Tim Freytag · Douglas L. Lauen
Susan L. Robertson
Editors

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Editors
Tim Freytag
Institute of Environmental Social Sciences and Geography
University of Freiburg
Freiburg, Germany

Douglas L. Lauen
Department of Public Policy
University of North Carolina at Chapel Hill
Chapel Hill, NC, USA

Susan L. Robertson
Centre for Science and Policy
University of Cambridge
Cambridge, UK

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Contributors

Kyle Abbott Department of Public Policy, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

Tim Freytag Institute of Environmental Social Sciences and Geography, University of Freiburg, Freiburg, Germany

Ulrike Gerhard Department of Geography, Heidelberg University, Heidelberg, Germany

David Giband Department of Geography and Planning, University of Perpignan, Perpignan, France

Anna Juliane Heinrich Institute of Urban and Regional Planning (ISR), Technische Universität Berlin, Berlin, Germany

Michael Hoelscher Chair in Higher Education and Research Management, German University of Administrative Sciences Speyer, Speyer, Germany

Douglas Lee Lauen Department of Public Policy, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

Brian L. Levy Department of Sociology and Anthropology, George Mason University, Fairfax, VA, USA

Editha Marquardt Chair in Higher Education and Research Management, German University of Administrative Sciences Speyer, Speyer, Germany

Angela Million Institute of Urban and Regional Planning (ISR), Technische Universität Berlin, Berlin, Germany

Samuel Mössner Institute of Geography, University of Münster, Münster, Germany

Julia Nast Phineo, Berlin, Germany

Matías Nestore Homerton College, University of Cambridge, Cambridge, UK

Susan L. Robertson Centre for Science and Policy, University of Cambridge, Cambridge, UK

Chapter 1
Space, Place and Educational Settings: An Introduction

Tim Freytag, Douglas Lee Lauen, and Susan L. Robertson

Schools are one of the few institutions through which all individuals in most countries around the globe are legally obliged to pass. Within societies and during the course of an individual's life, access to and participation in education are critical for humans to develop and societies to flourish. It is a key institution, alongside the family, in the socialization of individuals, and is crucial to creating social order in almost all societies.

One can therefore say that educational institutions, such as schools and universities, but also non-formal and informal education settings, which include private tutoring and what Mark Bray (2009) calls shadow schooling, shape the trajectories and experiences of everyday lives. As a set of formal institutions—from pre-school to higher education—educational actors are engaged in social and cultural production through their policies, programmes, and practices, which pave the ground for realizing futures.

As stated in the United Nations Sustainable Development Goals, education is considered a universal human right. In many developed economies, young people spend a substantial part of their lifetime as children and adolescents attending educational institutions, though not all are in high quality schools. By way of contrast, there are still some 263 million young people out of school worldwide, so the globe is a long way from meeting its lofty goals.

T. Freytag (✉)
Institute of Environmental Social Sciences and Geography, University of Freiburg, Freiburg, Germany
e-mail: tim.freytag@geographie.uni-freiburg.de

D. L. Lauen
Department of Public Policy, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

S. L. Robertson
Centre for Science and Policy, University of Cambridge, Cambridge, UK

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Yet education is also a positional good (Brown, 2000), and as societies have embraced ideologies to link education more closely to global competetiveness, important differences have emerged between families and communities regarding what education will entitle them to relative to others with less education. For some, education provides them with qualifications, empowerment, social integration, and orientation with the aim to open up perspectives for the professional career and well beyond. However, it has become a matter of major concern to both governments and to the multilateral agencies, like the OECD and UNESCO, that educational opportunities are not evenly distributed within societies. The pandemic, which has affected all nations around the globe, has laid these inequalities bare. All in all, existing social inequalities are reflecting in and potentially reinforced by different opportunities to participate in education and the varying degrees of educational success.

