwerpunkt 2014: Stadtentwicklung Und Städtebau, Stadterneuerung Und Stadtbau, Flächenmanagement Und Bodenordnung, Immobilienmärkte Und Grundstücks-Wertermittlung. Verlag Wichmann, Berlin, pp. 289 – 334.
- Kötter, T., Schollän, U.**, 2010. Suburbane Wohngebiete in Zeiten des demographischen Wandels – Szenarien, Handlungsbedarfe und Anpassungsstrategien. FuB Flächenmanagement und Bodenordnung 6/2010, 254 – 260.
- Koura, H.**, 2016. Coming future of suburbia: shrinking Takakuradai study on the early stages of shrinkage., in: Beilein, A., Kadono, Y., Polívka, J., Reicher, C. (Eds.), Maturity and Regeneration of the Residential Suburbia - Trends and Interpretations in Japan and Germany. p. (in print).
- Kramer, J.**, 1972. North American suburbs; politics, diversity, and change. Glendessary Press, Berkeley.
- Kröhnert, S., van Olst, N., Klingholz, R.**, 2004. Deutschland 2020. Die demographische Zukunft der Nation. Berlin-Institut für Weltbevölkerung und globale Entwicklung, Berlin.
- Kuhn, G.**, 2006. Suburbanisierung in historischer Perspektive, in: Zimmermann, C. (Ed.), Zentralität und Raumgefüge der Großstädte im 20. Jahrhundert, Beiträge zur Stadtgeschichte und Urbanitätstforschung. Franz Steiner Verlag GmbH, Stuttgart, pp. 61 – 81.
- Kühn, M., Sommer, H.**, 2012. Peripherisierung - Stadtentwicklung abseits der Metropolen. disP 48.
- Kühn, M., Weck, S.**, 2013. Peripherisierung – ein Erklärungsansatz zur Entstehung von Peripherien, in: Bernt, M., Liebmann, H. (Eds.): Peripherisierung, Stigmatisierung, Abhängigkeit? Deutsche Mittelstädte Und Ihr Umgang Mit Peripherisierungsprozessen. Springer VS, Heidelberg, Berlin, pp. 24 – 34.
- Kunzmann, K.R.**, 2011. Der funktionale Archipel der Stadtregion, in: Reicher, C., Kunzmann, K.R., Polívka, J., Roost, F., Utku, Y., Wegener, M. (Eds.), Schichten Einer Region – Kartenstücke Zur Räumlichen Struktur Des Ruhrgebiets. Jovis, Berlin, pp. 218 – 233.

- Lange, B.**, 2000. Von Suburbia nach Postsuburbia? Neue Verstadterungsformen in der Stadt-Region Frankfurt-Main und deren raumordnerische Konsequenzen, in: Jahrbuch Der Marburger Geographischen Gesellschaft 1999 (Ed.). MGG, Marburg/Lahn., pp. 315 – 319.
- Lang, R.E.**, 2003. Edgeless cities: exploring the elusive metropolis. Brookings Institution Press, Washington, DC.
- Lang, R.E., LeFurgy, J.B.**, 2007. Boomburbs: the rise of America's accidental cities. Brookings Institution Press, Washington, DC.
- Lefebvre, H.**, 1991. The production of space. Blackwell, Oxford OX, Cambridge Mass.
- Lichtenberger, E.**, 1998. Stadtgeographie. Begriffe, Modelle, Konzepte. Teubner, Stuttgart.
- Liebermann, E.S.**, 2005. Nested analysis as a mixed-method strategy for comparative research. American Political Science Review 99/3, 435 – 452.
- Lienert, G.A., Raatz, U.**, 1998. Testaufbau und Testanalyse. Beltz, Psychologie Verl.-Union, Weinheim.
- Lindblom, C.E.**, 1959. The science of muddling-through. Public Administration Review 19, 79 – 88.
- Li, W.**, 1998. Anatomy of a new ethnic settlement: the Chinese ethnoburb in Los Angeles. Urban Studies, 48(2) 35, 3, 479 – 501.
- L6w, M.**, 2000. Raum. Eine Neubestimmung des soziologischen Grundbegriffs unter besonderer Beruckichtigung stadtsoziologischer, bildungs- und sozialisationstheoretischer Aspekte. Habilitationsschrift. Halle.
