New urban living and mobility

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Abstract

Some cities across Europe currently experience new growth. Especially the inner-city areas are regaining their attractiveness as a residential area together with an influx of new residents and a diversification of the population structure (Herfert/Osterhage 2012; Haase/Kabisch 2010; Buzar et al. 2007). This process of urban population growth and change is oftentimes accompanied by an extension of the housing stock and the construction of new residential neighbourhoods within the existing built structure. Among these offers are new concepts for urban living that target specific demands of the residents and that potentially prevent urban sprawl and further suburbanization. The questions addressed in this article are which households relocate to these areas, what their motives are and how new urban development influences daily mobility. While it is established that compact mixed-use spatial structure rather supports low shares of motorized transport and short trip length, it is far from clear whether this is the case for new centrally located but rather low density areas. The results of a case study in Berlin suggest that this new type of urban living mostly attracts highly educated families with relatively high incomes. Residents mainly moved from other inner-city areas within Berlin to this newly developed location. The importance of some typically ‘suburban’ motives - a bigger apartment and a garden - for the decision to relocate indicates that new residents may have otherwise chosen to move out from the city centre. Daily mobility of residents is characterized by a rather high use of active modes such as walking and biking compared to the inner city population in general. Car use is about comparable despite a very high rate of car ownership. Overall, the study suggests that new inner city development, although with low density provides opportunities for sustainable mobility. At the same time, the potential of the area is far from being fully exploited.

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1. Introduction

For decades people across Europe have moved to suburbia, while in contrast inner cities have lost attractiveness and population. More recently, there are indications that households seem to be rediscovering the qualities of inner-city living (e.g. Geppert and Gornig 2003, Briuhl et al. 2005). A visible sign of this ‘urban renaissance’ and one of its physical expressions is the recent rise of new residential housing estates in central locations. Several cities in Europe have over the last years seen such large-scale developments, often located on former industrial areas or brownfields (Spaans 2004, BBSR 2012). These projects suggest living in the inner city is in vogue again.

Scientific and political debates around these new inner-city redevelopments have been paying attention to this phenomenon. One topic concerns the underlying socio-demographic dynamics. Several studies (e.g. Kabisch and Haase 2011, Siedentop 2008) have analysed the quantitative dimension of inner-city population trends and shifts in comparison to suburban locations. More qualitative work has tried to understand for whom, and why, new inner-city residential development is becoming attractive again (Frank 2011, Karsten 2007, Haase et al. 2010). Furthermore, some studies have examined displacement effects associated with social and economic ‘qualification’ that follows new development projects (Boddy 2007, Holm 2010, Davidson and Lees 2009).

A second issue with respect to new development projects is their role as part of intentional political strategies for urban renewal and economic revitalisation of run-down inner-city locations. In this context, they are interpreted as an expression of the normative goal of an ‘entrepreneurial state’ (Hall and Hubbard 1996) to attract households to the inner city, in particular groups with higher spending power (Doucet 2010). Likewise, the debate touches on the motivation and marketing strategies of real estate developers and their important role for creating new forms of urbanity (e.g. Füller et al. 2013).

The focus of this article is related to a third and perhaps less well-studied issue: the potential of new urban residential development to reduce the negative environmental effects of human activity in cities. Connected to concepts like ‘new urbanism’ or the ‘smart city’, studies have investigated how the design, technology and regulation of urban projects support objectives to reduce energy consumption, travel and emissions (Foletta and Field 2011). The potential of such projects to shape ‘sustainable’ mobility patterns is a particularly prominent aspect of this discussion. Their central location, density and mix of uses can provide the preconditions for short-distance commuting to work and trips to other destinations. Moreover, high accessibility to transit, favourable design and supportive regulation (like demand management) enable residents to make routine trips with convenient public transport, on foot or by bike – thus offering alternatives to the car.

Using the development area Alter Schlachthof in Berlin as a case study, this paper investigates the linkages between the decision of households to move into new urban areas and their daily mobility. The main questions are:

- For which households and people are the new inner-city development areas an attractive location and what are their main characteristics (socio-economic and demographic variables as well as mobility resources)?
- How does the daily mobility of the new residents at Alter Schlachthof compare with daily mobility in the inner city?
- What are the households’ motives to move to this area? To what extent are mobility-related motives relevant?
- What (general) lessons can urban planning and regulation draw from new urban living?

