

Mixed-Methods Monitoring of Large-Scale Urban Development Projects: The Case of Lake Phoenix in Dortmund-Hörde

Susanne Frank/Verena Gerwinat/Ulla Greiwe/Jörg Peter Schmitt

1. Introduction: Monitoring Approaches in Urban (Development) Research

Although the observation and evaluation of socio-spatial developments have long been part of (urban) policy and (urban) planning, and thus also of metropolitan research, the focus and methods of systematic monitoring of programs and projects have only gained increased attention over the last two decades. Hanusch (2018, 1563) describes spatial monitoring as “the collection, evaluation, interpretation, and provision of relevant data/indicators as a basis for decision-making” that is “intended to provide information on the actual development of predicted effects”.¹ In urban and regional development, monitoring exists, for example, in the areas of general spatial monitoring, urban development, the environment, sustainability, and climate change. Most recently, the implementation of the United Nations’ “New Urban Agenda”, which requires cross-level monitoring systems, has led to discussions on content and methodology in urban and spatial monitoring (BBSR 2021). For all of these areas, monitoring is based on solely quantitative approaches that work with statistical data and indicator sets.

Large-scale urban development projects have also been on the agenda of urban (development) policy (e.g., BMVBS 2011; 2012) for about as long. These often involve the construction of “new kinds of neighborhoods” (BMVBS 2011, 6) on industrial sites that have become fallow land in the course of structural change. In the worldwide competition between locations unleashed by globalization, these projects are intended to attract attention and provide an image boost; they (re)present the city to the outside world (Adam 2012, I). Therefore, it is hardly surprising that studies on the effects of large-scale urban development projects often focus on the change in the cityscape or on the image effect (Chilla et al. 2019/2020, 63). In contrast, very few studies also observe the long-term and inward impact of such projects, that is, on the local or regional environment.

1 All translations from German sources are ours unless stated otherwise.

Moreover, impact studies of urban development programs and large-scale projects usually have an evaluative character (see, e.g., BMI 2021). Typically, the aim is to compare expected and actual effects or to examine means–ends relationships. Evaluations thus frequently serve to assess implementation and success. They are necessarily retrospective. In addition, they are usually “sectoral” and “selective”, that is, focused on specific (technical) questions (Chilla et al. 2019/2020, 64).

Monitoring, by contrast, is “conceived more openly” (Chilla et al. 2019/2020, 64). It aims to “keep a whole range of possible developments ‘in mind’” and takes “more of an accompanying ‘real-time perspective’” (ibid.). There is, with good reason, no established blueprint for monitoring large-scale urban development projects. The approaches, forms, and methods always depend on the case under consideration: the function of the monitoring, the respective knowledge objectives, and the specific local and regional context in which the “new neighborhoods” are embedded (Chilla et al. 2019/2020, 64f.).

A “fundamental problem” of open, ongoing impact analyses that accompany large-scale urban development projects is that at the start of monitoring, “it is not predictable which topics will turn out to be particularly relevant in the long term” (Chilla et al. 2019/2020, 66) and which ones will not. At the same time, (many) impacts must not be considered too early, “because a well-founded assessment depends on the maturity of the project” (BMVBS 2011, 16). However, all contributions on this topic agree that a longer, thematically open, comprehensive, and meaningful accompanying observation is extremely costly and resource-intensive. To limit the effort, Chilla et al. (2019/2020, 65f.) therefore suggest formulating plausible “spatial postulates” and then testing them empirically. By this, they mean formulating (hypo)theses about probable or possible developments in different areas (e.g., media discourse, traffic, the real-estate market) that may emanate from the large-scale urban development project. These postulates are then to be used to pragmatically derive a “medium breadth’ of perspectives and indicators” that are to be continuously collected in order to (partially) confirm or refute the “spatial postulates” at some point (Chilla et al. 2019/2020, 65f.). Thus, this multisectoral approach also follows a quantitative and deductive (i.e., hypothesis-testing) research logic.

We chose a different path. In this paper, we present a multidimensional monitoring approach that aims to observe and interpret the effects of a large-scale urban development project by using a qualitatively grounded mixed-methods research concept. It was successfully tested on the Phoenix project in Dortmund-Hörde.

2. Methodological Considerations

A monitoring system that is intended to record the effects of a major urban development project in as many dimensions as possible, but which are not fully known in advance, must be designed to be long-term and open. It must allow the collection and analysis of different data using different methods.

Long-term study. Desired or feared changes as a result of large-scale urban development projects do not occur overnight but rather develop slowly, over years or decades.

Thus, observing and interpreting change in a neighborhood and its significance requires planning an unusually long study over many years. “Longitudinal research serves two primary purposes: to describe patterns of change and to establish the direction [...] and magnitude [...] of causal relationships” (Menard 2004, 597).

