Figure 96: Arabellapark urban sub-centre, started in 1965; Rosenkavalierplatz by Stöter-Tillmann & Kaiser, Friedrichs, Kleie 1977–1982; Arabella-Hochhaus by Toby Schmidbauer 1966–1969, Munich 2017

VI. Connecting and Releasing

"Instead of installing themselves in their containers, instead of adapting to them and living in them 'passively', they decided that as far as possible they were going to live 'actively'. In doing so they showed what living in a house really is: an activity. They took what had been offered to them and worked it, converted it, added to it. […] They created distinctions […]. They introduced personal qualities."
Lefebvre, Henri (1972 [1969]) preface to: Boudon, Phillipe (1979) Lived-In Architecture: Le Corbusier's Pessac Revisited, Cambridge MA

"The right to the city […] is a right to change ourselves by changing the city. It is, moreover, a common rather than an individual right since this transformation inevitably depends upon the exercise of a collective power to reshape the processes of urbanization."
Harvey, David (2008) The Right to the City, in: New Left Review, vol. 53, p.23

1. Making Multiple Connections

1.1 Multiplicity of Possible Connections in Multi-site Research

The Redundant City concept engages with only a small part of what makes for the multiplicity and diversity in our cities. It is highly selective in its observations and depicts a specific urban condition that coexists alongside many others. Acknowledging the limits of the concept means to see it as part of, and therefore as being connected, with other urban situations.

Openness and connectedness are central to the research approach of this project, for which reason I have chosen to work with grounded theory methodology (GTM) and situational analysis (SA). The methods of theoretical sampling, anchoring, intersecting, and positioning respond to and exploit the potentiality of open field constellations. Based on the proposed adaptation of the iterative-cyclical GTM process, the research navigated through the universe of architectural and urban narratives – searching for concepts of conflict and change, as well as through the Parkstadt Bogenhausen housing estate – searching for the specifics of its transformative process. The movements followed existing connections and generated new connections. The positional map placed concepts and narratives within an analytical field, showing relations, voids and unexpected proximities. In the empirical analysis, processes of joint human action could be traced through the timeline mappings. The mappings have established connections between decision making, time and space, between human action and spatial transformation. Hence, we can say that the establishing of new connections is at the core of the research project.

In the introduction to this project, I posited that research in architecture and urbanism occupies different epistemological locations and produces knowledge that is framed in different ways. For this reason, it cannot be assumed to be a routine or pre-given process. But rather than approaching the multiple framings of knowledge as an obstacle to research, I took them as an epistemological and conceptual resource to work with, based on the understanding that urban issues cannot be grasped in isolation and from a single perspective. As part of the methodological set up, the project has established new connections between architectural and urban research, GTM and SA. These connections are not limited to the project-specific adaptation of methods. The mappings of the Parkstadt arena as well as the work with positional maps in architectural and urban theory define novel approaches that could flow back into the research perspective of SA.

The sharing of basic assumptions with social theory about how humans act in and upon the world opens up further possible connections to research questions in the social sciences. Based on the analysis of the Parkstadt Bogenhausen housing estate and the Parkstadt arena, we have argued that its collective process differs from other transformative processes. We know about the kind of decisions negotiated over time. We see the arena's effects on urban space and the spatial arrangements in the estate. We have also made assumptions about the consequences this might have for the future and on the questions this may raise. However, we have not yet undertaken an analysis of 'how' these processes develop in detail, how changes are negotiated in interpersonal interaction and between different groups; how differences in power, gender, and status are addressed in the process; and how interactions become fixated as 'facts' so that

they appear as pre-given in a situation. Also, we do not know in detail about the relation of individual biographies, social networks, and political processes to the transformative process on the estate. Evidently, a broad range of further connections could be made in this field. They could be examined with a broad range of tools supplied by ethnography, narrative methods, ethnomethodology, as well as through the perspectives of actor network theory, or assemblage theory. Of course, we could also think of different connections with the production of design knowledge and design.

It is challenging, and maybe impossible, to fully address and exploit the possible connections opened up by a multi-site research approach. Among the many connections that may be established between the outcomes and other research, and among the many possibilities for applying and testing the outcomes in a practical way, I have selected three areas, which I discuss further below. The idea is to give a sense of the versatility of the new concept, and of the research approach that lies at its base.

1.2 Making Research Outcomes Available for Practical Uses

The research design of this project is not based on a 'problem identification – problem solution' approach. Offering blueprint solutions is not the intention of this research project. I have, however, suggested that the Redundant City is a matter of concern. In one way or the other, the observed conditions are part of many people's everyday lives – in and around the Parkstadt Bogenhausen housing estate and, perhaps, beyond. This justifies, and even seems to make necessary, the question as to possible practical applications of the research outcomes. For the reasons outlined above, I will, however, not be proposing a strategy, or goal-oriented set of recommendations. Rather, I point to possible ways of working with the research outcomes, showing how they could be put to practical use in different fields. The proposed way of working with the research outcomes is meant to generate an awareness for issues rather than provide solutions. In the following sections on connecting, I provide examples based on the following three areas

1. working with the **new concept**
2. working with the **mapping tools**
3. working with **narratives of conflict and change in the positional map**

Arenas of other housing estates, other WEG constructs, or other urban conditions of asymmetric urban change are all potential sites for working with the research outcomes. Upon outlining the research of housing schemes dating from the late modernist period, I have suggested that there is a generic quality in them as a result of the principles of universality and uniformity used in their design. Hence, despite the Parkstadt arena ranging at the far end of the spectrum in terms of its size and complexity, could we think of comparable processes being at work in other housing estates, neighbourhoods, commonhold-type properties, and condominium buildings? Many years have passed since the late modernist housing schemes and housing estates were built. They each have diversified and developed their own processes, irrespective of the similarity in their built form and common origin. The same applies to the institutionalising and rigidifying effects of WEG legislation. Although the framework regulates the process for all WEG constructs in the same way, individual forms of adapting the

Figure 97: Balfron Tower, designed by Ernő Goldfinger in 1963, built 1965–67, grade II listed since 1996, prior to commencement of refurbishment works in 2014, Poplar, East London 2014

rules and working with the framework have evolved and will continue to evolve. Housing administrators, advisory boards, and protocols of annual meetings may be similar, but never identical. This produces variations for each arena in the practices and processes used. Accordingly, each situation has to be examined for its own characteristics. As I have argued at the outset of the case study, there is no such thing like 'the' housing estate.

2. Working with the Redundant City Concept

2.1 Towards a Broader Understanding of Change in Housing Estates

Research in housing is to a considerable extent commissioned and funded by organisations in the private and public housing sectors[1]. Due to the many different issues involved, it may include research elements on financing, housing policy and programmes, statistics, construction technology, procurement methods, management, upgrading and maintenance, or best practice. However, categories of conflict that do not lend themselves to 'solutions', such as an understanding of conflict as a creative agent in collective processes, or an understanding of conflict as basic urban condition, are typically disregarded. Where the focus is on building norms, optimisation, or added-value chains, questions relating to macro-scale issues, or different ways of 'doing' architecture typically remain unaddressed. It operates within rather narrowly defined conceptualisations and the demarcations it imposes on itself. Without questioning the usefulness of the knowledge produced in this way – due to its methodological fram-

1 In Germany, the public and private housing sectors are subsumed under the term 'Wohnungswirtschaft'.

ing – it tends to have a limited range and tends to be focussed on conflict resolution, which is seen as a goal in itself.

A large body of research and design projects are concerned with housing estates that are in single ownership. Here, the process of change is typically negotiated between the owning entity, for example, a housing association or the municipality, and other large entities, like funding agencies or local authorities. Although residents are often consulted in the process, the ultimate responsibility and authority remains with the single owner.

However, there seems to be a growing awareness of the need to strengthen, establish, and open up arenas of conflict and change. The formerly widespread practice of managing change in housing estates as top-down process, as had been common practice in the Neue Heimat group and other large housing providers, has given way to more inclusive approaches. Innovation in the transformation and adaptation of housing today is often connected to new ways of engaging with variegated needs and diversity. Different levels of participation or co-design processes are increasingly seen as means to generate and include new qualities in housing projects.

The commonhold-type form of ownership establishes a more complex situation in estates if compared to the single owner/tenant relationship. Differences in ownership have a significant influence on how decisions are negotiated and made. Consequently, there are limits in terms of making connections between cases that are based on different ownership models. If transfer of knowledge is to be made, the differences have to be considered. The research on the transformative process in the Parkstadt Bogenhausen housing estate adds to our understanding of these differences as well as of the complexity involved. The transfer of knowledge between research in multiple and single ownership housing could work in both directions. Social worlds/arenas of housing estates in single and multiple ownership could learn from the issues to which they each have to respond.

The Redundant City concept provides a perspective that contrasts with the narratives commonly propounded by the private and public housing sectors. The understanding developed in this research project shifts the focus away from market-driven problems of optimisation and conflict resolution. It challenges the generalising and stereotyping idea of housing estates as 'mass housing' (Kling, in press), as well as the reduction of housing to its commodity aspect. In this sense, the project contributes to a shift that is already underway in both research and urban practice (Harnack 2012; 2014; Stenberg 2012; Stenberg and Fryk 2012; 2014; Benze, Gill and Hebert 2013; Stenberg et al. 2016; Kling and Ott 2019). To develop a broader understanding of change in housing estates would be a step towards enabling better change in housing estates, and in this sense towards better change in and of cities.

2.2 Challenging the Selectivity in Munich's Densification Programme

In 2009, the city council of Munich commissioned a study on long term development perspectives for residential uses in Munich – "Perspektive München. Langfristige Siedlungsentwicklung" (LaSie) (Landeshauptstadt München 2009). The focus in the first stage of this study was on the spatial aspects of restructuring mixed-use areas, consolidating the periphery, and planned densification. It included an analysis of urban morphology and existing spatial qualities. The studies were conduced by

Figure 98: Initially controversial, but much beloved today. Barbican Estate by Chamberlin, Powell and Bon 1965–1976, London 2017

multidisciplinary groups of external experts. The results were discussed in a workshop-like setting (Landeshauptstadt München 2011). The second stage of the study resulted in a status report for the long term development of residential uses. The policy document was prepared by the Department for Urban Planning and Building Regulation ('Referat für Stadtplanung und Bauordnung') in 2015 and adopted in 2016. It covers a broad range of issues that are understood to be of relevance for the development of new housing and for the spatial transformation of the city (Landeshauptstadt München 2016a). The authors of the status report assert that the ongoing debate on densification and the long-term LaSie development perspective have raised the awareness of problems of densification among the main actors involved (ibid., p.3). They highlight that new development schemes are now based on higher densities, but also mention that a growing number of local interest groups demand protection for their low-density neighbourhoods (ibid., p.5). The awareness addressed in the report is thus divided between the adjustment of building practice on the one hand, and resistance in local neighbourhoods on the other. This seems to confirm that the question of densification in Munich continues to be a contested political issue (Geipel and Meyer 2012).