- L6w, M.**, 2007. Zwischen Handeln und Struktur. Grundlagen einer Soziologie des Raums, in: Kessl, F., Otto, H.-U. (Eds.), Territorialisierung des sozialen Regieren uber soziale Nahraume. Budrich, Opladen; Farmington Hills, pp. 81 – 100.
- Lupi, T., Musterd, S.**, 2006. The suburban community question. Urban Studies 43/4, 801 – 817.
- Madden, J.F.**, 2000. Jobs, cities and suburbs in the global economy. Annals of the American Academy of Political and Social Science 572, 28 – 89.
- Marshall, S.**, 2006. The emerging "silicon savannah": from old urbanism to new suburbanism. Built Environment 32 267 – 280.
- Martin, R.**, 2010. Roepke lecture in economic geography - rethinking regional path dependence: beyond lock-in to evolution, Economic Geography. University of Illinois, Campaign.
- Martin, R.**, 2012. (Re)placing path dependence: a response to the debate: debates and developments. International Journal of Urban and Regional Research 36, 179 – 192.

- Martin, R., Sunley, P.**, 2010. The place of path dependence in an evolutionary perspective on the economic landscape, in: Boschma, R., Martin, R. (Eds.), *Handbook of Evolutionary Economic Geography*. Edward Elgar, Chichester.
- Masotti, L.H.**, 1972. Prologue: suburbia reconsidered - myth and counter-myth, in: Masotti, L. H., Hadden, J. K. (Eds.): *The Urbanization of Suburbs*. Sage Publications, Beverly Hills, London, pp. 15 – 22.
- McEvily, B., Perrone, V., Zaheer, A.**, 2003. Trust and organizing principle. *Organization Studies* 14/1, 91 – 103.
- McKenzie, E.**, 1994. *Privatopia: homeowner associations and the rise of residential private government*. Yale University Press, New Haven.
- McManus, R., Ethington, P.J.**, 2007. Suburbs in transition: new approaches to suburban history. *Urban History* 34.2, 317 – 337.
- Mecklenbrauck, I.**, 2015. *Universitätsstandorte der 1960er und 1970er Jahre. Eine empirische Analyse von Rahmenbedingungen und Herausforderungen in der Wissensgesellschaft*. TU Dortmund, Dortmund.
- Menzl, M.**, 2007. *Leben in Suburbia: Raumstrukturen und Alltagspraktiken am Rand von Hamburg*. campus Verlag, Frankfurt am Main.
- Metcalf, J.S., Foster, J., Ramlogan, R.**, 2006. Adaptive economic growth. *Cambridge Journal of Economics* 30, 7 – 32.
- Metzger, J.T.**, 2000. Planned abandonment: life-cycle theory and urban policy. *Housing Policy Debate* 11/1, 7 – 40.
- Mintzberg, H.**, 1979. *The structuring of organizations*. Prentice Hall, Englewood Cliffs.
- Mitscherlich, A.**, 1965. *Die Unwirtlichkeit unserer Städte. Anstiftung zum Unfrieden*. Surkamp, Frankfurt (am Main).
- Molotch, H.**, 1976. The city as growth machine: toward a political economy of place. *American Journal of Sociology* 82, 309 – 330.
- Morcöl, G.**, 2006. Positivist beliefs among policy professionals: an empirical investigation. *Policy Sciences* 34/4, 381 – 401.
- Mumford, L.**, 1961. *The city in history: its origins, its transformations, and its prospects*. Harcourt, Brace and World, New York.
- Musil, J.**, 2002. Co je urbanizace?, in: Hradská, P., Maur, E., Musil, J. (Eds.): *Zrod velkomesta. Urbanizace ceskych zemi a Evropa*. Paseka, Litomyšl, Praha, pp. 7 – 53.
- Naumann, A., Fischer-Tahir, A.**, 2012. *Peripheralization*. Springer, Berlin.
- Nierhoff, S.**, 2008. *Einfamilienhaussiedlungen im Wandel. Eine Untersuchung zum Generationswechsel vor dem Hintergrund des sozialdemographischen Wandels am Beispiel der Stadt Dortmund*. ISR TU Berlin, Berlin.

- Nishikawa, K., Fujimoto, A., Muto, T.**, 1989. Machi ni sumou: Osaka toshi juutakushi (Living in the City: History of Housing in Osaka). Osaka-shi Toshi Juutakushi Henshuu rinkai, Shohan. Heibonsha, Tokyo.