Creation of data repositories. In order to be able to determine and describe changes over time, data are needed that allow comparative before/after-analyses. This can be data collected at intervals (i.e., at two or more different points in time) or continuously collected ongoing data for which comparison points in time can be selected depending on the question. In addition, it should be possible to establish and document connections between processes or events in one area and subsequent reactions in other areas (e.g., an artistic project triggers developments that ultimately lead to the amendment of a development plan). This requires the compilation of source materials of various kinds. It is therefore necessary to create diverse data pools, although it is not always known in advance whether and when the respective data will be needed for which analyses.

General qualitative design. The overall design of the monitoring approach presented here follows a qualitative logic. In this, it differs from most monitoring projects with which we are familiar. The open-ended questions (see section 4) require an open, explorative, nonlinear research process in which phases of (re)conceptualization, data collection and analysis, and in-depth interpretation are repeatedly intertwined in a flexible manner to be able to consider new content-related findings or new events or developments in the field. In addition, the research is conducted without any systematic prior knowledge or theoretical assumptions to be verified; generalizable theoretical and empirical statements are to be obtained gradually, that is, during the research process as the diverse source material is analyzed and referenced.

Mixed-methods research. A mixed-methods approach is suitable when the aim is to capture a multifaceted object of study, one that is also subject to change during the research, in the most complex way possible and from different perspectives (Burzan 2016, 9). We understand “mixed methods” to be

the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purpose of breadth and depth of understanding and corroboration. (Johnson et al. 2007, 123)

Within the monitoring approach, qualitative and quantitative instruments are combined in a manner appropriate to the subject matter, that is, along the respective research question of interest. In doing so, we assume that “all methods can only capture sections of the empirical reality of interest, have different strengths and weaknesses, and can therefore complement each other” (Hense/Schork 2017, 360). For us, however, mixed-methods research also means, to the extent possible, always relating the data obtained from different sources and by different means to one another in such a way that they not only complement one another but can also challenge or even contradict one another. For example, if we observe that lively discussions about gentrification around Lake Phoenix flare up periodically, but at the same time the statistical data do not provide any reliable indications of significant rent increases in or even displacement from the district, there is obviously a discrepancy between subjectively perceived and objec-

tively verifiable changes. Such observations are particularly stimulating and challenge common interpretations (e.g., Frank 2018; 2021).

3. Setting the Context: Dortmund's Phoenix Project

In 2000, the Dortmund City Council unanimously set the course for a spectacular development project that was to symbolize the city's radical break with its coal and steel industrial past: in the Hörde district, only about five kilometers from the city center, a completely new urban area was to be created on the huge, approximately 200-hectare site of the former Hoesch and ThyssenKrupp blast furnace and steel mill: on one side would be the Phoenix West technology park, on the other the – according to its own promotional materials – “future residential, service, and leisure paradise” of Phoenix East with around 2,000 residential units around the artificially created Lake Phoenix (quoted in Frank/Greiwe 2012, 575). The overall project also included Phoenix Park, a green corridor with industrial vegetation structures and some abandoned industrial facilities.

The highly symbolic Phoenix project was the flagship of the *dortmund-project*, a ten-year plan aimed at repositioning the city as a competitive location in the global economy for the leading growth sectors of information and telecommunications technology, nanotechnology, microsystems technology, and logistics. The prerequisite for this was a significant improvement in the quality of life in the city to become an attractive (residential) location for the companies and their qualified employees.

The Phoenix project and its two subareas embodied these ambitions like no other project before it. At Lake Phoenix, Dortmund's “setting off toward the shores of a new era” (Stadt Dortmund 2015) was to be made visible and tangible – both literally and figuratively. The material and symbolic significance of the project is also explained by the fact that the Hörde district is both the cradle and grave of Dortmund's heavy industry: the first steel mill was built here in 1841, and the last one was shut down in 2001. As a result, the working-class district, which for a long time was one of the most ecologically devastated places in Germany, was particularly shaped by unemployment and poverty. The Phoenix project was therefore also intended to help halt or reverse the district's decline. The lake and its surroundings were to create urgently needed green spaces and open spaces; the upscale residential complexes were to attract “stable” groups of residents; the local economy was to profit from their purchasing power; the newly attracted companies were to create jobs; and Hörde as a whole was to “become a ‘strong part’ of Dortmund again” (Stadt Dortmund/Stadtplanungs- und Bauordnungsamt 2012, 3). Ultimately, the spectacular conversion project was intended to make Dortmund's transformation into an innovative service metropolis “characterized by high quality in working, living, leisure, and environment” (Ellwein/Mai 2016, 152), one that was widely visible and would in this way contribute significantly to the much-desired change in image. In retrospect, Dortmund's lord mayor summed up the outstanding importance of the project in terms of urban development policy as follows: “We were faced with the strategic question: how do we provide Dortmund with a new narrative? Phoenix, the ‘model project of structural change’, is the answer” (quoted in Nellen/Zibell 2016, 56).