Pertaining to the situation in low-density neighbourhoods, the status report claims that the means to actively influence the process and generate revenues for the cross-funding of adequate public infrastructure or affordable housing are very limited (Landeshauptstadt München 2016a, p.6). Despite the substantial development potential identified in the 2009 study, the 2015 status report creates the impression that densification in low-density neighbourhoods is not the preferred option. The report refers to the environmental qualities that are seen to be at stake, as well as the need to protect private interests from densification projects that change the character of the low-density area (ibid., p.5). For these areas, a series of exemplary local development plans are currently being conceived. This removes them from the centre of the densification debate and confirms their privileged status. Likewise, housing estates in dispersed ownership according to the WEG, or housing estates listed under the

Figure 99: Town hall exhibition 'Thinking Ahead. 125 Years Urban Development Planning in Munich'. The sign says: 'More people, more city', Munich 2018

heritage protection law, are also defined as separate categories and left aside in the current debate on densification (ibid., pp.19f; Landeshauptstadt München 2016b, p.17).

Hence, Munich's current politics of densification bears the characteristics of a politics of least resistance. We currently see densification schemes being realised in housing estates that are owned and managed by housing associations, municipal housing corporations, or large housing co-operatives with centralised forms of organisation, while other housing estates are not included in the process. The Parkstadt Bogenhausen housing estate is one of them. The city administration apparently avoids interfering with organised private interests. As a result, suburban neighbourhoods and larger, privately owned housing in multiple ownership are at this stage not part of the long term Munich perspective. The current discourse on housing densification, which includes research, workshops, experimental housing schemes, and other programmes, is highly selective. The result is a process that is defined by asymmetry in terms of how debates are focussed, as well as where and how densification projects are realised. This raises questions about who in the urban population has to adapt to the consequences of densification – positive or negative, but also about the overall capacity of the city to absorb growth and respond to conflict and change.

The selective approach excludes sites of greater complexity that offer resistance. It concentrates on problems that appear sufficiently structured and clear, hoping that in this way existing instruments can be used and faster solutions provided. As argued earlier, there is a tendency in technocratic and bureaucratic processes to admit problems only if they bear the promise of a 'solution'. However, the question is if a problem which is of city-wide public concern should be approached in this way. For Munich's historic development has produced a pattern of conflict externalisation and spatial segregation that is difficult to ignore. Structures like incinerators, garbage dumps, motorways, atomic research facilities, (disused) military camps, water treatment plants, and airports are all concentrated in the north and the east of the city. Critics could claim that the current selective approach towards densification and restructur-

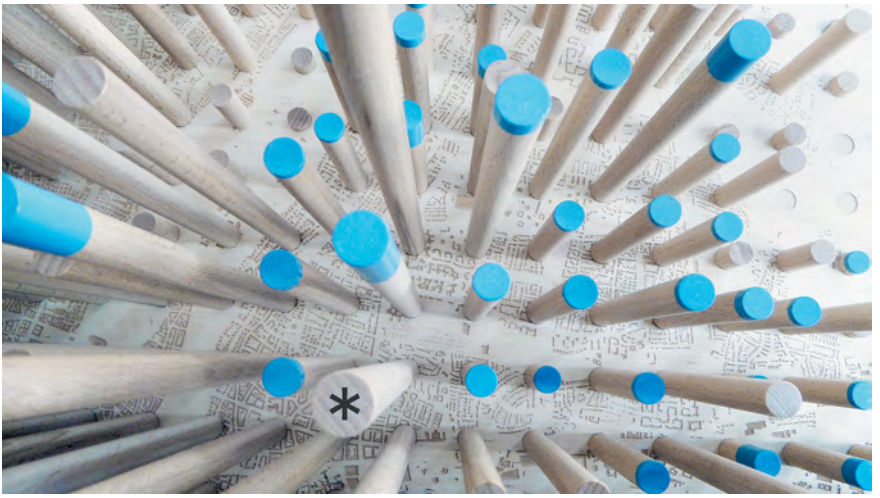
ing replicates this pattern of segregation in a disguised form. Although the areas earmarked for densification are scattered over the whole city territory, they seem disproportionally to include low income neighbourhoods. The selective approach threatens to lead to the concentrating of programmes in areas that already have to cope with stigmatisation, unemployment and rising rents. A critical urban politics needs to address urban inequality in densification and restructuring schemes.

As a response to the lack of affordable housing, the city administration seeks more actively to influence the kind of housing provided. Since 2013, the city of Munich is testing a change in housing development policy, which signals a shift away from profit maximisation towards long-term commitment and higher levels of public control. While in the past public land was in most cases sold to the highest bidder, which is understood to have led to adverse effects in the development of rents, the new policy "Konzeptioneller Mietwohnungsbau" (KMB, Experimental Provision of Affordable Rental Housing) allocates land on the basis of development quality and a set of long-term goals (Landeshauptstadt München 2016b, p.86). A fixed ratio of affordable housing is to be guaranteed for up to 60 years and no conversion into commonhold-type housing according to the WEG is permitted during this period. The authorities expect the model to have alleviating effects on rents in the long term. Also, it may well be the case that the model accommodates new and alternative modes of change in the future. However, despite these promising steps towards a broader and more fundamental response to the housing crisis and resistances to change, we have seen that a degree of selectivity has already become effective in the analysis stage of the LaSie programme and is likely to persist in the near future. What consequences does the partial postponing of analysis have for decision making and the overall process? We could argue that questions of urban restructuring and densification, which are considered by the authorities as a citywide and regional task (Landeshauptstadt München 2009, p.18; 2016a, p.4) should be examined for all areas and urban situations with the same thoroughness, irrespective of the resistances this may generate. The proposed concept and the social worlds/arenas perspective contribute to a better understanding of situations in which multiple and conflicting interests are entangled with spatial issues. With the support of this knowledge, urban situations that are currently excluded from the discourse on restructuring and densification may be more easily reintegrated.

2.3 Questioning Structural Conditions in Arenas of Change

The prevailing phase of low interest rates in the European Union for both savings and mortgages has made residential property an attractive alternative to other forms of investment for private investors. This has led to a rising demand for residential units that are optimised towards profitability and the commodity aspect, which in turn has increased the pressure on the property markets. In Germany, metropolitan regions of larger cities like Hamburg, Munich and Berlin are particularly affected by this trend. In this situation, the construction of new commonhold-type property according to the WEG, as well as the conversion of existing property continue to thrive. In conversions, residential blocks that previously have been in single ownership are subdivided into multiple private units that can be sold separately. Subsidised affordable housing that has reached the end of the public funding period after 25–30 years is often treated

Figure 100: Detail of model showing increase in floor area ratio (FAR) in Munich between 2012 and 2016. Note that no increase is specified for the Parkstadt Bogenhausen housing estate (, added), while the majority of neighbouring areas have grown substantially (blue). "München weiter denken. 125 Jahre Stadtentwicklung", Munich 2018*



in this way. As excess rates of subdivision are understood to have adverse effects on local neighbourhoods, municipal administrations have set regulations in place that are meant to control and restrict the conversions in designated areas ('Erhaltungssatzung', respectively 'Milieuschutz') (Landeshauptstadt München 2016b, pp.30, 116ff). A better understanding of the processes that influence change in housing estates as well as in buildings that are in multiple ownership could inform the broader discourses about gentrification and change in urban areas.

If, as Thomas Sieverts suggests, the unabated conversion and construction of new commonhold-type entities according to the WEG may lead to serious problems in that they reduce a city's capacity to accommodate and adapt to change in the long term (Sieverts 2017, p.105) – in what concrete ways could we influence the process? The social worlds/arenas map provides an idea of the different collective actors and concerns involved. There seem to be multiple possible ways through which the situation could be influenced. The most obvious, and perhaps one of the most powerful means would be to revise the regulation, and in this sense inhibiting frameworks, of commonhold-type housing, including property legislation. This possibility is, perhaps, less unlikely than it may seem. The current housing crisis has brought to the fore the weaknesses and shortcomings of the established regulatory systems. This in turn has led to a new interest in questions of land ownership (Hertweck 2018a; 2018b; 2018c), as well as the (re-)politicising of the way we approach regulatory instruments. Imke Mumm, for example, suggests that "the immanent significance of societal regulatory frameworks for the physicality of our cities has to be recognized so that we do not leave their creative power (Gestaltungskraft) to chance, and instead place it in the service of positive change." (Mumm 2018, p.153) Furthermore, there is a growing interest in alternative urban practices that seek to develop the use value of urban spaces rather than their exchange value by withdrawing them from capitalist speculation (Dona 2018).

The social agreement on private property is of such a fundamental kind that actors tend to take it for granted. In the case of Germany, a serious attempt to reform the land law ('Bodenrecht') was initiated in 1973 by SPD politician Hans-Jochen Vogel on behalf of the many who had been dissatisfied with the distribution and use of urban land, the housing situation, and market-led valorisation. The reformers demanded property owners assume their social responsibility as required by constitutional law ('Grundgesetz'), and to contribute in an appropriate way to the common good (Hertweck 2018a, p.154). Prior to holding the office of Federal Minister of Regional Planning, Building and Urban Development ('Bundesminister für Raumordnung, Bauwesen und Städtebau'), during which Vogel actively campaigned for the reform, he had been mayor of Munich during the years 1960–1972.

It is, perhaps, no coincidence that from 1956 to 1968 Vogel lived in the Parkstadt Bogenhausen housing estate (Krack 2006, p.162–164). Owned and managed by the trade union's non-profit housing association Neue Heimat Bayern, the housing scheme was by definition dedicated to the common good ('gemeinnützig'). During his long political career, Vogel also served as federal minister of justice, mayor of West-Berlin, SPD candidate for the chancellorship, and chairman of the SPD party. In 2006 he kindly assumed the patronage for the 50th anniversary of the Parkstadt Bogenhausen housing estate (Krack 2006, p.164) and gave the ceremonial address. During Vogel's office as mayor of Munich, the city of Munich commissioned the extensive sociological study "Stadt am Stadtrand" (Town at the Edge of Town) in 1964, which covered four large housing schemes, including the Parkstadt Bogenhausen housing estate (Zapf, Heil and Rudolph 1969). In the foreword, Vogel refers to the critical questions that began to emerge with the construction of new urban quarters, giving expression to the hope that the empirical study would contribute to the public debate about the provision of affordable, high-quality housing (Vogel 1969, pp.7f). Since then, the debate has had its highs and lows, but it has never lost its relevance.