- Nuissl, H.**, 2005a. Wirkungskette und Forschungsfelder zur Flächeninanspruchnahme. Umweltforschungszentrum Halle-Leipzig, Leipzig.
- Nuissl, H.**, 2005b. Das Flächensparbuch. Diskussion zu Flächenverbrauch und lokalem Bewußtsein - Vorwort, in: Das Flächensparbuch. Diskussion Zu Flächenverbrauch Und Lokalem Bewußtsein, ISR Diskussionsbeiträge. ISR, Berlin, pp. 7 – 9.
- Nuissl, H.**, 2007. Decline and sprawl. Urban sprawl is not confined to expanding city regions, in: Couch, C., Leontidou, L., Petschel-Held, G. (Eds.), Urban Sprawl in Europe. Landscapes, Land Use-Change and Policies. Blackwell, Oxford, pp. 136 – 162.
- Nuissl, H., Bigalke, B.**, 2007. Altwerden am Stadtrand – zum Zusammenhang von Suburbanisierung und demographischem Wandel. Raumforschung und Raumordnung 5, 381 – 392.
- Numagami, T.**, 1998. The infeasibility of invariant laws in management studies: a reflective dialogue in defense of case studies. Organization Science 1/1998, 2 – 15.
- Olson, P.**, 1982. Urban neighborhood research: Its development and current focus. Urban Affairs Q. 17, 491 – 518.
- Oosterlynck, S.**, 2012. Path dependence: a political economy perspective. International Journal of Urban and Regional Research 36.1, 158 – 165.
- Ottensmann, J.R.**, 1975. The changing spatial structure of American cities. Lexington Books, Lexington, Mass.
- Ourednicek, M.**, 2004. New suburban development in the post-socialist city: the case of Prague. Charles University, Dept. of Social Geography, unprinted paper, Praha.
- Ourednicek, M., Spackova, P.**, 2013. Teoreticke pristupy a soucasna temata vyzkumu suburbanizace, in: Ourednicek, M., Spackova, P., Novak, J. (Eds.), Sub Urbs: Krajina, sidla a lide. Academia, Praha, pp. 13 – 36.
- Park, R.E., Burgess, E.W., McKenzie, R.D.**, 1925. The City. University of Chicago Press, Chicago.
- Parson, T.**, n.d. The Social System. Free Press, Glencole, Illinois.
- Pastor, M.**, 2001. Looking for regionalism in all the wrong places, demography, geography and community in Los Angeles county. Urban Affairs Review 36/6, 747 – 82.
- Phelps, N.A., Wood, A.M., Valler, D.C.**, 2010. A postsuburban world? An outline of a research agenda. Environment and Planning 42, 366 – 383.



- Pickett, S.T.A., Cadenasso, M.L., Grove, J.M.**, 2004. Resilient cities: meaning, models, and metaphor for integrating the ecological, socioeconomic, and planning realms. *Landscape and Urban Planning* 69, 369 – 384.
- Pitkin, N.**, 2001. Theories of neighborhood change: implications for community development policy and practice. Essay, Los Angeles.
- Polívka, J., Hesse, M.**, 2013. Suburban life cycles – approaching the spatio-temporal varieties of suburbia, global Suburbanisms: governance, land and infrastructure in the 21st century., A Suburban Revolution? Paper Presentation, The City Institute at York University. Toronto.
- Polívka, J., Hohn, U., Kiuchi, S., Roost, F.**, 2012. Centralization and peripherization by urban renaissance policies in the polycentric Kansai region, Japan, in: *Proceedings of the Aesop 26th Annual Congress. AESOP, Ankara*, pp. 4303 – 4330.
- Polívka, J., Roost, F.**, 2011. Kerne, Adern und Ränder: Siedlungs- und Bebauungsstruktur des Ruhrgebiets, in: Reicher, C., Kunzmann, K.R., Polívka, J., Roost, F., Utku, Y., Wegener, M. (Eds.), *Schichten Einer Region – Kartenstücke Zur Räumlichen Struktur Des Ruhrgebiets*. Jovis, Berlin, pp. 38 – 78.
- Power, A.**, 1997. *Estates on the edge. The social consequences of mass housing in northern Europe*. Macmillan, London.