The following section provides a brief overview of the state of the art concerning the relation between urban form and travel behavior (section 2). Section 3 describes the research area and the data sets that are used to answer the research questions. Then, the main findings of the case study are presented (section 4) and discussed (section 5). A concluding section considers the implications of the research for urban planning and regulation (section 6).

2. Urban form and travel behavior

Existing studies suggest that urban form, along with sociodemographic characteristics influences travel behavior (e.g. Harms et al. 2007, Buehler 2011, Naess 2012, Cervero/Kockelmans 1997, Ewing/Cervero 2010). Urban land use structures and locations with a high population density, a high mix and distribution of uses and good access to the city center imply shorter average distances between residences, workplaces and service facilities and are
therefore considered to promote the use of non-motorized transport modes (Naess 2003). The proximity of the location of residence to the city center strongly influences distances traveled (e.g. Milakis et al. 2008, Naess 2011). Living in close proximity to public transport facilities helps to decrease car use and raises the number of trips by public transport (Buehler 2011). Arndt and Zimmermann (2012: 81) observed that differences in land use patterns and proximity to the city center associate with differences in travel behavior. From the city center to the city limits the modal split is shifting from a higher to a lower share of non-motorized modes and public transport whereas motorized individual transport is increasing.

While these findings are well established for ‘traditional’ neighbourhoods, little knowledge exists about new built urban areas. Only a few studies explore how people in newly developed urban neighbourhoods exercise daily mobility. Khattak and Rodriguez (2005) found that people living in a neo-traditional neighbourhood in North Carolina (USA) less often use the car than residents of a conventional (suburban) neighbourhood. Moreover, they travel shorter distances and make more trips within their own neighbourhood. This suggests that urban land use characteristics, such as higher densities, mixed uses and urban design can be seen as preconditions and explanatory factors for urban travel behavior. Foletta and Field (2011) conducted a study of several new development areas all over Europe that aimed to reduce car use and, in consequence, pollution and greenhouse gas emissions. The study shows that this objective was met by implementing specific urban planning instruments to create residential areas with low emissions: Specifically, residents living in these new inner-city areas have lower shares of car use compared to the average car use of the entire district or city. Another study shows that the motives for moving to a new inner-city area also play a central role for daily mobility. Sandfuchs (2009) found that the independence of a car and short distances to the workplace were strong motives for residents who moved to new inner city areas in Hanover (Germany).

Overall, there is evidence to confirm that urban form influences daily mobility. However, the impact of land use structures always has to be considered in the context of residential self-selection (e.g. van Wee 2009, Cao et al. 2010). It is not only the structural context of land use that influences travel behavior, but also individual land use preferences. People self-select themselves in the context of relocation to be able to translate preferences into actual travel behavior. Schwane and Mokhtarian (2005) for example examined land use preferences and travel behavior in urban and suburban areas and found that land use preferences as well as physical attributes of the residential neighbourhood influence travel behavior. This connection between residential behavior and travel behavior has to be taken into account when analyzing the impact of land use on travel behavior.

### 3. Research area and methodology

Berlin is a good example to illustrate the consequences of new urban development projects for daily mobility. The city is growing and there are a number of inner-city housing projects, and pressure to increase the housing stock further. At the same time there is still space and potential for inner-city development. Responding to this, a new long term urban development strategy (Berlin Stadtentwicklungskonzept 2030) and a housing strategy (StEP Wohnen) are currently under debate. A mobility strategy (StEP Verkehr) with ambitious targets to increase the share of non-motorized travel has recently been published (Senatsverwaltung für Stadtentwicklung 2011).

For a better understanding of the connection between travel behaviour and residential relocation in newly developed inner-city areas, we conducted a survey in the area of Alter Schlachthof in Berlin. Alter Schlachthof is located in the east of the inner city and covers an area of about 58 hectares (see Fig. 2). The area has been used for various purposes. At the end of the 19th century, a slaughterhouse was built – this is the period from which the name of the area originates. After the reunification of East and West Berlin in 1989, the remaining parts of the slaughterhouse were shut down and Alter Schlachthof lay temporarily idle. Some companies were established and used the area as a production site, warehousing and sales area. Due to its central location and the expected population growth in Berlin after reunification, the Berlin Senate decided to convert the area into a new residential area. Being declared as one of five development areas within Berlin, Alter Schlachthof was supposed to offer a great number of housing units. As the population growth did not take place to the projected extent, the urban planning measures had to be modified. (Senatsverwaltung für Stadtentwicklung 2007)