Vogel's positions have recurrently informed public debates as well as the criticisms of researchers and practitioners. A recent interview with Vogel, "Eigentum verpflichtet!", by Arno Brandlhuber and Christopher Roth is published in the Arch+ magazine's 231 volume "The Property Issue" (Brandlhuber and Roth 2018). Florian Hertweck provides an overview of Vogel's plan to reform the land law for urban areas in the same volume (Hertweck 2018b). He also refers to Vogel's reform plan in his contributions to the Porous City book and conference (Hertweck 2018a). Analysing the historical situation in 1973, Florian Hertweck suggests that for the purpose of conceptualising the reform plan, Vogel could draw on his first-hand experience with land speculation in Munich on the one hand, as well as on the affirmative 1967 court decision on the use of land by the Federal Constitutional Court on the other (ibid., p.154). Reading the court's statement today, it does not seem to have lost its relevance and urgency:

> "the fact that land is both limited and indispensible means that we cannot leave its use to free market forces or to the will of individuals; our legal and social obligations, which are based on justice, mean that in this case we need to consider public interests to an extent far greater than this is required for other financial goods" (Bundesverfassungsgericht 1967, translated in ibid.).

Figure 101: Student proposals for Neuperlach, Munich. Contribution to Munich's ongoing public debate on densification. Town hall exhibition "München weiter denken. 125 Jahre Stadtentwicklung", Munich 2018. A major part of the Neuperlach satellite town was developed by Neue Heimat Bayern in the early 1970s, the same non-profit organisation which had developed the Parkstadt Bogenhausen housing estate 15 years earlier.

In 2018, a formal process of further reforming the German WEG was initiated. However, like in the previous reform, the focus is on problems of modernisation and efficiency. The more fundamental questions are bracketed out. Critics of the planned reform see the power of decision-making to further shift to large investors and the administration (Prantl 2020).

Problems like land speculation and the difficulty of reconciling profitability with the social obligations of property ownership are, of course, directly related to the nature of the capitalist mode of production. The social world/arenas map shows how financial interests influence the relationship of different social worlds and subworlds in the Parkstadt arena. Regulatory instruments like 'Sozialgerechte Bodennutzung' – 'SoBoN', which was implemented in Munich in 1994 (Landeshauptstadt München 2016b, pp.11, 18), seek to mediate between different interests and goals by diverting a percentage of the profits to the provision of social and communal infrastructure. The provision of housing by municipal or non-profit housing associations, like the 'Gemeindebau' schemes in Vienna, or projects like Ex-Rotaprint in Berlin, where the land is withdrawn from speculation for long periods of time (Hertweck 2018c, p.14), are further examples of cooperatively or politically mediated market situations. Some initiatives go further in that they take their critique of the negative long-term effects of profit-orientated development as one of the starting points for the establishment of alternative modes of production, like the realisation of an urban commons (Stavrides 2015; 2016; Ott, Kling and Zöhrer, in press).

2.4 Appropriation and Redundancy in Buildings

Can we support processes of individual and collective appropriation through more redundancy in buildings? Can we influence patterns of change through constructing and organising spaces in different ways? Based on my earlier criticism, we should be cautious not to argue from within the myth of Pruitt-Igoe. Because buildings and their spatial capacities have to be seen as being related to the multiplicity of human and non-human actors that co-constitute a situation, including the structural conditions which I have discussed in the previous section. The task, then, would be to avoid approaches that are based on an assumed 'building problem/solution' causal linearity, and rather think about the kind of contributions buildings could make in and to the situation. The case study showed that residents modify their immediate spatial environments if they have the opportunity to do so. During the 50th anniversary of the Parkstadt Bogenhausen estate, a large cinematographic projector was installed in a private flat to make possible a free public screening, because no other means could be worked out for the technical setting-up[2]. The apartment was in this way converted into a temporary projection booth, and the housing estate into an open air cinema. Hundreds of guests and local residents enjoyed picnicking on the lawn, while watching films that had been made in and around the housing estate at some time in the past. If users were able more easily to add non-residential uses to the housing estate, how would it change? What other kind of changes might be possible?

Based on these and other observations we have made by studying the process in the Parkstadt Bogenhausen housing estate, a set of general practical propositions arise which relate to architectural work. For example, it would make sense to design specifically, and differently, for commonhold-type entities. The potential that is in the mix of collective and individual responsibility as well as in ownership-based authority could be coupled with concepts of adaptability to create more responsive built environments and to facilitate spatial change.

Where housing is primarily conceived as a commodity, optimisation and efficiency range as core values in the service of profitability. Any operating in the 'unknown' is considered a potential threat to this goal and therefore avoided. However, where housing is seen as being closely related to dwelling, understood as a process and creative activity, then the unknown, indeterminacy, and the 'soft' changing of space are seen as enablers, rather than threats. Pertaining to the 'soft' ways of using and changing space, Tatjana Schneider and Jeremy Till observe that "[…] soft use generally demands more space, even some redundancy, and is based on a relaxed approach to both planning and technology […]." (Schneider and Till 2007, p.7) In this sense, the ever increasing accumulation and consumption of private residential space per capita could be converted into a productive kind of redundant space – which is available for experimentation, accommodating change, and adapting to the new. Are there further ways of providing, or designing, a positive kind of redundancy in buildings and spaces?

The concept of adaptability has gained in relevance in connection with life cycle considerations and extended time-horizons for the built environment. The limited availability of greenfield sites, a changing attitude towards our historical urban fabric, and the consistent demand for space in growing cities all increase the pressure to reuse

2 Information about this project could be obtained through the expert interviews.

existing buildings. Many inner city sites succeeded in undergoing a rapid transition from light industrial to a post-industrial state because of their flexible building stock. Former commercial districts have been converted into thriving urban quarters, where residential use is mixed with new forms of living and working, leisure and tourism. Many of these buildings, like warehouses, 19th century housing, or historic office buildings had not been intentionally designed as adaptable buildings, yet they were able to accommodate change. In view of the future challenges to be met in cities, Thomas Sieverts advocates "the principles of resetting existing buildings and of fostering emotional interest, responsibility and active involvement in the city" (Sieverts 2017, p.99), as well as "[…] experiments in a new relation of urban development and natural environment, which do not destroy, but enrich the realm of nature." (ibid., p.102) Sieverts observes that "growing abstraction" and "indirectness" (ibid., p.101) have contributed towards people feeling detached from problems that should be of concern (ibid.). In this sense, the move away from the technocratic, centrally managed provision of housing towards models of housing in which groups and individuals have more control of – and therefore responsibility for – the built environment and the many processes and situations to which it relates, open up new possibilities for the (re-)connecting of people with issues that are of concern. Commonhold-type constructs already enable groups and individuals to assume a degree of direct responsibility for the built environment. In view of the potentially inhibiting effects which current commonhold-type constructs have, Sieverts suggests that a different hierarchy of control levels based on structure and infill could make buildings more responsive. In the proposed arrangement "[…] heavy support structures and access systems are defined as long-term elements of urban infrastructure, whilst private living spaces are defined as short-term, modifiable 'infills' made of materials that are easily renewed and recycled, e.g. wood." (ibid., p.104) In this sense, Sievert's proposals connect to the projects and ideas of John Habraken, Otto Steidle and others, who have advocated architectures that enable groups and individuals to change the spaces they use and occupy more actively and freely. Addressing the problem of WEG entities' inhibiting influence on processes of urban adaptation, Sieverts suggests that "the conflict could perhaps be resolved by restricting part-ownerships to the 'infills', leaving the 'infrastructure' to some kind of publicly controlled body." (Sieverts 2017, p.105) However, this would require that some of the locally exercised collective authority of WEG entities be delegated to a different, perhaps less local arena. New ways of cooperation and decision making between control levels or arenas of change would have to ensure that processes do not resort to the centralised, technocratic models of the past. With reference to historic precedents, Sieverts conceives of support/infill projects as

> "[…] on the one hand, abstract, open structures with general qualities, and on the other hand, strong individuals, sometime even stubborn personalities. They have a core of resistant, formal character, but also 'soft parts', which could even be taken away and substituted by new ones without destroying the basic character. In this sense they are like small models of cities." (ibid., p.104)

Actors who design, construct, modify and use spaces of this kind build on the specific "capacity" of architecture (Wolfrum and Janson 2016, pp.44f), in that on the one hand architecture may provide stabilising articulations of spaces, dense atmospheres,

'gestalt', materiality, and on the other hand, scope for the performative and appropriation, variability in use and meaning, and openness (ibid., p.45). Sophie Wolfrum and Alban Janson have subsumed the complementary capacity of the architectural under the terms "Prägnanz" and "Spielraum" (ibid.). The perspective of an "architectural urbanism" (ibid., p.10) emphasises these and other specific qualities which the architectural can bring into cities (ibid., pp.23ff). The idea of the city as mere agglomeration of structures and buildings is rejected together with the reduction of architecture to its physical aspects and the scale of a building. Architectural urbanism stresses the relations between space and action, between process and form, between continuity and change. If the support/infill approach is conceptualised in such a way that it includes the urban rather than being limited to the scale of a building, it may connect to, and in this way make use of the capacities of an architectural urbanism.

There is a growing public interest as well as a growing market for approaches that use the support/infill approach to give users more choices for realising individualised spaces, connecting to the city, and making changes in the future. As I have mentioned in my discussion of control hierarchies and layers of change, BeL Sozietät für Architektur (Wolfrum and Brandis 2015, pp.123ff) and Praeger Richter Architekten (Praeger and Richter 2017), among others, are currently testing and experimenting with variations of the model in competitions and realised projects. In order to fully unfold their potential, propositions for new kinds of buildings should not be seen in isolation and require, among other things, a corresponding set of enabling regulatory and financing frameworks. The financing would need to be orientated towards a process, rather than commodity or product. It would have to enable the realisation of spaces over time, and accommodate mixed responsibilities according to the different levels of control involved. Using the Redundant City concept as a basis for urban intervention means seeking ways of creatively exploiting the contradiction between the stabilising and utopian capacity of redundancy, and to work with its ambivalent qualities, its otherness, its political dimension.

3. Working with the Mapping Tools

3.1 Community Mapping as Means of Empowerment and Agent of Change

The mappings presented in this book are positioned within an academic research context. They are the result of a single researcher engaging with a specific research situation. This raises the question as to what extent the mappings may be applied to the analysis of other housing estates and situations of change, and if so, could they become instruments of collective learning and of empowerment beyond academia?[3] SA's broadly conceived methodological framework allows mapping instruments to be applied to varying data, according to the situation under study. I have added to the standard SA mapping tools a set of newly developed mappings. The mapping of

3 The Third Oikonet Conference in Manchester in September 2016 gave me the opportunity to present my work and to discuss this question in a multidisciplinary setting. I would like to thank in particular Adam Evans, Viviana Fernández Prajoux, Lasse Fryk, Leandro Madrazo, Jenny Stenberg and Iván Tosics for their comments and for sharing their ideas in the session.

negotiated concerns in the Parkstadt arena, as well as the diagram showing the overall situational process along a timeline are key mappings in the case study. They establish a record of controversies over time, they juxtapose dominant and weaker discourses, they show how shifts in the decision-making process are linked to changes in ownership structure and other parameters that influence the process. If we think in terms of the versatility of the case-specific timeline mappings, how easily may they be reconfigured for the analysis of other situations? Housing estates are sites where a multitude of social worlds intersect with each other. The generic character frequently attributed to modernist housing should not deceive us about the uniqueness of every housing estate. Hence, mappings developed for a particular situation cannot be transferred to other situations of analysis without some modification. It seems justifiable, however, to assume that there is a common theoretical and methodological basis which could serve as a starting point for developing contextualised maps that reflect the specificity of other cases.