- Prak, N.L., Priemus, H.**, 1986. A model for the analysis of the decline of postwar housing. *The International Journal of Urban and Regional Research* 10, 1 – 7.
- Preuss, N., Schoene, L.B.**, 2010. *Real Estate und Facility-Management: aus Sicht der Consultingpraxis*. Springer, Berlin, Heidelberg.
- Priemer, R.**, 1992. *Grimma und Muldentale*. Sax-Verl., Beucha.
- Putnam, R.D.**, 2000. *Bowling alone: the collapse and revival of American community*. Simon & Schuster, New York.
- Reichenbach-Behnisch, J.**, 2010. Installieren multipler Häuser als gemeinschaftlicher Stützpunkt von Dienstleistung und Nachbarschaft in ländlichen Regionen in der vom Demographischen Wandel besonders betroffenen Modellregion ‚Stettiner Haff‘. rb architekten, Leipzig.
- Reichenbach-Behnisch, J.**, 2014. Installieren Multipler Häuser in der Modellregion Stettiner Haff - Begleitforschung. rb architekten, Leipzig.
- Reimer, M.**, 2012. *Planungskultur im Wandel. Das Beispiel der REGIONALE 2010*. Rohn, Detmold.
- Reutlinger, C.**, 2008. Die Stadt als sozialer Raum und die Raumbezogenheit sozialer Probleme in der Stadt, in: Baum, D. (Ed.), *Die Stadt in der Sozialen Arbeit*. Springer Fachmedien, Wiesbaden, pp. 94 – 110.
- rha**, 2013. *Suburbaner Raum im Lebenszyklus. Dritter Statusbericht*. BBSR (internal material), Dortmund, Bonn.

- Roost, F., Folgmann, K.**, 2013. Airport cities. Gateways der metropolitanen Ökonomie, SURF Metropolis und Region. Rohn, Detmold.
- Roskamm, N.**, 2011. Dichte: Eine transdisziplinäre Dekonstruktion. Diskurse zu Stadt und Raum. transcript, Bielefeld.
- Schenk, W.**, 2012. Suburbane Räume als Kulturlandschaften. ARL, Hannover.
- Schively, C.**, 2007. Understanding the NIMBY and LULU phenomena: reassessing our knowledge base and informing future research. Journal of Planning Literature 21, 255 – 266.
- Schmid, C.**, 2005. Stadt, Raum und Gesellschaft: Henri Lefebvre und die Theorie der Produktion des Raumes. Steiner, Stuttgart.
- Schmidt, L.H.**, 2006. Technologie als Prozess. Eine empirische Untersuchung organisatorischer Technologiegestaltung am Beispiel von Unternehmenssoftware, Dissertation. FU Berlin, Berlin.
- Schmitz, G.**, 2005. Regionalplanung, in: ARL (Ed.), Handwörterbuch Der Raumordnung. ARL, Hannover, pp. 963 – 973.
- Schnur, O.**, 2008. Quartiersforschung im Überblick - Konzepte, Definitionen und aktuelle Perspektiven, in: Schnur, O. (Ed.): Quartiersforschung Zwischen Theorie Und Praxis. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 19 – 52.
- Schnur, O.**, 2010. Konzepte, Zugänge und Potentiale der Quartiersforschung. Sozialraumorientierte Handlungsansätze zur Förderung der kommunalen Kriminalprävention, Fachtagung "Sicherheit im Quartier." KSKP, Bremen.
- Schnur, O.**, 2014. Quartiersforschung im Überblick: Konzepte, Definitionen und aktuelle Perspektiven, in: Schnur, O. (Ed.), Quartiersforschung. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 21 – 56.
- Schnur, O., Drilling, M.**, 2011a. Quartiere im demographischen Umbruch, in: Schnur, O., Drilling, M. (Eds.): Quartiere Im Demografischen Umbruch. Beiträge Aus Der Forschungspraxis. Springer VS, Wiesbaden, pp. 11 – 26.
- Schnur, O., Drilling, M. (Eds.)**, 2011. Quartiere im demografischen Umbruch. Beiträge aus der Forschungspraxis. VS Verlag für Sozialwissenschaften, Wiesbaden.
- Schumann, H.**, 2008. Zukunft Alter – Altwerden in Einfamilienhausquartieren der Nachkriegszeit, Dortmunder Beiträge zur Raumplanung. TU Dortmund, Dortmund.