The conductors of the OECD's Programme for International Student Assessment (PISA) and of numerous other studies show that students' competences and qualifications differ considerably. Although these differences are partly linked to their individual abilities and prerequisites, they also depend on the educational institutions' financial and personnel resources, such as the qualifications of the teaching staff, the annual education budget, and local labor markets. However, differences in the students' educational achievements cannot be explained solely by their learning abilities and the institutions' equipment, because extra-individual factors from families and other non-school environments also play important roles. There is overwhelming evidence that students from more affluent families and with parents holding higher educational degrees tend to have clear advantages over those from educationally deprived and less affluent families (Coleman et al., 1966; van Zanten, 2005).

It could be argued that various actors and stakeholders in educational policy and educational planning should share the responsibility of setting up and reshaping the conditions of education as a matter of social justice. Yet private actors increasingly see education as a source of profit, particularly when they are able to secure a toe-hold in the education market. Education is also a site of contestation, as social classes strategize getting ahead in the race to access better jobs and more secure futures. In this ongoing process, actors articulate competing ideas, viewpoints, and ideologies in debates over which goals should be prioritized, which measures should be taken, and what the veracity of evidence is. It is highly contested which interventions are needed and to what extent financial resources can be allocated for education. As one can observe in many places, this leads to numerous conflicts and related negotiation processes involving not only politicians but also civil society actors, parents, and students, as well as various other stakeholders and decision makers. The great efforts various actors have undertaken to actively engage in such negotiation processes underline education's particular social and political importance as an arena to make key decisions and set the course for present and future developments.

With this book, we argue that researchers of education may frame their efforts too closely if it they remain within the realm of a classroom or educational institution. In many cases, it is important not to neglect the broader context of educational

settings, taking into account the prevailing social, political, and economic conditions as well as the notions of space and place (Massey, 2005). Accordingly, we understand educational settings as the broader framing of education, which includes the out-of-school environment, neighborhoods, and institutional arrangements, as well as the agendas of the multilateral and corporate world. Education literally takes place in the neighborhood and educational landscapes are embedded in local communities, although they are exposed to and are part and parcel of educational policies and the ongoing dynamics of transformation at regional, national and international scales. Such profound changes in the education sector have occurred as a result of New Public Management (NPM) reforms and related programs and initiatives over the past few decades (Tolofari, 2005).

As part of the *Knowledge and Space* series, this book's authors follow a comprehensive approach bringing together a set of contributions reflecting various disciplines with their methodologies and theoretical backgrounds. The main idea is to create an open arena for exchange and cooperation, drawing upon and going beyond the ongoing research activities in geographies of education (Butler & Hamnett, 2007; Hanson Thiem, 2009; Holloway & Jöns, 2012). Complementing other volumes in the *Knowledge and Space* series, such as *Geographies of Schooling* (Jahnke, Kramer, & Meusburger, 2019), we explore the nexus between education, space, and place. The majority of the chapters assembled in this volume are based on papers presented on the occasion of the Knowledge and Space Symposium on *The Role of Socio-Environmental Settings for Learning and Educational Attainment* that was held in Heidelberg in September 2017. In addition, we decided to include a few more selected contributions to enlarge the scope of the research fields that are represented in this volume.

Taking up the example of Heidelberg in southwestern Germany, Gerhard, Hoelscher, and Marquardt (2021) adopt a sociospatial perspective to better understand the interplay between the knowledge society, educational attainment, and the unequal city. The authors point out that social and educational inequalities are produced and reproduced by educational institutions in a university town that is referred to as a "knowledge pearl" because it is highly competitive in the knowledge economy. They use the case of Heidelberg to underline that making knowledge and education a local priority does not necessarily prevent some students from being left behind.

Anna Juliane Heinrich and Angela Million (2021) address the question of how initiatives in urban development and urban planning can contribute to reducing educational inequalities. They draw upon Campus Rütli in Berlin and the Morgenland Neighborhood Education Center in Bremen-Gröpelingen to sketch out the implementation of educational landscapes with the support of funding programs and initiatives. With these two examples from Germany, they show how socially deprived neighborhoods can benefit from implementing and rearranging local educational landscapes.