Individual owners in privatised commonhold-type housing estates have a statutory right to participate in the collective decision-making process and are, in this sense, already in positions of power. However, I do not distinguish between owner residents and non-owner residents, or between privatised or non-privatised housing estates in this section, for I believe there is a general need for empowerment and increased levels of participation in housing estates, irrespective of ownership form and status. The proposed empowering capacity of collective mapping could be seen as resting in both the production of knowledge, and the collective process itself. If participation is defined as participating in the making of decisions, that is, to actually make decisions (Lüttringhaus 2012; Unger 2014, pp. 40, 47; Fernández Prajoux 2014, p.4), the mappings of the Parkstadt arena engage with the very substance of participation. They represent the decision-making process and therefore the participatory process. Mappings of this kind can enable members of a specific social world in participative processes to better understand their situation in relation to other social worlds in the arena. Organised as timelines, they show transformative interactions over time. The mappings may give actors a better idea about how and in which constellations decisions are made. The mappings make visible the effects of pre-structured processes, the distribution of power, "compartmentalization" and "dynamic conservatism" (Schön 1971, pp.31–60), exclusion, or the establishing of a dominant maintenance project. Actors may in this way analyse how resistances influence participatory processes, or prevent change occurring. The knowledge thus produced could lead to the questioning of current relations between different social worlds and sub-worlds in arenas of change. It could put individuals and groups in a position from which they may more easily raise issues and engage in debates about their built environment and all aspects that intersect there. It may facilitate connecting with the macro-level, the realm of WEG legislation, urban discourses on densification, accumulation, asymmetric urban change, or urban inequality. Mappings of this kind call into question the structural conditions in arenas of change as discussed above. They could inform processes through which the power relations in the arena are renegotiated and ultimately changed.

The second empowering effect of collective mapping rests on the actual making. Similar to the self-reflexive work of community mapping (Unger 2014, pp.78ff), this could be the first step in a participatory and inclusive process which is then further developed. Groups and individuals could engage in workshop-like settings to collec-

tively produce maps of their decision-making process and of the negotiations they engage with. They could develop timeline diagrams of the common concerns they think are of significance, for individuals, different groups, or social worlds in the arena. As part of the making, they could draw comparisons between different versions of maps. The mappings could also act as memory device, making available information about past decisions while supporting a process of collective learning. The mappings could bring to the fore possible silences that conceal positions of power, or issues that would otherwise be covered up by dominant concerns. They could help the residents of a housing estate to more critically reflect on moments of closure in the arena. This might lead towards an opening up of processes for non-owner residents, neighbours or other users of the estate.

Participatory, empowering, and collective forms of research are closely linked to questions of control. Only if participants have the right to co-determine research goals and the power to access, influence, and change the project or process can we speak of true participation (Lüttringhaus 2012; Unger 2014, pp.40, 47; Fernández Prajoux 2014, p.4). This is not without implications for the instruments used. Ideally, they can be accessed, worked with and modified by all participants. The level of control has to include the basic configuration of the instruments used. Providing tools that have user-friendly interfaces is not enough for this purpose. Even the most neutral and adaptable instrument is based on certain presumptions and moments of closure, which are beyond the control of users. Only if the collective is involved with the conceiving and actual making of instruments – as producers – will the empowering effect give full control, and make the collective gradually independent of the input of external specialists. In this sense, the tools have to be simple in terms of making, but powerful enough to probe into the complexity of situations. The maps of SA and its adaptations seem to be well-suited for this purpose. Moreover, if change is to be one of the outcomes of the empowering process, participants have to be cautious to not inscribe existing routines into their instruments and processes. Pertaining to the relationship of collective routines and spatial change, sociologist Martina Löw suggests that

> "Changes emerge when routines are not merely varied, but rather old habits replaced by new routines. If this happens regularly, collectively, and with reference to relevant rules and resources, institutionalized spaces and spatial structures can be changed." (Löw 2016 [2001], p.191)

If mapping work succeeds in breaking up routines, if it supports the collective in establishing new perspectives through interpretative analysis and self-reflection, it will have the capacity to become an active agent of change. Historically, the WEG act of 1951 has to be seen as an instrument for the establishment and organisation of property rights in a situation of crisis in post-war West-Germany. The legislators' intentions were not to empower residents so that they could change the built environment, or participate in urban processes. Collective mapping could provide case-specific insights in the process and its restrictions, and in this way create an awareness of the issues involved. In view of the problem of "dynamic conservatism" in commonhold-type entities according to the WEG, empowerment through mapping could help actors to overcome some of the inhibiting effects of the WEG model. For, participants in WEG-framed arenas are currently not free to choose their modes of interaction. Here, Habraken's propo-

sition that "[…] home owners will change their houses no matter what, even when the latter are functionally determined when bought, because ownership is empowerment […]" (Habraken 2008, p.291) is currently limited to the confines of the single residential unit. Empowered through mapping, users, owner and non-owner residents may find new ways of extending their effective range of action to higher levels of control, and ultimately to the changing of spatial arrangements and their housing estate.

3.2 Extending the Repertoires of Mapping in Different Fields of Representation

Describing and analysing spatial and social relations are difficult and challenging tasks. In particular, if the representation of complex relationships is done in writing. Maps and diagrams offer complementary ways of representing spatial and social complexity. Adele Clarke sees a particular strength of mapping in the representation of connections (Clarke 2005, p.30), which includes the representation of areas where there are no connections. The capacity of maps to relate different things to each other is analytically exploited in situational analysis as well as in other mapping methodologies. Some kinds of maps are conceived to analyse a very narrowly defined field. They are often inextricably linked to a single research problem and to a specific task. Other maps are versatile and can be used more freely. This implies that maps of this category are adaptable and modifiable in some way, so that they can respond to the requirements of new research situations. However, the transfer of a specific mapping technique from one research situation to another is not self-evident and has to be backed by theoretical reflection.

The repertoire of mapping in a given discipline or research context can be extended in various ways. Existing mapping techniques can be adapted and modified. This may result in a genealogy of related mapping methods. New mapping methods can be designed and developed from scratch. This is often the case when new technologies become available, or when new problems require new tools of analysis. Another way is to transfer existing mapping methods from one discipline to another, for example from situational analysis to an architectural and urban research context. The transfer is likely to result in the modification of the mapping method. In all cases, the idea is to extend the representational and analytical range of mapping, and thus to produce new knowledge in the fields that are being mapped.

Design is a field in which mappings of different kinds are regularly used. The mappings of situational analysis proper, and the mappings I have developed on the basis of its epistemological assumptions, have no foothold in architectural or urban design at the present. This is not to say that connections between the social sciences and design are weak, for both fields can look back on a long tradition of interdisciplinary cooperation. Urban and architectural design shares with urban sociology a strong interest in the city, and with sociology of housing a strong interest in the everyday. However, research methods themselves rarely travel from the social sciences to design and vice versa. Instead, they share their respective research outcomes with each other. Design draws on data and theories generated in the social sciences. Conversely, the social sciences relate to and position their research within the (designed) built environment, but typically not by using design methods.

As I have argued at the outset of this book, it is characteristic of architecture departments that they accommodate different framings of knowledge, "cultures of knowledge" (Biggs and Büchler 2011, pp.68f), or "knowledge landscapes" (Dunin-Woyseth and Nilsson 2011, p.80). Maps have a specific strength in the representation of connections. In this sense they could be understood as connecting devices themselves. Their connecting capacity can be exploited in the transfer of knowledge and information between different cultures and landscapes of knowledge. Geographer Michael Conzen's analytical maps are examples of mapped knowledge travelling in research practice between different framings of knowledge (Conzen 1960). His mappings of structural patterns in towns are foremost descriptive and analytical, without any intention by the researcher of making them operable in architectural and urban design (Moudon 2004, p.26). The rigorous focus on the mapping data enabled Conzen to develop new concepts, in particular about the fringe belt, burgage pattern, and plan unit (ibid., p.28). Subsequently, the versatility of the maps, and the accessibility of the knowledge embedded in the maps, allowed the information as well as the mapping method to travel fairly easily from cultural geography into other disciplines and across the boundaries of different framings of knowledge.

New mapping methods continuously enter the design disciplines and in this way expand their repertoire of analytical and interpretative instruments. The kinds of mappings developed in this research project could be among them. Transferring the mapping approach to a design context and making them useful for design work requires translation and reflective modification. To fully exploit the potential, the translation will have to ensure that the mapping approach retains its connecting capacity between the social and the material, between decision-making processes and urban space. In this way, the mappings can expand the analytical and theoretical range of design-related analysis and of design projects. Because faculties of architecture and urbanism assemble different framings and practices of knowledge, they are obvious places for the transdisciplinary transfer of information through maps.

The theory of relational space is another field in which mapping could extend the repertoire of analytical representation. Martina Löw's "The Sociology of Space" identifies ample possibilities for "(An)Ordnungen" (Löw 2015 [2001], p.158) that could be mapped and in this way interpreted. Löw's case study on "Countercultural School Spaces" reads almost as an invitation, or instruction for a mapping analysis:

> "However, the analysis of spaces must not be limited to the analysis of the structuring effects of spaces that are already institutionalized […]. In the everyday constitution of space, these arrangements are constantly subject to challenge and are shifted, temporarily suspended, and sometimes even annulled – for example by moving around or selecting one's place oneself. This resistance to institutionalized arrangements can have various causes: acting differently on reflection, feeling ill at ease, other people's manners of action, or constellations of otherness. The violation of dominant space constitutions can thus prove to be the realization of another habitus." (ibid., pp.209f)

The questions implied are, for example: What kind of (pre-)structuring powers become effective in the school spaces analysed? How are territories constituted, how are conventions violated through countercultural spatial practices? How do people move through space, use space, behave in space, when they want to be different? CHORA's

short sequential analysis of the "Locker Girls", based on the group's "Erasure–Origination–Transformation–Migration" concept of urban change, is an example of the mapping of countercultural spaces (Bunschoten, Binet and Hoshino 2010 [2001], pp.376f). The mappings of situational analysis, including social worlds/arenas maps, as well as the timeline mapping of ongoing concerns, actions, or commitments to transformative processes, could contribute towards new kinds of conflict-orientated socio-spatial mapping analysis.