Just as Phoenix was to become the beacon of the “new” Dortmund, the working-class district of Hörde, home to the “Hoeschians”, embodied the “old” Dortmund – the industrial past that city leaders were so keen to leave behind. Even before the groundbreaking ceremony, it was foreseeable that Hörde would become a place of sharp contrasts and pronounced social differences. We assume that it was specifically the immediate proximity of rich and poor, past and future, depreciation and appreciation, all induced by planning, that sparked the immense (supra-regional, even international) interest in this project (Frank/Greiwe 2012).

In 2011, the lake flooding and public infrastructure measures were completed; the commercialization of the land was successful; and the first residential occupancies and the start of recreational use around the lake were announced for 2012. Soon followed the first voices to express concern about gentrification processes in old Hörde (Schneider 2008; Evert 2011).

4. Radiation Monitoring

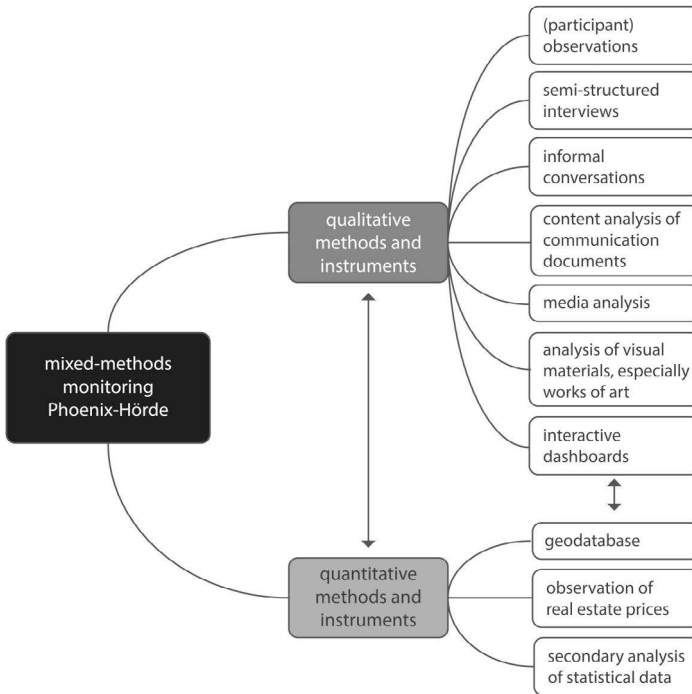
Among the questions that we asked ourselves were, *how will the Phoenix project radiate outward to old Hörde?* (This explains the title of our impact research.) Will it fulfill the city’s many hopes? In which areas will it succeed or fail? What unintended or undesired effects will it have? How do the various social groups and committed actors in the district perceive its transformation? How is it seen and evaluated from the outside? Which social groups can profit from the developments and which cannot? Which developments might ignite conflicts and how will they be resolved? How will established residents and newcomers live together? Will the gentrification processes predicted by many actually take place? And in general, how will this particular empirical case fit into the current state of social science urban research on topics such as structural change through lighthouse projects, middle-class-oriented urban development, social polarization and segregation, new-build gentrification, and so on?

These questions of ours were soon supplemented by a normative concern. Early on, our observations showed the following: in their absolute determination to tell a flawless success story of having mastered structural change with the Phoenix project, Dortmund’s city leadership was rarely willing to deal with critical questions, concerned voices, ambivalent feelings, or the stories of those who might benefit less or not at all from the Phoenix project. At the time, it was mainly artists and journalists who voiced such perspectives. Against the backdrop of these observations, our research has paid special attention to the plurality of perceptions, positions, and experiences in this far-reaching transformation process.

5. Methods Applied

Quantitative data are particularly suitable for describing (objective) changes over time. For this purpose, we have used small-scale statistical data on socio-demographics of the population of Hörde, on their voting behavior, and so forth, which are provided by

Fig. 1: Overview of the methods used in our “radiation monitoring”



the Statistical Office of the City of Dortmund. Especially important for our topic is the change in local rents and purchase prices. We have surveyed these at regular intervals in cooperation with the *InWIS – Institute for Housing, Real Estate Management, Urban and Regional Development* in Bochum on the basis of specially prepared data from the real-estate brokerage platform *ImmoScout24*.

Possible upvaluation processes in “old” Hörde would be reliably indicated by changes in retail, commercial, and service structures as well as by changes in the condition of buildings (renovation, modernization, [luxury] refurbishment). Since such data are not available on a small scale, we collected them ourselves. For this purpose, we defined an area adapted to the research question. The selected area includes the streets bordering the lake to the north and south, the nearby town center of Hörde, and some residential areas south of the railroad line that crosses the district.