Instead of buildings offering a great number of housing units, the area now accommodates various types of multi-family buildings and terraced housing with garden (see Fig. 1). Still under construction, the area is characterized by
a rather low-density urban structure with parks and green space: about 32 inhabitants per ha currently live in Alter Schlachthof, whereas on average about 39 inhabitants per ha can be found in Berlin (authors’ own analysis based on Amt für Statistik 2012). Though Alter Schlachthof is mainly residential, there are shopping facilities located within walking distance at the edge of the residential area. The area is well connected to several public transport facilities: light rail, tramway, bus and underground stations can be found in proximity to Alter Schlachthof. Even though the creation of an entirely car-free residential area was discussed, specific measures to reduce motorized individual transport were finally not taken. Today, the area is fully equipped with private and public car parks.

The following analysis uses two data sets. One data set contains detailed information about the residents in Alter Schlachthof. The respective survey was conducted in October of 2012, asking 700 households to fill in a questionnaire addressing residential relocation, daily mobility and socio-demographics. A paper-based questionnaire was personally distributed to and later collected from the households (response rate was 45%). In each case one household member aged 18 years or older was asked to fill in the questionnaire as well as an individual trip diary of one day. Altogether, the data set contains information about 317 persons and their households and information about 1,066 trips. The second data set is part of the survey ‘Mobility in Cities – SrV 2008’, which was conducted in 76 cities in Germany. The data was collected with telephone, postal and online surveys. It provides comprehensive socio-economic information of households and household members of all ages and contains individual trip diaries of all household members. For Berlin, there are data of about 40,000 persons, 19,000 households and 100,000 trips.

The advantage of this data set is that households are locatable. As the residential location of a household is georeferenced to one of the 195 statistical areas in Berlin, this allows for the selection only of households located in the inner city of Berlin. Fig. 2 shows the statistical areas that belong to the inner city of Berlin and the location of the
Alter Schlachthof research area. With both data sets at hand, it is possible to derive comparative figures concerning socio-economics and daily mobility. By focusing on the inner-city areas it is possible to reveal if residents of new urban areas differ from residents of traditional urban areas. However, the comparison of both data sets has to be interpreted carefully as data were gathered with different interview techniques, date from different years and provide a different number of cases.

4. Empirical findings from the case study

The following analysis is structured in three parts. Firstly, the socio-economic structure of Alter Schlachthof is characterized and compared with the population structure of the inner-city areas of Berlin. Next, the central mobility parameters of the Alter Schlachthof residents are analysed and compared with those of the inner-city areas. Finally, we will take a look at the process of residential relocation of the residents in order to identify preferences in terms of housing and neighbourhood characteristics.

4.1. Household Size and Structure

Household size and structure show that Alter Schlachthof is especially attractive for larger households (see Fig. 3). Almost 60% of the households consist of 3 persons or more, 30% are two-person and only 11% are one-person. This structure is in sharp contrast to the composition of households in the inner city, where the majority of the households are one-person (more than 60%). Taking a closer look at the household structure of the population in Alter Schlachthof, it turns out that most of the residents live in a family or as a couple. Almost 60% of the households are couples with children, another 30% are couples without children and only 10% of the households are single-households.

Fig. 3. Household size in Alter Schlachthof (n=312 households) and Berlin inner city (n=6,834 households).
Source: authors’ own analysis based on dataset ‘Alter Schlachthof’ (2012) and ‘Mobility in cities - SrV 2008’ (weighted)
The age distribution underpins this difference between the population of Alter Schlachthof and the inner-city areas. Since we found that families especially are attracted to live in Alter Schlachthof, we assumed the share of middle-aged and younger people would be high. The findings represented in Fig. 4 verify this assumption. Forty-two percent of the Schlachthof residents are aged between 27 and 44 years, with another 30% younger than 18 years. This share is almost twice as high as the share of minors in the inner-city areas of Berlin, whereas older age groups are more strongly represented in the inner city than in Alter Schlachthof.