- Schwirian, K.P.**, 1983. Models of neighborhood change. Annual review of Sociology 9, 83 – 102.
- Scott, A.J.**, 2013. Disintegrated development at the rural-urban fringe: Re-connecting spatial planning theory and practice. Progress in Planning 83, 1 – 52.
- Selle, K.**, n.d. Stadtentwicklung aus der "Governance-Perspektive". Eine veränderte Sicht auf den Beitrag öffentlicher Akteure zur räumlichen Entwicklung - früher und

- Setterfield, M.**, 1997. Should economists dispense with the notion of equilibrium? *Journal of Keynesian Economics* 20, 47 – 76.
- Siebel, W.**, 2005. Suburbanisierung, in: ARL (Ed.), *Handwörterbuch Der Raumordnung*. ARL, Hannover, pp. 1135 – 1140.
- Siedentop, S.**, 2008. Die Rückkehr der Städte? Zur Plausibilität der Reurbanisierungshypothese. *Informationen zur Raumentwicklung* 3/4.2008, 193 – 210.
- Siedentop, T.**, 2005. Problemdimensionen der Flächeninanspruchnahme, in: Besecke, A., Hänsch, R., Pinetzki, M. (Eds.), *Das Flächensparbuch. Diskussion zu Flächenverbrauch und lokalem Bewußtsein*, ISR Diskussionsbeiträge. ISR, Berlin, pp. 19 – 27.
- Sies, M.C.**, 1997. Paradise retained: an analysis of persistence in planned, exclusive suburbs, 1880-1890. *Planning Perspectives* 12, 165 – 191.
- Sieverts, T.**, 1997. *Zwischenstadt. Zwischen Ort und Welt, Raum und Zeit, Stadt und Land*. Birkhäuser, Braunschweig.
- Sieverts, T.**, 2012. Resilienz – Zur Neuorientierung des Planens und Bauens. *disP - The Planning Review* 48, 83 – 88.
- Simandan, D.**, 2012. Options for moving beyond the canonical model of regional path dependence. *International Journal of Urban and Regional Research* 36.1, 172 – 178.
- Simmie, J., Martin, R., Carpenter, J., Chadwick, A.**, 2008. *History matters: path dependence and innovation in British city regions*. National Endowment for Science, Technology and the Arts, London.
- Simon, H.A.**, 1972. The organization of complex systems, in: Pattee, H.H. (Ed.), *Hierarchy Theory. The Challenge of Complex Systems*. George Braziller, New York.
- Simon-Philipp, C., Hopfner, K.**, 2013. *Das Wohnungsbauerbe der 1950er bis 1970er Jahren: Perspektiven und Handlungsoptionen für Wohnquartiere*. Wüstenrot Stiftung, Ludwigsburg.
- Skifter Andersen, H.**, 2003. Urban sores. On the interaction between segregation, urban decay and deprived neighbourhoods. Ashgate, Adlershot.
- Smith, N., Caris, P., Wylie, E.**, 2001. The “Camden syndrome” and the menace of suburban decline. Residential disinvestment and its discontents in Camden County, New Jersey. *Urban Affairs Review* 36 (4), 497 – 531.
- Soja, E.**, 2000. *Postmetropolis: critical studies of cities and regions*. Blackwell Publishers, Oxford.
- Sorensen, A.**, 2011. Uneven processes of institutional change: path dependence, scale and the contested regulation of urban development in Japan. *International Journal of Urban and Regional Research* 35.4, 712 – 734.

- Stadt Gelsenkirchen, Referat Stadtplanung**, 2008. Erster Wohnungsmarktbericht Gelsenkirchen. Stadt Gelsenkirchen, Gelsenkirchen.
- Stilgoe, J.R.**, 1988. *Borderland: the origins of the American suburb, 1820-1939*. Yale University Press, New Haven, London.
- Strübing, J.**, 2004. *Grounded theory: zur sozialtheoretischen und epistemologischen Fundierung des Verfahrens der empirisch begründeten Theoriebildung, Qualitative Sozialforschung*. Verlag für Sozialwissenschaften, Wiesbaden.
- Sucato, E., Zimmer-Hegmann, R.**, 2006. *Stadtumbau in Nordrhein-Westfalen*, in: Arbeitskreis Stadterneuerung (Ed.), *Jahrbuch Stadterneuerung 2004/2005*. Univerlag TU Berlin, Berlin.