In 2012, we recorded the structural conditions and the kinds of use (differentiated by floor) of all buildings located in the area for the first time in an elaborate standardized process. In addition, the exterior of each building was documented photographically. In 2018, we repeated this survey. The survey results were digitized and transferred to a specially created *geodatabase* using official address records, in which the photographs were firmly assigned to the individual building records (fig. 2). The results were checked and adjusted (including individual follow-up surveys).

who have since moved in and the long-established former working-class residents. (We do not consider these two groups to be homogeneous!) Therefore, we took care to recruit people from the group of lakeside residents living in different types of housing (single-family homes in the ‘front’ rows of the lake, condominiums in apartment buildings) and in different living situations (families with children in the household, couples without children, employees and retirees) as interview partners.

Recruiting interview partners among the long-established residents proved more difficult than among the newcomers. To get in contact and increase the chances of an interview, we approached people who had made statements to the local media about change in the district. As a result, the long-established residents whom we interviewed were usually particularly committed residents or civic actors who have lived or have been involved in Hörde for a long time.

However, this meant we were unable to reach many other groups living in the district. The well-known difficulties in accessing population groups with migrant roots and from educationally disadvantaged backgrounds due to a lack of language skills and socio-cultural distance also affected our project. For example, despite repeated efforts, we could not persuade further members from the comparatively large Turkish community in Hörde to take part in an interview.

Informal conversations proved to be a much more suitable way of reaching such long-established residents. These “conversations with purpose” (Burgess 1988, 153) usually arose unplanned and spontaneously during chance encounters but proved to be immensely productive. In our experience, this was especially true for hairdresser visits and cab rides. Two visits to different salons, for example, revealed that the hairdressers in each case were longtime residents of Hörde. In both cases, we gained vivid and detailed insight into the ambivalent feelings that the socio-spatial transformation in Hörde has evoked among many long-established working-class families of Turkish and German origin. In several conversations with former steelworkers who now drive cabs, we also encountered a sense of alienation (Frank 2021).

Unlike formal interviews, informal conversations take place spontaneously, in an unprepared fashion and an everyday context, and therefore often yield “more authentic data, where less performativity is involved” (Swain/Spire 2020). There is also no distraction and distancing through formalities such as recording the conversation with a recording device. These informal conversations were documented afterwards from memory. However, since the interviewees did not normally give their consent to participate in the research project, the information obtained must be handled with special care.

We also gathered important field information through *participant and occasionally passive observations*. Over the years, we attended a variety of urban development events such as panels and other discussions, “neighborhood labs” or “citizen dialogues”, and many more. In this way, we were able to gain various insights into the neighborhood-related concerns and interests of long-established and new citizens as well as into interactions between these groups and with representatives of the city. We also used such occasions to recruit interlocutors for formal interviews and for many informal conversations at the margins of the events. In addition, our participation in official lake tours

offered by the city of Dortmund repeatedly provided us with information about how the city leadership would like to see its prestigious project presented to the outside world.

A final and at the same time particularly revealing object of systematic participant observation was the series of “citizen dialogues” that have been held regularly since December 2018, moderated externally, and conducted with great effort, to which all new lakeside residents were regularly invited by the city at intervals of three months. Complaints about noise, litter, safety, order, and traffic problems in the new lakeside neighborhood were personally received by the mayor and demonstratively passed on in the form of specific work assignments to the numerous present heads of the relevant municipal departments. At the subsequent events, the latter had to give a public account of the completion status of their assignments. The citizen dialogues show with almost unparalleled clarity the undivided attention and preferential treatment given by the city leadership to the new citizens at Lake Phoenix and their interests and sensitivities.

Survey and analysis of a wide variety of communication materials. As explained at the outset, the Phoenix project has played a key role in the city’s policy of structural and image change. For this reason, we were interested in all “official” word, image, and sound materials with which the city’s leadership has disseminated its narrative of the “New Dortmund”: official documents, maps, homepages, marketing brochures, books and videos, published interviews on the topic, and much more.

In addition, we collected and analyzed the diverse – approving, differentiating, critical, or adverse – reactions to the Phoenix project and its actual or anticipated consequences, which could be observed in a wide variety of analog and digital forms and formats. Three groups of actors have been particularly relevant here.

Since its beginnings, the project has been intensely followed by journalists. Considering the high influence of media coverage on the formation of public opinion, we systematically recorded the former from the very start. The local newspapers and radio stations play a special role here, as they dedicate a great deal of space to developments in Dortmund and endeavor to give different voices in the population and also many experts a chance to have their say. They are also the recipients of readers’ letters. In terms of external perception, national media (newspapers, television stations) are also relevant as information carriers.

In addition, the lake project has inspired an astonishing number of artists to create artworks on the topic. These include photo series, documentary, fictional and biographical (audio) films, paintings, installations, interventions, cartoons, and much more. As creative visual commentaries, individual graffiti or rogue posters by nameless authors were also the subject of our consideration. We classified these artworks in a contextual perspective; that is, we asked about the respective conditions and motives that led to the production and the respective contents or messages of the work as well as about the reactions they triggered in different groups and from different perspectives.