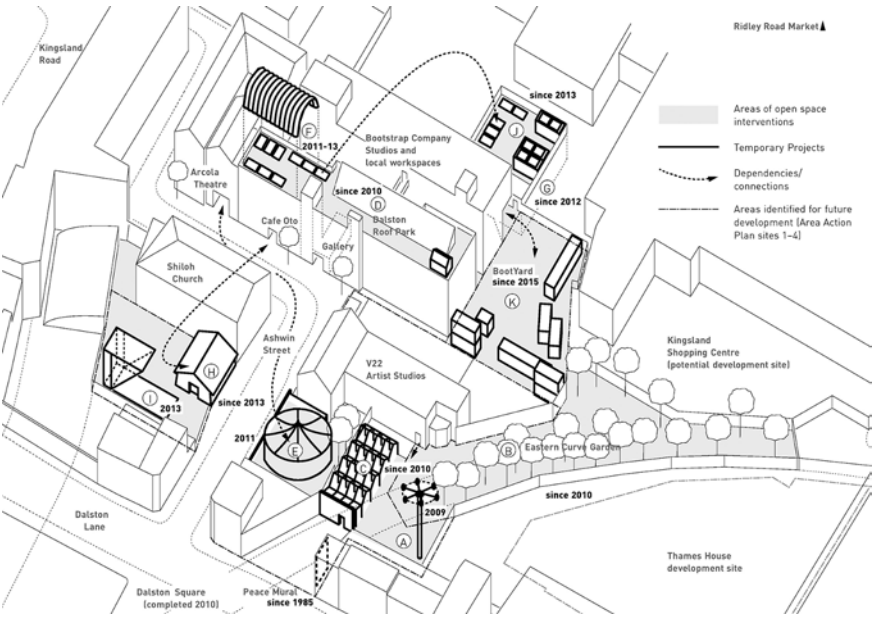
4. Working with Concepts and Narratives of Conflict and Change

4.1 Challenging Dominant Modes of Space Production

The positional map relates different and in part contradictory concepts about urban and architectural change to each other. According to the epistemological assumptions of SA, it gives marginal positions a voice, and prevents the marginal from being forced into the background by the more dominant positions (Clarke 2005, p.128, p.178). Hence, the map can be used as a conceptual device for the detecting and analysing of differences in an urban condition. If applied to a particular urban condition or site, it is, perhaps, not too difficult to identify one or more concepts in the map that dominate in the situation. Dominant concepts in architectural and urban change are concepts to which the majority and most powerful agents, institutions and stakeholders explicitly or implicitly refer in the situation. They are, in this sense, the conceptual supports for the dominant mode of space production and its discourses. However, there may be other spatial practices that leave only very faint traces in the material world.

Concepts of change that struggle to be heard in urban controversies, or that struggle to establish a different mode of space production, may be more easily detectible with the assistance of the positional map. In this sense, the positional map could provide clues as to where and how to look. Furthermore, the epistemologically justified openness of the positional map, as well as the theoretical sampling method encourage the adding of new information. Once identified in the situation under study, new positions can be added to the map. The limits of the positional map that I have presented in this research project are defined by its focus on architectural and urban narratives. This means that when using the positional map in its current form, we have to bear in mind that other, non architectural or urban concepts of conflict and change are likely to be of relevance in the situation under study, rooted, for example, in social relations, personal experiences, economic conditions, or global conflicts and climate change. Dominant concepts of urban and architectural conflict and change seek to establish stabilising spatial practices, take control of space, achieve closure. They are part of a stabilising discourse in support of the hegemonic mode of space production. Planning and planning legislation based on modernist ideas are institutionalised instruments that are directed towards this goal. However, irrespective of how dominant a concept in a given situation is, the positional map is a reminder that there is no single narrative of change. There are always alternatives – different ways of thinking and doing change. The positional map shows that conflict can be foregrounded with different intensities, that conflict is sometimes silenced, depoliticised and concealed.

Figure 102: "Contested Porosities". Movements and sites of spatial intervention and production in Dalston, East London. ***A*** *Dalston Mill, EXYZT + Agnes Denes [commissioned by Barbican Art Gallery].* ***B*** *Eastern Curve Garden, muf + J&L Gibbons.* ***C*** *Barn for Curve Garden, muf + EXYZT.* ***D*** *Dalston Roof Park, Rob Rainbow + zectorarchitects.* ***E*** *Arcola Tent, Arcola Theatre.* ***F*** *Inflatable Roof, zectorarchitects.* ***G*** *The Bunker, provisional venue space.* ***H*** *Oto Project Space, Assemble.* ***I*** *'Dalston House' by artist Leonardo Erlich [commissioned by Barbican Art Gallery] .* ***J*** *Bee Garden, Joy Schlageter.* ***K*** *Boot Yard. Bakery, brewery and other uses, Featherstone Young, zectorarchitects.*



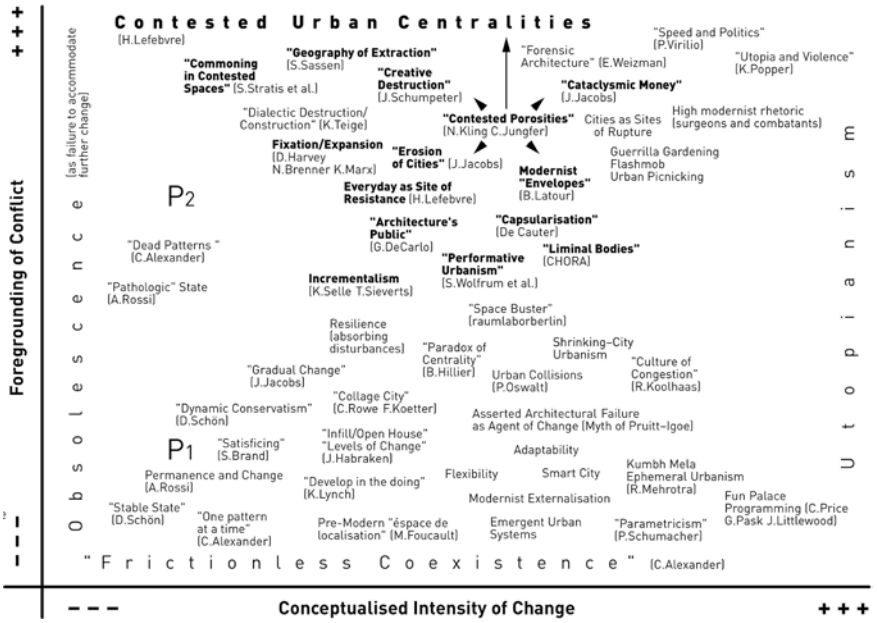
The positional map is an invitation to undertake speculative interpretative movements through the universe of architectural and urban narratives. I have done so for the construction of the dual position of the Redundant City concept.

Another opportunity arose while working on the conceptualising and analysis of a concrete urban condition in Dalston, East London, which I undertook together with Carsten Jungfer. The local area is a contested zone, in which alternative urban practices are currently challenged by institutionalised routines of space production, and vice versa. The dynamics of the area seem to be defined by a movement between appropriation and domination on the one hand, and a movement between accumulation and dispersion on the other hand (Kling and Jungfer 2018, p. 260).

Both movements exert their influence on the area in different ways, resulting in unexpected and contradictory urban situations and conditions of asymmetric urban change.

As part of the analysis, we produced a map showing all major spatial interventions in the recent past (Figure 102). Drawing on the writings of Henri Lefebvre, Neil Brenner, Martina Löw, and others, we identified 'porous' spatial qualities that support alternative spatial practices and processes of making a different city (ibid.). The positional map served as a background reference in the analysis and concept development

Figure 103: The newly developed concept "contested porosities" added to the positional map. Relevant neighbouring concepts and alternative spatial practices in the proximity of the concept are highlighted.



(Figure 103). We assigned a medium intensity of change to the processes observed in Dalston. To this, we added a high level in the foregrounding of conflict, reflecting the intensity of current public debates on the future development of the area. Based on these assumptions, it was then possible to place the proposed concept "Contested Porosities" in the positional map and to see how it would relate to other positions and concepts of change[4]. Adjacent concepts provided clues as to possible issues that could be of relevance in the situation. They also informed our critical discussion of the observed processes. Hence, in this mode of analysis, we used the positional map as discursive device in our theorising about urban change. The corresponding article "Contested Porosities. A Spatial Enquiry into Urban Conflicts in Dalston, East London" (Kling and Jungfer 2018) is published in the "Porous City" edited volume, which enquires into the nature and potential of porosity, and how it could become an agent of difference and change (Wolfrum et al. 2018).

The positional map holds the promise that despite the dominance of certain positions there are alternatives – and that new alternatives can be conceived and added. The positional map highlights the contingency in the universe of narratives and concepts. There could always be a different perspective on conflict and change, and therefore a different spatial practice. The map is meant to provoke controversy. In this sense, the assembling of multiple concepts of conflict and change in the positional map is in itself an act of questioning the dominant mode of space production.

4 The positional map has further evolved since then, resulting in differences between this version and the one used for the intersection.

4.2 Positioning Design Interventions In the Urban Field

Architectural and urban design is in one way or the other concerned with changing a situation, or with adding something to urban reality. Design does not inevitably materialise in built form. The outcome of design can be a process, a way to organise things, a representation of an idea, an image, or a concept. As I have argued in the introduction to this book, design is a unique way of producing knowledge. "Designerly ways of knowing" (Cross 2001) have the capacity to initiate change or to contribute towards an ongoing process of change. Design can also stop a given mode of change when it introduces an alternative. Within the relational theory of space, design is discussed as a unique form of spatial acting. Through designing, relations are established between things, of which some may not yet exist in materialised form. In a design project, the existing, be it built form, ways of thinking, a process, or mode of space production, intermingles with the imaginary. The creative capacity of design enables us to conceive of new forms, new ways of thinking, other ways of doing space. The new is rarely, if at all, generated from within mental spaces that are void of preconceptions and presuppositions. The constructivist and relational perspectives both assume that once things are made by humans, they act back upon them in different ways (Berger and Luckmann 1966, p.183; Löw 2016 [2001], p.144). In this sense, we could say that modes of changing and designing, once established and communicated, recursively influence future modes of changing and designing. Designing, even if it strives for innovation and rejects the methods of the present or the past, relates to existing concepts of design, and therefore to existing narratives of change. The positional map is conceived as an open representation of past and present concepts and narratives of change in architecture and urbanism. Based on the assumption that the new always connects, in one way or the other, to that which is already there, the map can be seen as a tool for critically reflecting on the new in terms of its relatedness to the existing. In this way, it can assist designers in the conceptual positioning of their design interventions in the ever-changing urban field. If, as Jane Rendell suggests,

> "[…] design is a mode of enquiry that is capable of generating new ways of knowing and understanding the world through creative processes and the production of artefacts, but also that designers are able to offer critiques of their own mode of practice, both self-reflective and politicised (Rendell 2007, p.7)

– then a critique of the productions of designers is likely to involve a critique of the overall mode of space production in which they participate. This includes critical reflection about the limits of generating new ways of knowing through design. Participants in design processes work within contradictory situations, which inevitably makes contradictions part of their ways of working. There is, on the one hand, the notorious process-inherent lack of information and the movement towards openness, which is supported by the desire to create something new. On the other hand, the more precise and concrete a design becomes, the closer it is to fixation. In David Harvey's view, "[…] to materialise space is to engage with closure (however temporary) which is an authoritarian act."(Harvey 2000, p.183) Yet, if we understand fixation not as a single and conclusive event, but rather as something that is continuously (re-)produced – for example as a competition entry, as the putting forward of ideas by interest groups, as

the discussion of a building proposal in a council meeting, as the granting or refusal of funding, or as the exhibition produced at the end of a participatory workshop – then a strong temporal dimension is introduced to the problematic. In this way, moments of fixation are seen as being part of a temporal condition, in which the tendency towards closure is challenged by [re-]openings. The issue, then, is not to produce 'a design', as the static output of professional work, but to engage with a process, and to make designing part of the process. Competing concepts of conflict and change intersect in the city. They are related to constellations of power, which in turn are related to different ways of producing space. Working on the design and the realisation of a project means participating in the production of space. Urban and architectural projects are situated within a web of relations in the arena of urban change.