- Suttles, G.**, 1972. *Social construction of communities*. University of Chicago Press, Chicago.
- Swanstrom, T., Chapple, K., Immergluck, D.**, 2009. *Regional resilience in the face of foreclosures: evidence from six metropolitan areas, Building Resilient Regions*. IGS, University of California, Berkeley.
- Sydow, J., Schreyögg, G., Koch, J.**, 2005. *Organizational paths: path dependency and beyond*. Paper from 21st EGOS Colloquium, Berlin.
- Sykora, L., Posova, D.**, 2011. *Formy urbanizace: kritické zhodnocení modelu stádií vývoje mest a návrh alternativní metody klasifikace forem urbanizace*. *Geografie* 1/116, 1 – 22.
- Sykora, L., Stanilov, K.**, 2014. *The Challenge of post-socialist suburbanization*, in: Stanilov, K., Sykora, L. (Eds.), *Urban Decentralization in Postsocialist Central and Eastern Europe*. Wiley, Chichester, pp. 1 – 32.
- Tamaru, T.**, 2001. *Suburban growth and suburbanisation under central planning: the case of Soviet Estonia*. *Urban Studies* 38(8), 1341 – 1357.
- Teaford, J.C.**, 1997. *Post-suburbia. Government and politics in the edge cities*. John Hopkins University Press, Baltimore.
- Teaford, J.C.**, 2007. *The American suburb. The basics*. Routledge, New York.
- Temkin, K., Rohe, W.M.**, 1996. *Neighbourhood change and urban policy*. *Journal of Planning Education and Research* 15/3, 156 – 170.
- Thelen, K.A.**, 2004. *How institutions evolve: the political economy of skills in Germany, Britain, the United States and Japan*. Cambridge University Press, Cambridge, New York.
- Tisdale, H.**, 1942. *The process of urbanisation*. *Social Forces* 20, 311 – 316.
- Todokoro, T.**, 2000. *Chiiki Seisakugaku Nyumon (Introduction into regional political science)*. Kokin shuppan, Tokyo.
- Turkington, R., Kempen, R. van., Wassenberg, F.**, 2004. *High-rise housing in Europe: current trends and future prospects*. DUP Science, Delft.

- Van den Berg, L., Drewett, R., Klaasen, L.H., Rossi, A., Vijverberg, C.H.T.**, 1982. Urban Europe. A study of growth and decline. Oxford.
- Vaughan, L., Griffiths, S., Haklay, M., Jones, E.C.**, 2009. Do the Suburbs exist? Discovering complexity and specificity in suburban built form. *Transactions Journal Compilation*, 475 – 488.
- Walker, R.**, 1981. A theory of suburbanisation: capitalism and the construction of urban space in the United States, in: Dear Michael, J., Scott, A.J. (Eds.), *Urbanization and Urban Planning in Capitalist Society*. Methuen, London, pp. 383 – 429.
- Walker, R., Lewis, R.**, 2001. Beyond the Crabgrass frontier: industry and spread of northern American cities, 1850-1950. *Journal of Historical Geography* 27 (1), 3 – 19.
- Walker, B.H., Gunderson, L., Folke, C., Carpenter, S., Schultz, L., Kinzig, A.**, 2006. A handful of heuristics and some propositions for understanding resilience in social-ecological systems. *Ecology and Society* 2006/11(1): 13.
- Warner, S.B.J.**, 1968. *The private city: Philadelphia in three periods of its growth*. Univ. of Pennsylvania Press, Philadelphia.
- Warren, D.**, 1975. *Black neighborhoods: an assessment of community power*. University of Michigan Press, Ann Arbor.
- Warren, D.**, 1977. *The neighborhood organizer's handbook*. University of Notre Dame Press, Notre Dame.
- web ASBB**, 2015. Bevölkerungstatistik Berlin. Amt für Statistik Berlin-Brandenburg. <https://www.statistik-berlin-brandenburg.de/statistiken/inhalt-statistiken.asp>. Last access: 26.01.2015, 23:50.
- web BBSR**, 2010. Urban Restructuring in Germany. <http://www.bbsr.bund.de/BBSR/EN/Publications/BMVBS/SpecialPublication/2010/UrbanRestructuring.html>. Last access 24.09.2014, 15:20.