The third group actively accompanying the Phoenix project from a professional perspective consists of natural and social scientists. The former are primarily interested in the water-management and water-ecology challenges posed by the construction and

operation of an artificial lake.² The latter are mainly urban researchers of different disciplinary provenance, who often come to Hörde from outside to conduct empirical research on the social and spatial, material, and symbolic effects of the lake project, including many students. These usually present their findings in unpublished written works that are, however, accessible to us.

With their works, journalists, artists, and scientists also contribute significantly to the production and reproduction of meaning and significance around the Phoenix project. In doing so, the authors of these genres very often let the citizens of Hörde or committed local actors have their say. Hence, their works were also important sources for tracing the positions or moods of the local population (especially over time).

The different forms and formats of communication materials offered excellent databases for content-analytical or rather discourse-analytical evaluations, both individually and especially in combination.

6. The Power of Images

Our analyses have made us aware of the enormous significance of still and moving images as instances of the construction of social reality, which we would like to emphasize again separately in this section. In line with Mitchell (1994, 41) and Bohnsack (2014, 869), we assume that such constructions are not only represented but also constituted by images. The central importance of maps and promotional materials, photographs, and films for the (contested) construction, perception, and interpretation of the Phoenix project supports the observation of an increasing relevance of visual and audiovisual formats for the production of social meaning (Traue et al. 2014, 570). We can give many examples to show interactions between (audio)visual representations and (real) social events and discourses (Akremi 2014, 887). For example, we can determine that the photo exhibition of the former urban planner and photographer Jürgen Evert titled “Press – Clear – Wait – Change: GENTRIFICATION at Lake Phoenix?” in 2011 catalyzed a chain of events and processes that have been followed closely by the media, namely, public discussion events in the context of further exhibitions in Dortmund, which finally led to the amendment of a part of the development plan that now also integrates social housing. Evert’s pictures thus comment on social developments and trigger new ones themselves. The same holds true for the multiple-award-winning longitudinal documentary GÖTTLICHE LAGE [DIVINE LOCATION] by filmmakers Ulrike Franke and Michael Loeken (2014) and the twelve-part mini-soap PHOENIXSEE [LAKE PHOENIX] by Michael Gantenberg and Bettina Woernle broadcast during prime time on public TV (2016 and 2019). Both films focus – with a great deal of humor – on the class antagonisms and the radically different lifestyles of old and new citizens in Hörde and use different creative means (such as camera angles, color scheme, lighting, and equipment) to express their sympathy with the first group without denouncing the second. The broad national response, especially to the documentary and the feature film, also shows the extent to

2 We did not pursue this line of discussion systematically due to our insufficient professional expertise in these matters.

which films are part of everyday social life and can therefore reach many people (Akremi 2014, 887).

7. Reflecting on our own Role as Researchers in the Monitoring Process

Regularly reflecting on one's own role in the field is an important principle of qualitative research. This is especially true for this long-term study, which is dedicated to an object of investigation charged with strong political and symbolic meaning. The longer the research project lasted, the more we became part of the dynamic events we were observing. After the publication of our first article on the significance of the Phoenix project for Dortmund's urban development (Frank/Greiwe 2012), we were already perceived as experts by interested sub-publics and regularly asked to comment. We were interviewed and quoted by journalists and scientists, invited to public lectures and discussion events, and asked by various groups of visitors for guided tours of the city and the lake. In this way, we ourselves became a voice in the discourse, intervening in the field of investigation in many ways. As explained above, this does not contradict our intentions. However, as interest in our research grew, we found ourselves in a situation that was complicated in several ways: on the one hand, we had to constantly rebalance our respective positions on the object of study as observers (distance, external perspective) and participants (proximity, inside insights). On the other hand, and this situation is more serious, we were and still are very often assumed or assigned a certain politically and ideologically motivated stance. Journalists in particular expect us to provide evidence and criticism of the subjectively perceived gentrification processes in old Hörde. However, our data do not support the latter. We did find numerous indications of symbolic but not actual displacement from the neighborhood (as of 2020). Similarly, although we criticize the way in which the city authorities communicatively "frame" or "sell" the lake project to the outside world, we do not have any fundamental criticism of the project itself. These are just two examples of differentiations that we apparently have difficulty communicating, so that we repeatedly see ourselves counterfactually portrayed in the local media and in the field of local city politics as sweeping "lake critics" or even "lake opponents" and occasionally defamed by the city leadership. That this classification of ours has solidified in the public perception over time, we can clearly discern from the various empirical materials. Thus, the role attributed to us on the level of discourse takes on an "objective" character, *nolens volens*. The real problem with these attributions, however, is not our sensitivities in this regard but rather the fact that they make it difficult or even impossible for us to access certain social groups, institutions, and individuals.

8. Selected Results

Although we are still far from having analyzed all of the collected data, we have already been able to gain important insights into various questions by using and combining different methods over a long period of time. With the help of the "hard facts", insights into

the subjective perceptions and evaluations of the change by the old and new residents of the district and by outsiders, as well as insights into the structures and psychologies of community life in the district, we have succeeded in drawing a picture of the change in Hörde that is as broad as it is rich in detail.