![Age distribution in Alter Schlachthof (n=1,842 residents) and Berlin inner city (n=13,651 residents)](image)

Source: own analysis based on Amt für Statistik (2012) for Alter Schlachthof and ‘Mobility in cities - SrV 2008’ for Berlin inner city (weighted)

### 4.2. Educational background, employment and household income

Residents of Alter Schlachthof are well educated. Eighty percent of the respondents indicated that they attained the general qualification for university entrance and about 70% graduated from tertiary education. The analysis further shows that the majority of respondents are employed (almost 80%). This equally applies to men and women. However, there is a difference between men and women in respect to full-time and part-time employment: 73% of the male and only 49% of the female respondents work full-time. The overall high employment rate and the educational background result in high incomes. Almost 60% of the households dispose of an income of €3,600 and more (see Fig. 5). Consequently, the highest share of households can be assigned to the highest income category. The income situation in the inner-city areas presents a completely different picture. Here, the share of lower income groups is higher, while households with higher income appear less often. Although the household size is smaller in the inner-city areas, which naturally leads to a lower household income, the findings set forth above hold true after taking the household size into account: 84% of 4-person households in Alter Schlachthof dispose of a household income of €3,600 and more; only 26% of the 4-person-households in the inner-city areas have the same income.
4.3. Mobility resources

People living in Alter Schlachthof have various mobility resources for different modes. However, the focus on the private car is apparent: a share of 95% of the respondents has a driver’s licence and the car ownership rate per household in Alter Schlachthof almost doubles the one in the inner city of Berlin: 85% of the households dispose of at least one car. In contrast, only 44% of the households in the inner-city areas of Berlin have one or more cars at home.

Nevertheless, there is also a high share of households with bicycles: 74% of the households stated that they have at least one bike, whereas in the inner city areas 64% of the households dispose of one or more bikes. Besides the high rates of cars and bikes in the households, 45% of the respondents also indicated that they have a monthly or annual ticket for public transport which is roughly comparable to the inner city residents (> 17 years).

Overall, this shows that there are almost no mobility constraints resulting from limited mobility resources. More specifically, this means that the households of Alter Schlachthof are better equipped with cars than the households of the inner-city areas.

4.4. Travel behavior

This section compares the daily mobility of people living in Alter Schlachthof and residents living in the inner city, based on an examination of reported mobility parameters for a reference day. Bearing in mind that the Alter Schlachthof residents are very well equipped with mobility tools, particularly with cars, we expected high rates of car use. Since only residents aged 18 years or older were asked to fill in the questionnaire in Alter Schlachthof, we control the age distribution for the following analysis and include data from persons only aged 18 years or older that live in the inner city of Berlin. Moreover, within the dataset “Mobility in cities – SrV 2008” only data from autumn will be analysed so that it matches the Alter Schlachthof dataset (which was gathered in October).

Overall, the Alter Schlachthof residents make more and slightly longer trips than the population of the inner city: They make on average 3.9 trips per day, whereas the population of the inner city makes 3.7 trips per day. Furthermore, the trip length of all trips up to 100 km1 differs. Schlachthof residents make trips with an average length of 6.1 km, whereas the trips of inner-city area residents are slightly longer at 6.3 km. In comparison, the average trip length of residents (>17 years) of the entire of Berlin is 7.4 km.
Taking a closer look at the modal split of the residents living in Alter Schlachthof and those living in the inner-city areas, we do not find substantial differences (see Fig. 6). Overall, environmentally friendly transport modes are well represented but also the share of car use is not negligible: Non-motorized modes account for 53% of all trips in Alter Schlachthof. This is four percent more compared to the share of non-motorized modes in the inner city. Particularly cycling seems to be important in Alter Schlachthof, since one quarter of all trips is done by bike. The share of public transport is high at 23% but not as high as in the inner-city areas, where it accounts for 28%. Finally, the Alter Schlachthof residents drive by car for 22% of all trips. This is four percent more than the population living in the inner-city areas.