- web BBSR**, 2015. Raubeobachtung. [http://www.bbsr.bund.de/BBSR/DE/Raubeobachtung/Raumabgrenzungen/raumabgrenzungen\\_node.html;jsessionid=83B94B0BD8BACA3E7BA0AFE10E220D65.live1041](http://www.bbsr.bund.de/BBSR/DE/Raubeobachtung/Raumabgrenzungen/raumabgrenzungen_node.html;jsessionid=83B94B0BD8BACA3E7BA0AFE10E220D65.live1041). Last access: 26.01.2015, 23:50.
- web Grimma**, 2015. Grimma Zahlen und Daten. Arbeitsmarkt: [http://www.grimma.info/wirtschaft\\_daten\\_arbeitsmarkt/?newsid=10005&PHPSESSID=82n7lh9d29etfg20qvkh9f8436](http://www.grimma.info/wirtschaft_daten_arbeitsmarkt/?newsid=10005&PHPSESSID=82n7lh9d29etfg20qvkh9f8436). Last access 02.02.2015, 19:46.
- web Grimma**, 2015a. Grimma Zahlen und Daten. Arbeitsmarkt: <http://www.grimma.info>. Last access 02.02.2015, 19:46.
- web GWB**, 2015. Grimmaer Wohnungs- und Baugesellschaft mbH. <http://www.wohnen-in-grimma.de/text/unternehmen.html>. Last access 02.02.2015, 19:46.
- web RPWS**, 2015. Der Regionale Planungsverband Leipzig-West Sachsen. <http://www.rpv-west-sachsen.de/verband.html>. Last Access: 13.02.2015, 14:35.

- web RVR**, 2015. Regionlplanung für die Metropole Ruhr. <http://www.metropoleruhr.de/regionalverband-ruhr/regionalplanung.html>. Last access: 13.02.2015, 13:45.
- web WGG**, 2015. Wohnungsgenossenschaft Grimma eG. <http://www.wg-grimma.de>. Last access 02.02.2015, 19:46.
- web Yamaman**, 2015. <http://www.yamaman.co.jp/>. Last access 15.01.2015, 13:30.
- Westley, W.**, 2002. Adaptive Management on the Front Lines, in: Gunderson, L., Holling, C.S. (Eds.), *Panarchy. Understanding Transformations in Human and Natural Systems*. Island Press, Washington, pp. 333–360.
- Whyte, W.H.**, 2002. *The organization man*. University of Pennsylvania Press, Philadelphia.
- Wiechmann, T.**, 2008. *Planung und Adaption: Strategieentwicklung in Regionen, Organisationen und Netzwerken*. Rohn, Dortmund.
- Wiedemann, P., Preußer, S.**, 2008. *Flächenverbrauch und Landschaftszerschneidung*. BMU, Berlin.
- Wiese, A.**, 2003. *Places of their own. African-American suburbanization in the twentieth century*. Chicago University Press, Chicago.
- Wiezorek, E.**, 2011. *Eigentümerstandortgemeinschaften und Urban Governance eine Untersuchung kollektiven Handelns in der Stadtentwicklung am Beispiel von Wohnquartieren im demographischen Wandel*. Rhombos-Verl., Berlin.
- Wirth, L.**, 1996. Urbanism as a way of life, in: LeGates, R., Stout, s (Eds.), *The City Reader*. Routledge, London, New York, pp. 189 – 197.
- Wohnungsbauinitiative**, 2012. *Bedarf an sozialem Wohnungsbau in Deutschland*. WBI, Hannover.
- Wunsch, J.L.**, 1995. The suburban cliché. *Journal of Social History* Spring 1995, 643 – 658.
- Wüstenrot-Stiftung., Berndgen-Kaiser, A., Bläser, K., Danielzyk, R., Fox-Kämper, R., Hopfner, K., Siedentop, S., Simon-Philipp, C., Zakrzewski, P.**, 2012. *Die Zukunft von Einfamilienhausgebieten aus den 1950er bis 1970er Jahren: Handlungsempfehlungen für eine nachhaltige Nutzung*. Wüstenrot-Stiftung, Ludwigsburg.
- Yin, R.K.**, 2003. *Case study research: design and methods*. SAGE, Thousand Oaks.
- Yuen, T.C.**, 1979. *Neighbourhood analysis for residential urban renewal: a conceptual framework*. Faculty of Environmental Design, Calgary.