The data on rental and purchase price trends show that although housing prices are rising in Hörde, they are in line with the citywide trend. However, the change in rent levels in Hörde is more dynamic than the citywide average (as of 2018). In addition, one can observe a decline in vacancies and the increased implementation of modernization measures. In the commercial sector, by contrast, changes toward higher-quality uses can be observed only very sporadically, as can conversions from commercial to residential uses. Building renovations and new construction are on the rise, especially in the streets bordering the new development area to the north. Numerous homeowners and landowners are directly affected by the increase in land values; they report being regularly contacted by brokers and real-estate companies interested in buying. Although the Phoenix project has partially triggered upvaluation and price increases, on the whole, it is not possible to speak of gentrification in the sense of appreciation processes that lead to the displacement of the long-established population. Understanding why discussions about gentrification nevertheless continue to flare up here requires interpretive methods (Frank 2018; 2021; see also Brown et al. 2019).

How the Phoenix project and its impact on the district are perceived and evaluated depends very much on the respective perspective. From the city's point of view, Lake Phoenix is considered a great success in every way. The "showcase project for industrial structural change" (Wilde 2016, 84) is considered groundbreaking for the transformation of the entire Ruhr region. Critical voices, even if they relate only to parts or individual aspects of the project, are often brusquely dismissed as inappropriate or groundless, or simply ignored. Nevertheless, many of the long-established residents of Hörde look at the lake and the transformation of their district with ambivalence. On the one hand, the lake is welcomed as the "best alternative" for the subsequent use of the steelwork wasteland, the positive effects on the environmental quality are highly appreciated, and the influx of citizens from the upper-middle class is accepted as a necessary development of the district. On the other hand, the project and the city's preferential treatment of the wealthy population make the former workers aware of their own marginalization in the "New Dortmund", which evokes melancholic feelings among many of the longtime residents (Frank 2021). Such emotional states of pain, loss, and discrimination, which find no place in the official city's narrative of the Phoenix project, are in turn discussed and thus represented by journalists and artists, especially in the form of articles, photographs, documentaries, and feature films.

The coexistence of the different milieus is characterized by the newly emerging social hierarchy in the district. Many informal conversations, most of our interviews, and also our observations have shown that there is hardly any social contact between long-established residents and newcomers. Since many newcomers rarely spend time in old Hörde and remain primarily in their immediate living environment by the lake, there is a lack of opportunities for and points of contact. Even at potential meeting places such as daycare centers or the town center of Hörde, the social groups usually keep to themselves. Old and new residents do not live together but rather next to each other. This

once again confirms the findings of international urban research, according to which the spatial proximity of different social classes or milieus does not necessarily lead to social proximity. As opposed to sociological assumptions to the contrary, there are no open social or other conflicts between the two groups (Gerwinat 2020). The decisive factor here seems to be the described ambivalence of the longtime residents toward the project: most residents basically agree with the neighborhood transformation, even if it is not always to their personal advantage.

9. Conclusion: A Proven Transferable Approach

The “Radiation Monitoring Phoenix-Hörde” research project has been designed as a long-term observation of the material and symbolic or structural-spatial, political, social, economic, demographic, and emotional as well as the perceived and actual effects of the Phoenix project on the Hörde district. For ten years now, we have been systematically collecting and collating data on the question of how the “new” Hörde “radiates” onto the “old” Hörde, onto the city of Dortmund, and also beyond. The complex research design – with its basic qualitative orientation and its cornerstones of a) long-term orientation, b) creation of data stores that make it possible to trace developments over time and establish cross-references between different fields of observation, c) a flexible, open-ended concept, and d) a methodologically pluralistic approach – has proven itself in all respects. Today, we have a unique treasure trove of diverse data at our disposal, which we have not yet been able to fully exploit in terms of its potential for analyses and special features. Nevertheless, these data already enable us to draw an empirically well-founded picture of different facets of change in the district as well as the different perceptions and perspectives related to it. Moreover, we can offer explanations and interpretations for existing discrepancies between subjectively perceived and objectively verifiable changes and our own concepts for interpreting neighborhood change and the resulting conflicts. Thus, we provide theoretical and empirical contributions to national and international expert discussions in urban sociology, geography, and spatial planning, which deal with the manifold consequences of large-scale urban transformation projects. At the same time, it is our concern to offer interested local and supra-regional publics as well as the various groups of actors in politics, society, and culture a resilient basis for informed discussions and neighborhood-related action with our data.