![Fig. 6. Modal split in Alter Schlachthof (n=1,062 trips) and Berlin inner city (n=6,367 trips) (only persons aged 18 or older) Source: authors’ own analysis based on data set ‘Alter Schlachthof’ (2012) and ‘Mobility in cities - SrV 2008’ (weighted)](image)

4.5. Residential relocation

New urban development projects are often implemented as part of strategies to rehabilitate and regenerate inner-city areas, with the expectation that inner-city households seeking to relocate can be prevented from leaving the city or that households living outside will be attracted to move to the inner city (Doucet 2010). For the case of Alter Schlachthof, the results indicate that a large majority of residents mainly moved from other inner-city areas within Berlin to this newly developed location. A share of 67% moved from neighbourhoods within the inner city of Berlin and 16% lived in other neighbourhoods of Berlin (but outside of the inner city). Less than 1% came from the hinterland of Berlin. A share of 17% moved from beyond the agglomeration of Berlin to Alter Schlachthof. Almost one quarter of those residents had previously been living abroad. The findings emphasize that this newly developed area also attracts people from farther away, although the largest group of residents had previously already been living in Berlin and more specifically in other inner-city areas.

When asked for the main reasons to relocate, 59% of the respondents stated that personal or family reasons played an important role to look for a new residential location. When asked for more detailed reasons for relocation, almost one third of the respondents indicated a birth in the household and 15% specified that they wanted to move in together with their partner. Personal or family reasons frequently coincide with needs in housing conditions: a change in the life cycle, such as starting a family, is often followed by an adjustment of housing conditions. This is underlined by the findings concerning housing conditions: 71% stated that the housing conditions in the previous location were an important motivation to look for a new residential location. The respondents decided to look for a new apartment especially if the former apartment was too small or there was no garden available. Furthermore, 47%
stated that it was also important to them to purchase residential property. Another 42% indicated that the prior living environment was no longer suitable. A little more than one quarter mentioned that work reasons mattered when looking for a new residential location. These reasons often provoke interregional migration.

The combination of push-factors and pull-factors that motivate looking for a new residential location ultimately explains the choice of the new residential location. Fig. 7 shows the importance of various neighbourhood characteristics among the residents for their decision to move to Alter Schlachthof. Three clusters of characteristics concerning the choice of residential location emerge. Firstly, living in a central location and access to public transport were rated as very important. Since almost 70% of the residents had already been living in inner-city areas of Berlin before they moved to Alter Schlachthof, these aspects of good accessibility and central location still seem to be important at both the new and the previous residential relocation. Consequently, staying in the inner city and benefiting from the advantages of inner-city living appears to be a deliberate choice. Moreover, mobility-related motives seem to play a ‘mixed’ role in the decision for relocation: access to public transport is very important, but accessibility by car and parking facilities are not as important, despite the high rate of car ownership at Alter Schlachthof.

![Fig. 7. Importance of neighborhood and housing characteristics among Alter Schlachthof residents (1=not important, 5=very important)](source: own analysis based on dataset ‘Alter Schlachthof’ (2012))
Secondly, the residents rated that a safe, clean and quiet neighbourhood and the availability of parks were important aspects when looking for a new residential location. These tend to be more characteristic of suburban areas. At the same time, the residents also mentioned that shopping facilities were important. Given that the mix of uses is clearly connected to an urban environment, the residents seem to have both suburban and urban land use preferences in terms of the living environment.

Finally, the design and size of an apartment were important aspects for the respondents when looking for a new residential location. This result is clearly connected to the push-factors outlined above: a change in the life cycle results in adjusting the requirements for housing, leading to a search for a new, in this case bigger, apartment or house. The push-factors in terms of housing conditions further indicated that some residents were looking for a new residential location in order to have a garden. Taking a look at the pull-factors in Fig. 7, the aspect of having a garden happens to be not that important. However, the aspects of ‘house’ and ‘garden’ get a high average score (house=4.0; garden=4.2) when controlling for people who now live in a house with garden. This shows that some residents were explicitly looking for these housing types.

5. Discussion

The findings suggest that the new inner-city area Alter Schlachthof differs quite significantly from other inner-city areas of Berlin in terms of the socio-economic structure of its residents. While the inner city of Berlin is dominated by one-person households, Alter Schlachthof is a popular location for couples with children. The educational background of the respondents living in Alter Schlachthof is very high and the respondents are in large part employed, though men are more frequently in full-time employment than women. Moreover, the household income in Alter Schlachthof is higher than the average in the inner city. The high household income accompanies a high availability of mobility resources. Cars seem to be particularly important, since the ownership rate is twice as high as in the inner city. These differences in the socio-economic structure suggest that daily mobility might differ as well. To some extent this holds true for the average number of trips per day as well as for the trip length, both of them being slightly higher at Alter Schlachthof compared to the inner-city areas. Concerning the modal split, car use is a few percent higher in Alter Schlachthof than in the inner city and trips are less often made by public transport in Alter Schlachthof. This is interesting since the residents rated public transport the second most important consideration for their decision to move to Alter Schlachthof. Overall, these findings show: residents living in the new urban area differ in terms of the socio-economic structure from the residents in the traditional urban area, but their travel behaviour is only slightly different.