- Zakrzewski, P.**, 2011. In der Übergangszone: Alternde Einfamilienhausgebiete zwischen Revitalisierung, Stagnation und Schrumpfung, in: Schnur, O., Drilling, M. (Eds.), *Quartiere im demografischen Umbruch*. VS Verlag für Sozialwissenschaften, Wiesbaden, pp. 47 – 66.

- Zanfi, F.**, 2014. The family house and its territories in contemporary Italy: present conditions and future perspectives, Workshop ILS: Exploring the Future of Suburban Neighbourhoods under Conditions of Declining Growth. Department of Architecture and Urban Studies (DASU) Politecnico di Milano, Italy, Köln.
- Zimmer, B.**, 1975. The Urban Centrifugal Drift, in: Hawley, A., Rock, V.P. (Eds.), Metropolitan American Contemporary Perspective. Wiley, New York, pp. 23 – 91.

## LIST OF FIGURES

<b>Figure 1:</b> The construction of housing in the state of North Rhine-Westphalia	<b>18</b>
<b>Figure 2:</b> Cognitive interest defined by its basic theoretical and discursive framings	<b>24</b>
<b>Figure 3:</b> Structure of the dissertation	<b>27</b>
<b>Figure 4:</b> Development of centrality in metropolitan areas	<b>37</b>
<b>Figure 5:</b> Urbanization model	<b>40</b>
<b>Figure 6:</b> Geyer & Kontuly differential urbanization model	<b>40</b>
<b>Figure 7:</b> Types of migration processes	<b>43</b>
<b>Figure 8:</b> Transformation process of suburbia	<b>45</b>
<b>Figure 9:</b> Types of lokal governance societal system supporting core functions within settlement areas	<b>46</b>
<b>Figure 10:</b> Suburban 'static fatality'	<b>58</b>
<b>Figure 11:</b> Discourses on Suburbia	<b>60</b>
<b>Figure 12:</b> Approaches on Phases in Lifecycle of Suburban Areas	<b>73</b>
<b>Figure 13:</b> Phases of economic evolution of an industry or technology	<b>77</b>
<b>Figure 14:</b> The canonical path dependence model	<b>77</b>
<b>Figure 15:</b> Toward an alternative path dependence model	<b>79</b>
<b>Figure 16:</b> David-type model of path dependence evolution	<b>81</b>
<b>Figure 17:</b> Setterfield-type model of path dependent evolution	<b>81</b>
<b>Figure 18:</b> Stylized alternative evolutionary paths	<b>83</b>
<b>Figure 19:</b> Models of policy change	<b>85</b>
<b>Figure 20:</b> Varieties of path creation	<b>86</b>
<b>Figure 21:</b> A canonical model of suburban evolution	<b>89</b>
<b>Figure 22:</b> An alternative model of local suburban evolution	<b>89</b>
<b>Figure 23:</b> Strategies towards stable maturity according to particular lifecycle	<b>97</b>
<b>Figure 24:</b> Situative decision matrix for different research strategies	<b>99</b>
<b>Figure 25:</b> Overview of the nested analysis approach	<b>104</b>
<b>Figure 26:</b> Study design	<b>107</b>
<b>Figure 27:</b> German suburban areas and core cities	<b>108</b>
<b>Figure 28:</b> Case study types	<b>112</b>



<b>Figure 29:</b> Characteristics of selected suburban areas	<b>121</b>
<b>Figure 30:</b> Grimma Süd case study area, development phases, morphology, functions	<b>125</b>
<b>Figure 31:</b> Gelsenkirchen city active renewal programs	<b>131</b>
<b>Figure 32:</b> Resser Mark case study area, development phases, morphology, functions	<b>134</b>
<b>Figure 33:</b> Diversification process in Grimma Süd	<b>142</b>
<b>Figure 34:</b> Diversification process in Resser Mark	<b>148</b>
<b>Figure 35:</b> Grimma Süd panarchy	<b>172</b>
<b>Figure 36:</b> Resser Mark panarchy	<b>173</b>
<b>Figure 37:</b> Systemic space	<b>189</b>
<b>Figure 38:</b> Model of evolution in stable maturity state	<b>206</b>
<b>Figure 39:</b> Model of panarchy (dis)connections	<b>208</b>