Although the monitoring approach described is exceptionally time- and resource-intensive, it has repeatedly rewarded the substantial effort with exciting theoretical and empirical findings and returns. To exploit its full potential, it is highly recommended to start the monitoring of (large-scale) urban development projects early. Furthermore, the immensely important insights that can be gained through (participant) observation and informal conversations are tied to personal presence at the moment of action and can rarely be obtained through retrospective procedures. It is also advisable to carry out an initial survey of the functions and uses of buildings in the spatial environment of a (large-scale) urban development project as soon as it has been announced, because the mere announcement of an ambitious planning project can already trigger effects in the surrounding area.

With this in mind, we will now turn our attention very quickly to the project that is to replace Phoenix as the first flagship of Dortmund's urban development: Smart Rhino. On the centrally located, 52-hectare site of the former *Hoesch Spundwand und Profil GmbH* (HSP), the city of Dortmund is working with the Essen-based Thelen Group to develop a "future campus": an innovative "living, education, knowledge and technology park" that will act as an "incubator and accelerator for solutions in the digital society" (Mertins 2019). With our approach, a field-proven concept for studying its development and the effects on its social and spatial environment already exists.

10. Works Cited

- Adam, Brigitte. "Stadtentwicklung durch Großprojekte? Einführung." Informationen zur Raumentwicklung 11/12 (2012): I–II. http://www.bbsr.bund.de/BBSR/DE/veroeffentlichungen/izr/2012/11_12/Inhalt/izr-11-12-2012-komplett-dl.pdf?__blob=publicationFile&v=1
- Akreml, Leila. "Filme." Handbuch Methoden der empirischen Sozialforschung. Ed. Nina Baur, Jörg Blasius. Wiesbaden: Springer VS, 2014. 887–897.
- Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR) (ed.). Stadtentwicklung durch Großprojekte. Spec. issue of Informationen zur Raumentwicklung 11/12 (2012). http://www.bbsr.bund.de/BBSR/DE/veroeffentlichungen/izr/2012/11_12/Inhalt/izr-11-12-2012-komplett-dl.pdf?__blob=publicationFile&v=1
- Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR) (ed.). Stadtentwicklung beobachten, messen und umsetzen. Spec. issue of Informationen zur Raumentwicklung 1 (2021). <http://www.bbsr.bund.de/BBSR/DE/veroeffentlichungen/izr/2021/1/izr-1-2021.html>
- Bundesministerium des Innern, für Bau und Heimat (BMI). "Monitoring und Evaluierung." 2021. http://www.staedtebaufoerderung.info/DE/Grundlagen/MonitoringEvaluierung/monitoringevaluierung_node.html
- Bundesministerium für Verkehr, Bau und Stadtentwicklung (BMVBS). Stadtentwicklung und Image: Städtebauliche Großprojekte in Metropolräumen. Berlin, 2011. http://www.nationale-stadtentwicklungspolitik.de/NSP/SharedDocs/Publikationen/DE_Ressorforschung/stadtentwicklung_image.pdf?__blob=publicationFile&v=1
- Bohnsack, Ralf. "Unbewegte Bilder: Fotografien und Kunstgegenstände." Handbuch Methoden der empirischen Sozialforschung. Ed. Nina Baur, Jörg Blasius. Wiesbaden: Springer VS, 2014. 867–873.
- Brown, Adam, [...], Susanne Frank [...], Verena Gerwinat et al. Clean Walls = Higher Rents?! Gentrification Debates in Legacy Cities, 2019. <https://drive.google.com/file/d/1XEknwF6slzvQiT2CWyCs7aRq3nSZGY7/view>
- Burgess, Robert G. "Conversations with a Purpose: The Ethnographic Interview in Educational Research." Conducting Qualitative Research. Ed. Robert G. Burgess. London: Jai Press, 1988. 137–155.
- Burzan, Nicole. Methodenplurale Forschung: Chancen und Probleme von Mixed Methods. Weinheim: Beltz Juventa, 2016.