Assuming that redundancy is present in situations and spaces other than the Parkstadt Bogenhausen housing estate, what characteristics might they have? How could we engage with the ambivalent qualities of redundancy in design? As part of the development of the Redundant City concept, I have argued redundancy to convey a promise of difference. Redundant spaces are less dynamic than their surroundings due to the rigidifying frameworks and institutionalisations that keep them from engaging with the urban level. However, one of the underlying assumptions of redundancy is that changes can be initiated if action is assumed collectively. Furthermore, arenas that negotiate and produce redundant spaces have the possibility of (re-)connecting to the political and to the urban level of change. Working with redundant spaces means addressing problems of rigidity and conflict as part of a process. It also means working with the existing, not only in terms of the built environment, but more importantly with the competing desires and the web of social relations that intersect on a site. Theorising about shifts in the work of architects and the pressure of change resulting from global capitalism, conservationist Thordis Arrhenius suggests that

> "Urban patterns and building programs are increasingly becoming redundant, demanding change to accommodate new functions and identities. Driven by contemporary concerns with scarcity and overflow, the building stock is constantly altered. In this situation, architects are increasingly concerned with adjusting and reprogramming what is already there. This raises an urgency or necessity for contemporary architectural culture to address the pressure of change in alternative modes." (Arrhenius 2016, p.55)

The design projects to which I refer in the following engage with three urban conditions in very different ways. What they have in common is their relatedness to redundancy in one way or the other; a temporality and connectedness to ongoing processes of change; a degree of improvisation, incompleteness and imperfection; and an openness to appropriation. In all three projects, the spaces can be reconfigured by the participants and co-producers of space, either by simply being present in the situation, or by introducing changes and engaging in different ways with the project.

I had the opportunity to contribute to these projects as a partner at zectorarchitects in various ways, together with Carsten Jungfer and many others who made them happen.

Figure 104: Dalston Roof Park, East London, design by zectorarchitects and artist Rob Rainbow, photo 2011 © by Mimi Mollica

Dalston Roof Park

Dalston Roof Park is located in East London and opened in 2010. It is part of a series of local initiatives that developed in and around Ashwin Street, which gradually took over spaces that had been left by defunct light industry. Many non-profit organisations, cooperatives and charities are based in the area and provide their services to the local and wider community. Dalston Roof Park started as a gardening project and bar service on the unused flat roof of a former paint factory. The premises are managed by the Bootstrap Charity, which provides workspace and training for small social and creative enterprises. From 2011–13, a removable pneumatic canopy provided shelter so that scheduled activities on the rooftop could be hosted in less favourable weather conditions (zectorarchitects 2011). This was later replaced by a more permanent structure. Supported by many helping hands and a great number of guests and users, Dalston Roof Park evolved into a vibrant location over the years. It is a friendly and open space, offering a special atmosphere in a unique location. Dalston Roof Park and other projects attract visitors from outside Dalston and make the local cultural and community work more widely known. The project is self-funding and revenues help support local projects. The Bootstrap Charity, its tenants, neighbours, friends and the regular users of the premises are currently working on proposals for the extension and modification of the usable roof area. zectorarchitects is involved with the co-design process and the preparation of a series of workshops. Among the three projects introduced in this section, Dalston Roof Park engages with conditions of obsolescence and redundancy in the most direct way.

Figure 105: MiPUM – Pop-Up Museum. Temporary archaeological exhibition next to London wall in Tower Hill, L-P: Archeaology, Roey Hunt and zectorarchitects, London 2015

The local processes have to be seen within the broader urban situation. Since the turn of the millennium, East London has experienced substantial change through urban restructuring and investment in new public transport infrastructure. The local populations, which traditionally include minority groups, migrants and households with low incomes, are struggling with rapidly rising rents, exclusion and persistent inequality. A broader discussion of the current local situation and its specific condition of asymmetric urban change is provided in "Contested Porosities. A Spatial Enquiry into Urban Conflicts in Dalston, East London" (Kling and Jungfer 2018).

MiPUM

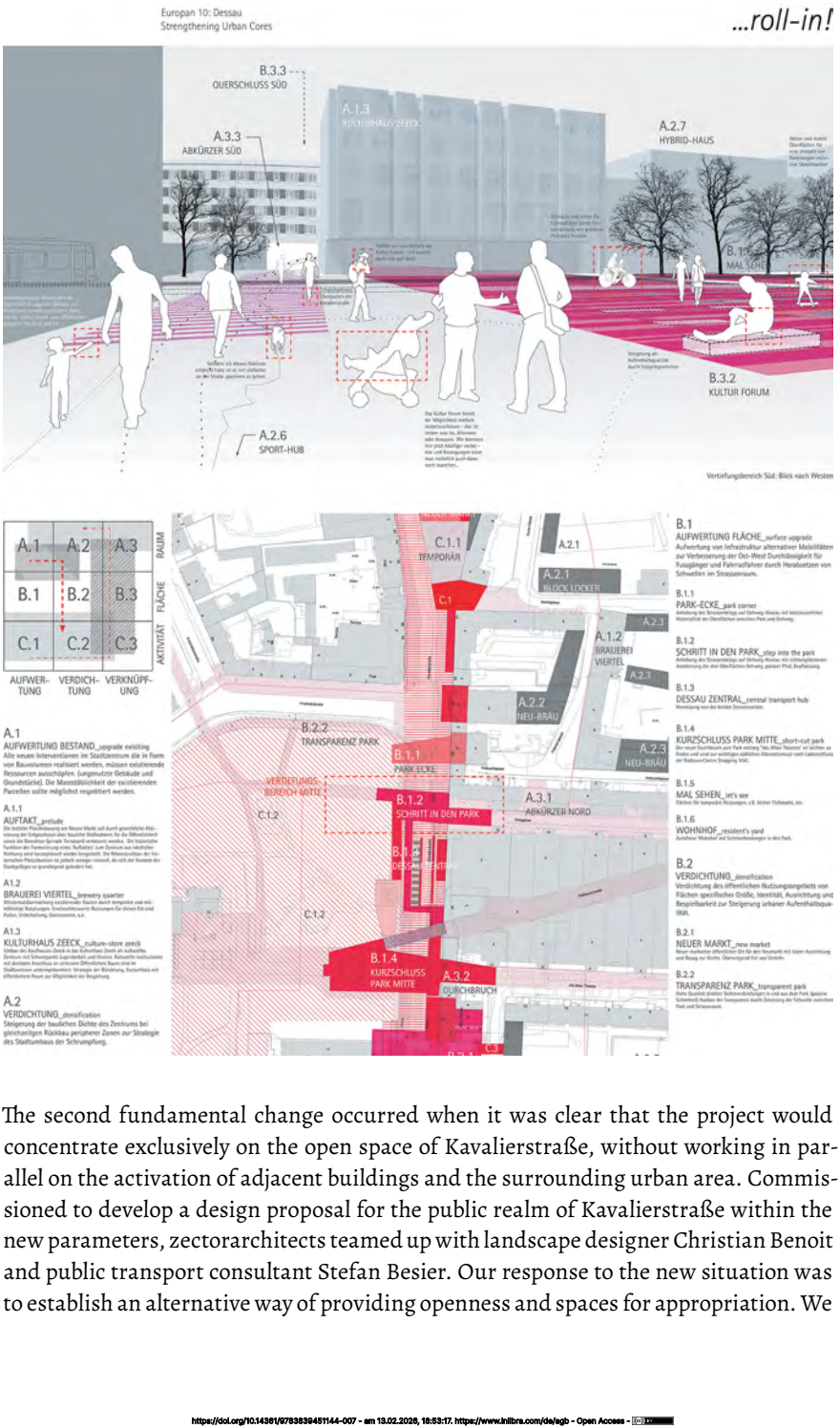
The 100 Minories Pop-up Museum (MiPUM) was a temporary archaeological exhibition in the City of London in 2015 (zectorarchitects 2015). The event was part of the Festival of Archaeology 2015, and realised within a close collaboration between L-P: Archaeology, zectorarchitecs and fabricator and artist Roey Hunt. The exhibition was set up in proximity to the excavation pit, off Coopers Row, directly in front of the remains of the Roman wall. The excavation covered an area that was formerly the ditch 'without' the fortification walls. Framed by the remains of the Roman wall and the open courtyard situation, the exhibition provided information about the ongoing excavation and the history of the site. Members of the archaeological team, easily recognisable by their safety vests, could be approached and engaged in conversations. A family of different display cases with a series of original artefacts invited visitors to inspect the findings closely. Information panels provided additional information for their contextualisation. The situation connects to conflict and change in various ways. Archaeological excavations usually reconstruct processes backwards in time, following the stratigraphic sequence of contexts from top to the natural bottom. The dig at 100 Minories was part of a transitional condition itself, as the excavated site was later built over by a new multi-storey building. Urban excavation sites are entangled in a complex web of conflicts that orig-

inate from inside and outside the archaeological project. Internal conflicts are related to the destructive aspect of excavating, problems of archaeological context and interpretation, the everyday management of an excavation, or conflicts between safety and public access. External conflicts originate from the wider site constraints, from dependencies arising from funding structures, or from time schedules that do not sufficiently take into account the unforeseen. The architectural design project does not evolve in isolation from these specific conditions of conflict and change. We understand that it is only by participating in and interfering with the overall process, that the design project is able to establish adequate relations and meaningful spaces in the situation.