Concerning the process of residential relocation, we found that the decision to relocate seems to be triggered by a change in the life cycle (i.e. formation or extension of the family), which is in line with studies pointing out the importance of life cycle changes for location decisions (e.g. Beige 2008, Van Wissen und Dykstra 1999). These life transitions lead to modified requirements and preferences with respect to housing conditions and living environment.

With reference to the reurbanisation debate, the study cannot confirm that this new inner-city area is attractive for ‘reurbanites’ moving to the central location from outside of the city. Rather, they are attractive for ‘urbanites’ (with respect to the central location) with ‘suburban’ preferences regarding the properties of the house (e.g. size, garden) and the residential area (safe, clean and quiet neighbourhood with parks). Therefore, the assumption that new urban living concepts attract people from suburban areas to the core city is not confirmed by our data. However, this research indicates that it was important for the residents to look for a bigger apartment and a garden when they decided to relocate. This suggests that if there was no adequate supply of dwelling types in the inner-city areas, the residents might have moved to other areas to satisfy their housing preferences. This is in line with studies that found that households would often move to suburban areas as a ‘second-best-decision’ because they did not find a suitable apartment or house in the inner city (BMVBS 2007: 76, Bauer et al. 2005).
6. Lessons learned for urban planning and future research

The results of this study demonstrate that new inner-city residential development projects are attractive for higher-income households with ‘suburban’ preferences and characteristics. That these households choose an inner-city place of residence over a peripheral location is - at a first glance – good news for urban planners and political actors in Berlin. It suggests that the city is successfully keeping this group of tax payers within its boundaries. Also, their demand for inner-city living supports an urban development strategy of densification (rather than sprawl) with potentially favorable effects on mobility (shorter distances, therefore less car use compared to households living in suburban areas). However, the requirements of this group with respect to dwelling type and size, accessibility, and the environmental quality of the locations are quite high and require an intensive planning effort. Firstly, it means that such qualities need to be created, in the form of attractive recreational facilities, excellent access to infrastructure for public transport, cycling and walking. Secondly, this task requires a dialogue with developers and their role in ‘producing’ such qualities. Thirdly, planners need to be aware of and assess the social-spatial effects of newly built housing estates for higher-income groups. As outlined at the onset of this paper, the revaluation of the location may lead to neighbourhood change.

The study also reveals that new residents at Alter Schlachthof are characterised as highly mobile in terms of their availability of mobility resources as well as their daily mobility patterns (e.g. high number of average trips). Perhaps surprising is the prominence of the car despite the central location and excellent access to public transport. While car use is a few percent higher compared to the reference inner-city area, the reported car ownership is almost twice as high. In particular, this enormous car availability and the mismatch between ownership and actual car use implies that the potentials of the central location Alter Schlachthof for sustainable mobility are far from being fully exploited. The provision of mobility alternatives, such as Carsharing concepts, could be one option to reduce car ownership and use further. Moreover, the implementation of a mix of uses and urban design qualities in Alter Schlachthof could promote walkability of the area. Ewing et al. (2006), for example, found that the willingness to walk increases by implementing certain urban design qualities, such as recognition, transparency or enclosure of streets and places. The implementation of urban design qualities could not only generally increase the trips made by foot, but could also have an impact on the frequency of public transport trips, since the willingness to walk to the nearest stop would also increase.

Finally, the case study highlights some areas that require further research. Firstly, what are the potential benefits and effects of an active mobility management before and during residential relocation? Would households rethink car use and ownership if they are aware of the alternatives? Secondly, what would be the potential of new mobility concepts, including the most recent forms of flexible carsharing options, for developing new urban residential locations? And finally, recognising that the decision of households towards Alter Schlachthof is triggered by a change in life course, is it possible (and desirable) to design neighbourhoods that are suited for different life phases?

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