- Chilla, Tobias, Anna Heugel, Franziska Sielker, Georg Glasze. "Monitoring von städtebaulichen Großprojekten: Das Beispiel 'Siemens Campus Erlangen.'" *Mitteilungen der Fränkischen Geographischen Gesellschaft* 65/66 (2019/2020): 63–74.
- Ellwein, Harriet, Hildegard Mai. "Dortmund." *Cities as Engines of Sustainable Competitiveness: European Urban Policy in Practice*. Ed. Leo van den Berg, Jan van der Meer, Luis Carvalho. London: Routledge, 2016. 141–155.
- Evert, Jürgen. "Press – Clear – Wait – Change: GENTRIFICATION am Phoenixsee?" Photo exhibition. St. Georg Church, Lünen, June 2011.
- Frank, Susanne. "Das Phoenix-Projekt und die große Erzählung vom Neuen Dortmund: Diskussionen um 'gefühlte' Gentrifizierung im Stadtteil Hörde." *Urbanität im 21. Jahrhundert: Eine Fest- und Freundschaftsschrift für Walter Siebel*. Ed. Norbert Gestring, Jan Wehrheim. Frankfurt am Main/New York: Campus, 2018. 196–214.
- Frank, Susanne. "Gentrification and Neighborhood Melancholy: Collective Sadness and Ambivalence in Dortmund's Hörde District." *Cultural Geographies* 28.2 (2021): 255–269.
- Frank, Susanne, Ulla Greiwe. "Phoenix aus der Asche: Das 'neue Dortmund' baut sich seine 'erste Adresse.'" *Informationen zur Raumentwicklung* 11/12 (2012): 575–587. http://www.bbsr.bund.de/BBSR/DE/veroeffentlichungen/izr/2012/11_12/Inhalt/izr-11-12-2012-komplett-dl.pdf?__blob=publicationFile&v=1
- Gerwinat, Verena. *Parallelwelten?! Das Zusammenleben alteingesessener und neu zugezogener Bevölkerungsgruppen in Dortmund-Hörde*. Unpublished master's thesis. Dortmund: TU Dortmund University, 2020.
- Hanusch, Marie. "Monitoring." *Handwörterbuch der Stadt- und Raumentwicklung*. Ed. Akademie für Raumforschung und Landesplanung [ARL]. Hannover: Verlag der ARL, 2018. 1563–1575.
- Hense, Andrea, Franziska Schork. "Doing Mixed Methods: Methodenintegrative Ansätze in der Organisationsforschung." *Handbuch Empirische Organisationsforschung*. Ed. Stefan Liebig, Wenzel Matiaske, Sophie Rosenbohm. Wiesbaden: Springer Gabler, 2017. 359–388.
- Johnson, R. Burke, Anthony J. Onwuegbuzie, Lisa A. Turner. "Toward a Definition of Mixed Methods Research." *Journal of Mixed Methods Research* 1.2 (2007): 112–133.
- Menard, Scott. "Longitudinal Research." *The SAGE Encyclopedia of Social Science Research Methods*. Ed. Michael S. Lewis-Beck, Alan Bryman, Tim Futing Liao. Thousand Oaks/London/New Delhi: Sage Publications, 2004. 597–601.
- Mertins, Heike. "Smart Rhino: Ideen für Zukunftscampus auf ehemaligem HSP-Gelände nehmen Gestalt an." 15 April 2019. http://www.thelen-gruppe.com/wp-content/uploads/Smart-Rhino_-Ideen-f%C3%BCr-Zukunftscampus.pdf
- Mitchell, William John Thomas. *Picture Theory: Essays on Verbal and Visual Representation*. Chicago/London: University of Chicago Press, 1994.
- Nellen, Dieter, Franziska Zibell. "Stadtentwicklung und politische Führung: Interview mit Oberbürgermeister Ullrich Sierau und Vorgänger Gerhard Langemeyer." *Phoenix: Eine neue Stadtlandschaft in Dortmund*. Ed. Dieter Nellen, Christa Reicher, Ludger Wilde. Berlin: Jovis, 2016. 56–61.

- Rubin, Herbert J., Irene S. Rubin. *Qualitative Interviewing: The Art of Hearing Data*. Thousand Oaks: Sage Publications, 1995.
- Schneider, Johannes. "‘Phoenix See’: Wenn er erst mal kommt." *Frankfurter Rundschau* (11.11.2008). <http://www.fr.de/kultur/wenn-erst-kommt-11576317.html>
- Stadt Dortmund. *Lebenswert – der PHOENIX See für Dortmund*. Dortmund bricht auf zu neuen Ufern. 2015. <http://www.phoenixdortmund.de/de/fakten/phoenixsee.html>
- Stadt Dortmund/Stadtplanungs- und Bauordnungsamt. *Begründung (Teil A) zum Bebauungsplan HÖ 252 – PHOENIX See, Teilbereich A, Teil I – Seequartier*. Satzungsfassung. Dortmund, 2012.
- Swain, Jon, Zachery Spire. "The Role of Informal Conversations in Generating Data, and the Ethical and Methodological Issues They Raise." *Forum: Qualitative Sozialforschung/Forum: Qualitative Social Research* 21.1 (2020): Art. 10.
- Traue, Boris, Lisa Pfahl, Lena Schürmann. "Diskursanalyse." *Handbuch Methoden der empirischen Sozialforschung*. Ed. Nina Baur, Jörg Blasius. Wiesbaden: Springer VS, 2014. 565583.
- Warren, Carol A. B. "Qualitative Interviewing." *Handbook of Interview Research: Context & Method*. Ed. Jaber F. Gubrium, James A. Holstein. Thousand Oaks/London/New Delhi: Sage Publications, 2001. 83–102.
- Wilde, Ludger. "PHOENIX im gesamtstädtischen Kontext. Strukturwandel und die Strategien zukunftsorientierter Stadtentwicklung." *Phoenix – eine neue Stadtlandschaft in Dortmund*. Ed. Dieter Nellen, Christa Reicher and Ludger Wilde. Berlin: Jovis, 2016. 82–87.