Kavalierstraße Dessau

The Kavalierstraße project evolved from our EUROPAN 10 competition win in 2010 (Rebois 2010, p.64; zectorarchitects 2010). During the second half of the 1990s, the city of Dessau experienced a significant decline in population, which a decade later resulted in large scale urban restructuring. Surplus housing and abandoned industrial areas were gradually dismantled, giving way to a new kind of urban landscape. The long-term spatial strategy was developed as part of the International Building Exhibition IBA, co-curated by the Bauhaus Foundation in Dessau. The urban development concept for the Dessau region "Urbane Kerne – landschaftliche Zonen" was to direct the restructuring process in such a way as to raise the quality in peripheral areas by connecting residential and lower density neighbourhoods to green spaces, while at the same time strengthening the remaining urban cores (Ministerium für Landesentwicklung und Verkehr des Landes Sachsen-Anhalt 2010, p.612). The Kavalierstraße project is one of the key initiatives within the urban core of Dessau. Our EUROPAN 10 winning entry – 'roll-in' – was focussed on the activating and reinterpreting of existing potential and qualities, as well as adding new ones. The site analysis included a close-up observation of everyday spaces and local spatial arrangements. The proposal showed what kind of interventions could be possible in terms of programme, open spaces and built structures. Our initial proposal was conceived to evolve as an open process, based on high levels of public participation. The idea was to postpone any design fixations at the outset until they could emerge from a collective process in due course. In the end, the municipality chose to follow a more formal and linear route with the project, although the International Building Exhibition IBA included examples of open processes that had generated high-quality spaces for different places in the region. The revitalisation of the Stadtpark in Dessau and the local projects initiated by the Bauhaus Foundation in Dessau, for example, were based on higher levels of public participation, in the sense of establishing a collective process with stakeholders and the local community during the design phase of the projects (ibid., pp.452ff and pp.611–620). The shift fundamentally changed our initial assumptions about the process. The political difficulties related to the required relocation of traffic, the funding situation, the overall complexity, and possibly also the personal preference of the leading politicians may have contributed towards the route chosen by the local authority.

Figure 106: Kavalierstrasse Dessau, EUROPAN 10 competition, detail of winning entry by zectorarchitects, which shows sites of possible interventions alongside a matrix organisational model conceived to hold and make available a broad set of ideas during the envisaged participative and open process. (zectorarchitects 2010)



The second fundamental change occurred when it was clear that the project would concentrate exclusively on the open space of Kavalierstraße, without working in parallel on the activation of adjacent buildings and the surrounding urban area. Commissioned to develop a design proposal for the public realm of Kavalierstraße within the new parameters, zectorarchitects teamed up with landscape designer Christian Benoit and public transport consultant Stefan Besier. Our response to the new situation was to establish an alternative way of providing openness and spaces for appropriation. We

Figure 107: Kavalierstraße Dessau, 'Aktionsfeld' with water feature and local shops, visualised by zectorarchitects in 2015

changed the idea of having an overall open design process in favour of an approach that would incorporate smaller collectively designed situations, which could then be modified and changed in the future (zectorarchitects 2013). The site is conceptualised as two superimposed organisational systems, comprising the north-south axis and a series of cross-links and small spaces that reinforce one another. The project stretches from a newly created square to the North, along the city's central public park and towards the southern main junction with the town museum. It links up with the spatial pattern defined by the heritage of socialist housing, as well as the central shopping mall built during the late 1990s.

New crossings are provided, most importantly between the historical town centre and the park. Two types of 'fields' are inserted at irregular intervals along the route, supporting different kinds of events and communicative activities. 'Flexifelder' provide an infrastructure of basic service supplies to commercial and other uses. 'Aktionsfelder' bring specific spatial qualities into public space. They contrast with the standard hard surfaces in terms of materials, use, and articulation.

The initial test-programming of the 'Aktionsfelder' was developed by the design team together with the planning department and other specialists. The public and local stakeholders were invited to comment on the overall scheme, as well as on the individual fields. A workshop held at a local school, engendered further ideas that could be developed and incorporated into the project. The intended change of material and form in the 'Aktionsfelder' produces independent elements that can be re-designed and re-configured over time. A new public transport hub is integrated to the scheme. The hub, the newly introduced crossings, reduced traffic, and the improved cycle infrastructure make the centre more accessible. The first phase of the project, comprising the central section of Kavalierstraße, was completed in November 2018. The Bauhaus Museum Dessau was constructed in a parallel process. It establishes a new cultural destination on Kavalierstraße and in the city centre.

With this brief discussion, I hope to have provided an idea of some of the possible connections between concepts and narratives of conflict and change, and design practice. In the mutual relationship, design projects may refer to existent concepts and narratives, and conversely, new concepts and narratives may emerge in the wake of new designs. The wealth of urban and architectural concepts and narratives of conflict and change can inform design projects and the way design interventions are conceptually positioned in the urban field. Similarly, design can further add to the wealth of concepts and narratives of conflict and change. In this sense design may broaden the understanding of transformative processes as well as actively contribute towards the richness and quality of spatial practices and relations.

5. Concluding Remarks: Architectural and Urban Work as 'Matters of Concern'

This book explores the rich body of narrative knowledge in architecture and urbanism and confronts this knowledge with an empirically grounded situational analysis of a large housing estate. The outcome of this twofold research approach comprises a new perspective on urban narratives of conflict and change, an extension of SA mapping tools and their application to spatial issues, and the Redundant City concept, which describes a specific form of collectively negotiated urban change.

At the outset I have suggested that research in architecture and urbanism cannot be assumed to be a routine or pre-given process. In these disciplines, research occupies different epistemological locations and produces knowledge that is framed in different ways. The complex and at times contradictory nature of this knowledge needs to be addressed if naïve objectivism, compartmentalised discourses and the reproduction of partial knowledge are to be avoided. Because there are valid justifications for each of these framings, and because different bodies of knowledge contribute to architectural and urban research in different ways, researchers need to define which kinds of knowledge and research perspectives they intend to relate to – for each enquiry separately and anew. I have suggested that instead of perceiving the diversity of knowledge as an obstacle to research, we could take it as a unique resource to work with, in particular if we understand urban and architectural issues as something that cannot be grasped in isolation and from a single perspective. If research and scientific work are not simply seen as the detecting of what is already 'out there', but as activities that are purposefully added to the world, then research cannot be understood as taking place within a neutral territory.

I have further suggested that conflict and change have accompanied architecture and urbanism throughout their historical development and continue to be of major relevance today. Current theory emphasises the dynamic nature of cities. Conflict and change are ever present urban conditions. Given the multitude and complexity of existing and emerging phenomena in urban environments, it seems unsurprising that architectural and urban theory struggle with constantly having to adjust and (re) invent their conceptualisations and descriptions of spatial transformations.

Cities are composed of differences and multiplicity (Wolfrum and Nerdinger 2008). They confront us with their complex physical and social reality – as an ever-changing reality, which is produced and reproduced, appropriated and inhabited in multiple

and conflictual ways. Urban change is more than anything the product of collective human action and of the processes humans conceive to structure their lives and the world. Shifting relations of power, resistances, the contesting of urban centralities, creative destruction, and competing modes of production are sources of conflict in cities. The introduction of new ideas, desires and innovations, the imposition of new utopias upon past utopias and traditions, the introduction of new patterns of urban organisation are all associated with the emergence of conflict. Many, but not all architectural and urban narratives understand the urban condition as going hand-in-hand with the production of conflicts. Based on my discursive-interpretative analysis I have suggested that conflict embodies the concept of change. Change is understood to be both, product and driver of conflict. There is an instrumental and operational dimension to conflict. As conflict and change can be seen to be two fundamental principles of the urban condition, I have chosen to open this research project with Henri Lefebvre, who suggested that

> "To think about the city is to hold and maintain its conflictual aspects: constraints and possibilities, peacefulness and violence, meetings and solitude, gatherings and separation, the trivial and the poetic, brutal functionalism and surprising improvisation." (Lefebvre 1985 [1996], p.53)

Against this background and with reference to the writings of Neil Brenner, I have proposed to conceive of the urban as open construct rather than as predefined object (Lefebvre 2003 [1970], p.174; Brenner 2014). Understanding the urban as open construct means to call into question the separation of macro and micro scales of conceptualisation, the uncritical adoption of concepts of static space, the insistence on hard disciplinary demarcations and reductionist framings of problems, the mechanisms and interests that seek to achieve closure, the privileging of specialist positions, and the enforced gap between social and material worlds. The proposed research design addresses the methodological and epistemological challenges that come with this perspective. I have established a multi-site/multiple-methods research approach in which architectural and urban theory is combined with empirically-grounded analysis. I refer to this particular form of research as 'situated and critical project'.

Taking as a methodological starting point the idea of the urban as an open construct required on the one hand that an adequate level of non-closure be maintained in the research process, while on the other hand ensuring research precision and scrutiny. For this purpose, I have adapted the iterative-cyclical research model of grounded theory methodology (GTM) together with the mapping tools provided by situational analysis (SA) (Clarke 2005; Clarke, Friese and Washburn 2018). GTM and SA conceptually move along an incremental analysis of field-related data and in this way generate theory or concepts in the course of the process. For the purpose of this study, I have developed 'anchoring' and 'intersecting' as additional analytical tools. 'Intersecting' is based on SA's positional map and acts as device for the assembling of concepts/positions in architectural and urban narratives of conflict and change, as well as heuristic

Figure 108: "[…] the poetic, brutal functionalism and surprising improvisation." (Lefebvre 1985 [1996], p.53), Theresienwiese and Hacker-Zentrum (Ernst M. Lang, Klaus von Bleichert and Gernot E. Car 1970–1974), Munich 2017

device for the development of the Redundant City concept. By means of intersecting, I have established a high-density construct with the aim of adding an additional layer of research precision and depth to the analysis.

The research project developed along two main processes. Analytical Process A concentrated on the identification and critical interpretation of domain-specific narratives that have informed, and continue to inform, our conceptualisations of and discourses on conflict and change in architecture and urbanism. I have used theoretical sampling as a theory-guided method in the selection process and as a means of reducing the possible effect of preconceptions. Each narrative was understood to hold one or more positions about conflict and change. I have assembled the positions in the shared analytical space of the positional map which relates different intensities of change and conflict with each other. The positional map showed a proportionalising tendency. Low intensities of change tended to occur in combination with a weak foregrounding of conflict in the narrative and high intensities of change with a strong foregrounding of conflict, leaving two voids in the space of the map. The first void indicated that there are no, or few, positions that combine low intensities of change with a strong foregrounding of conflict, and the second void indicated that there are no, or few, positions that combine high intensities of change with a medium foregrounding of conflict. Hence, the theorisation of conflict in architecture and urbanism seems to be strangely underdeveloped for conditions of low and high intensities of change. The positional map made visible areas, which have remained almost unexplored by architectural and urban theory in the past.

However, the growing awareness of situations of conflict, the growing significance of process-led and collectively negotiated change, seem to demand new conceptual approaches to conflict in architecture and urbanism. The Redundant City concept is a contribution towards these goals. It is an attempt to challenge the voids – if only in

a small region – by adding a new concept that combines low intensities of change with a strong foregrounding of conflict.

With the case study of Analytical Process B, the focus of analysis shifted onto the Parkstadt Bogenhausen housing estate in Munich. The local pattern of asymmetric change which I observed over a longer period of time stood at the very beginning of this research project. In the analysis, different kinds of mapping, coding, and analysis informed a research approach that included both qualitative and quantitative perspectives. I have used the social worlds/arenas map to represent and analyse the multiple social worlds which assemble in and around the Parkstadt arena, including their relatedness. Arenas are sites in which different social worlds participate. Each social world is associated with its specific going concerns, practices, actions or commitments that contribute to the process of change in the Parkstadt Bogenhausen housing estate. The arena and its participating social worlds reconfigure themselves and are thus in a fluid state, while at the same time providing a degree of stability for the collective process.

The second kind of map, or diagram, engaged with the overall situational process and the changing structural conditions over time. The map showed connections across different scales, as well as the decision-making process in its wider context, including ownership status, formation and reformation of resident groups, decisive events, and the presence of visible and less visible actors in the situation. The third kind of map was based on the minutes of the collective's formal annual meetings (Wohnungseigentümergemeinschaft Parkstadt Bogenhausen 2016) and assembled detailed sequences of negotiated concerns. The comparative analysis of further data from the field showed that the transformation of other mid-20th century housing estates in Munich is currently under way on a grand scale. Against this background, it became apparent that the Parkstadt Bogenhausen housing estate is different. The estate does not seem to participate in the current spatial dynamics of the local area. It does not change in the same way and with the same transformative speed as other housing estates in Munich.

The comparative analysis revealed that the observed phenomenon cannot be explained with reference to differences in economic or demographic parameters, or the local urban context. It confirmed the view that the specific pattern of change in the Parkstadt Bogenhausen housing estate is not primarily the product of tight-fit functionalism and other potentially inhibiting architectural properties. Likewise, the phenomenon could not be explained by the listing of the estate as building ensemble. Rather, the empirical and comparative data suggested that the observed difference is rooted in the way the estate is owned and organised, in the conditions defined by the Parkstadt arena, and in the collective's approach to conflict and change. In the ensuing interpretative and concept-generating synthesis, I have related the findings to the concepts and positions on the positional map. The movements of discursive displacement established new interpretative links, which further informed the development of the new concept.

The Redundant City concept describes the process of change observed in the Parkstadt Bogenhausen housing estate and in this sense a situation in which urban change is strangely absent. The Redundant City has, on the one hand, a specific capacity to initiate and develop processes of change through the relative autonomy of a collectively exercised, ownership-based authority. On the other hand, collective self-regulation, structural and institutional frameworks, investment-driven accumulation, the silenc-

ing of conflict, and "dynamic conservatism" (Schön 1971, pp.31–60) produce conditions which allow transformations to occur on the micro level, albeit in a very regulated and limited way, while practically inhibiting changes and interactions on the urban level. The ambivalence in the conceptualised situation is mirrored by the term redundancy. In the Redundant City, spaces of individual appropriation and change are connected to spaces of stagnation. Processes of change are oriented to the inside, while interactions with the city are reactive and reduced to a minimum.

The term 'Redundant City' functions as a signifier both for the sensitising concept and its socio-spatial referent, the Parkstadt Bogenhausen housing estate. Hence, the controversial notion of redundancy is an invitation to critically engage with the Redundant City concept as well as the housing estate and to connect them to current urban debates.

I have suggested that the situation cannot be changed effectively without addressing the full range of factors that are constituent of the situation: economic, legal, spatial, and social factors. WEG legislation is aimed at the single purpose of organising and managing property rights. However, as we have seen in the analysis, it has spatial implications. Through pre-structuring the arena and the decision making process, WEG legislation influences the way space is collectively and individually produced, appropriated and changed. The rules for the spatial processes do not originate from within the collective which uses the spaces. If, as David Harvey suggests, "The right to the city is far more than the individual liberty to access urban resources: it is a right to change ourselves by changing the city" (Harvey 2008, p.23) – what does it mean if the means to control change are, in effect, beyond people's control? This question, clearly, has to be a matter of common concern.

If we understand the transformative process of the Parkstadt Bogenhausen housing estate as being negotiated in the Parkstadt arena, that is, a site in which conflicting interests and agendas of multiple social worlds participate, and if we take into consideration the many structural and other rigidifying effects, we see how difficult it can be to introduce and realise change, no matter how small or modest it may be. If space is socially produced, then conditions of rigidity and resistance to change – as specific qualities of space – have to be seen as social products. An analysis of problems of architectural and urban change, therefore, has to take into consideration a broad range of different factors. Initiatives of change that are based on simplification and that define resistance to change as a predominantly architectural problem, in the sense of a critique of 'mass housing' or tight-fit functionalism, and that seek to introduce change by means of merely changing the architecture as advocated by those who maintain the myth of Pruitt–Igoe, are bound to fail in complex situations. Architecture may unfold its potentiality only if it engages with the reality of the arenas in which it participates. It seems that only if architectural agendas succeed in establishing relationships with the arena's multiple social worlds can architecture play a more active role in the process. If architecture cannot make sufficiently clear its relevance for the participating social worlds, it will continue – at least in the arena of the Redundant City – to be regarded as a mere problem of maintenance. The social worlds in the arena need to clearly know why architecture and urbanism could make a difference and why they matter.

Some of the more critical narratives analysed in this research project consider conflict as a creative force in the city, including agonistic forms of conflict that are difficult if not impossible to reconcile. If combined with urban action, they tend to strive

for urban change and constitute what we could call an urban 'practice of conflict'. I have suggested that not to explicate conflict means to withdraw a situation from the political domain. The critical approach emphasises the gap between the actual and the possible, the contradictions within urban reality, and the contingent nature of urban processes.

From this perspective, scientific research is understood as an activity that is closely tied to the conditions in which it takes place, rather than following a linear and neutral progression of knowledge. The concept of "matters of concern" (Latour 2005) emphasises the political dimension of research and of knowledge, by means of emphasising the instrumental nature of knowledge, its connectedness to power, as well as the tendencies inherent to scientific practice. While "matters of fact" enable those who claim to be in possession of indisputable knowledge to "shut the dissenters' voice down" (ibid., p.39), "matters of concern" build upon dispute, for they acknowledge the political dimension of objects and artefacts (ibid., p.47). I have argued that, if we conceive of the researcher as critical examiner, then it is a role that cannot be confined to narrowly defined scientific domains, for she or he will be expected to justify the research in terms of how it could – or should – be of our concern. I have suggested that if orientation and directionality is required in this process, it may be sought in a double trajectory at once away from and towards – learning from our past mistakes, coupled with collectively produced ideas of and for a different future.

However, looking at our built environment, we realise that much of what we see is produced and researched as 'matters of fact', rather than 'matters of concern'. This includes the regulatory frameworks, the financing instruments, as well as the management and administration of the built environment. I have suggested that within the architectural professions there is a tendency to defining the professionals' work in terms of optimisation and 'problem solving' according to their own narrowly defined terms. This tendency is shared and reproduced by the many clients, be they individuals, corporate or public-institutional, who hire and pay for experts to solve problems, and to work on optimisation and efficiency in the service of profitability. Accordingly, current research conducted in Germany on mid-20th century housing tends to be focussed on restructuring, marketability, energy efficiency, optimisation of floor plans and standards of comfort. Where housing corporations, the building industry and the federal governments act as the main clients and sponsors of this research, agendas are predefined, economic questions foregrounded, and power relations and political questions excluded – or at least uncritically reproduced. This research can be classified as demand-driven research. It receives its strength through the narrow frame applied to the broad field of housing. Without questioning the merits or justification of such research, we should not expect them to go too far beyond the specific requirements and agendas of the clients. As a consequence, truly challenging and refreshing perspectives on mid-20th century housing seem to be the exception. There is the danger of the work of architects and urbanists being reduced to mere problem solving and the production of rigid 'matters of fact'. I have suggested that if we wish to work without pre-defined concepts and pre-defined problems, different research approaches will need to be developed.

Furthermore, I have argued that many concepts in architecture and urbanism are theorised in such a way that they do not directly relate to the social, or the political, and that disciplinary thinking and the keeping separate of material and social worlds

makes it difficult for concepts to travel and connect. This results in the exclusion of issues and the difficulty of the disciplines in contributing their spatial and other specialist knowledge to public urban debates. Stronger levels in the foregrounding of conflict could in this sense extend the repertoire of conceptualisations in architectural and urban practice, as well as the conceptual range of analysis and theory.

Equipped with design knowledge and the experience of working with contradictions and difficult problems, architects and urbanists are in a good position to raise critical questions and engage in controversies. The disciplines could put greater emphasis on their expertise in problem detecting, identifying, spatialising. If the ways architectural and urban problems are defined were to include more of the debatable 'matters of concern', architectural and urban discourses could engage with questions from different perspectives, be more inclusive, and address issues in such a way that they can be of broader concern.

Emphasising the ambivalence and controversy associated with the notion of redundancy, the new concept is intended to contribute to ongoing controversies – not in the sense of offering solutions, but in the sense of opening up new perspectives that may be of use if we wish to think about architecture and the urban differently. The research project is conceived as an invitation to think and debate about, as well as actively engage with the specifics of the urban and of cities.

In this book, I have argued for architectural and urban research to further extend their range of enquiry, to explore more systematically the relationships between human and non-human actors, between collective action and the material world, between discursive controversy and space-generating processes. I have brought together criticisms that raise doubts as to the usefulness of constructing intellectual and institutional boundaries when engaging with urban issues. I have argued for an approaching to the urban as open construct, because of and despite the multiple mechanisms and interests that work towards its closure. With this research project, I have generated new questions by means of connecting architectural and urban theory to discursive arenas and to situations "where the action is" (Goffman 1967; Dellwing and Prus 2012, p.9) and in this way attempted to push the limits of what we can 'see' in the city. However, I have also suggested that adding to architectural and urban enquiry an analysis of process and social action is not without risk, for it raises specific methodological difficulties and has to withstand the criticisms of different disciplines. I have pointed up the issue that research conducted under the premise of openness necessarily leaves residues of unaddressed problems, and that in this sense it cannot be exhaustive or systematically complete. Nevertheless, I believe that this has been offset by the chance to develop a richer, and thicker understanding of urban and architectural reality.

I conclude this research project with the contention that architectural and urban work matter, and that, on the grounds of being entangled with all other productions humans conceive to change themselves and structure their worlds, should therefore be regarded as 'matters of concern'.