In their chapter, Douglas Lee Lauen and Kyle Abbott (2021) examine how variation in charter school effects test-score achievement in the United States. Charter schools challenge the notion that a centralized government can and should determine the practices and curriculum in common schools that all students should attend. Therefore, they provide an interesting case study in how institutional

settings vary across countries (and states within countries) that determine which types of schools are permitted to exist. In addition, this chapter's authors highlight the variable effects across studies, some with very few schools of the same type in one region, some with many schools of different types from many regions.

In another chapter based in the U.S., Brian L. Levy (2021) explores the question of the effects of neighborhood setting on educational attainment. Drawing on sociological and life course theory, he theorizes about the heterogeneous effects of neighborhood socioeconomic status on student educational attainment. Specifically, he posits that neighborhoods can contribute to cumulative advantage, cumulative disadvantage, advantage leveling, and compensatory effects. This chapter serves as a reminder that settings can have complex and varied effects on youth.

Matías Nestore (2021) examines the complex relationship between pedagogical practices and marginalized youth in the Quartieri Spagnoli (QS) in Naples. As an urban space, the QS is a paradoxical mix of wealth and poverty, advantage and disadvantage, a formal economy and an informal one, which emerge out of the ways in which global neoliberal politics shape places and their politics. Nestore (2021) draws on an ethnography of marginalized youth in the QS, and argues that teachers' pedagogies to a large extent contribute to these excluded youths' marginalization. He concludes by suggesting that educators and policymakers need to take into account the production of place-based identities as a matter of social justice.

Tim Freytag and Samuel Mössner (2021) use their contribution to explore the fragmented geographies of education in Freiburg, Germany. The authors trace back the implementation of an educational landscape and network in Freiburg that includes monitoring and counseling services and was funded within the framework of a national program. Although the organizational structures implemented are designed to support the work of the educators and to enhance the students' educational participation and success, it proves difficult to establish a support system that efficiently responds to the needs of students from less privileged family backgrounds and that allows the reduction of persisting educational inequalities.

David Giband (2021) sets a focus on schooling for the deprived gypsy population in the inner-city neighborhood of Saint-Jacques in Perpignan, France. Adopting a territorial approach, he analyzes the complex relationship between school education and the sociocultural environment of a marginalized group. Moreover, the author takes a critical stance towards a local experiment that was part of an educational reform, whose actors aimed at setting up inclusive cultural schools to transform individual and collective attitudes towards schooling among the gypsy families in Saint-Jacques.

Julia Nast (2021) addresses the question of how neighborhoods shape the organizational practices of teachers and other educational professionals. Combining a Bourdieusian perspective and new institutional theory, she draws upon interviews and observations from two schools in Berlin to explain how local settings become important as social, symbolic, and administrative units. Consequently, institutional changes can take various forms and play out differently in different neighborhoods. In other words, neighborhoods as such contribute to the production and persistence of educational inequalities.

As Susan L. Robertson (2021) shows, however, despite places mattering, actors in contemporary modes of governing education tend to set aside, and ignore, the

importance of place-based social inequalities. In short, she argues, central governments and international agencies, like the Organization for Economic Cooperation and Development, tend to flatten socioeconomic differences in places, imposing instead a new kind of difference in schools, one based on vertically organized ordinal rankings. This approach to governing sets up a competition with winners and losers in a social mobility race that has its own pathologies.

Complementing each other, the authors of this volume's chapters illustrate and analyze the complex interrelations between space, place, and educational settings. Several contributors underline that educational inequalities can be aggravated by structural barriers shaping the students' out-of-school environment. On the one hand, other authors focus on the scope for action that students, parents, teachers, and stakeholders can utilize to improve and enhance educational participation. Public and private programs, networks, and initiatives at various geographical scales widely support such activities.

We present this volume as an invitation to explore and critically reflect the interplay between space, place, and educational settings that is marked by complexities, ambivalences and controversies. Scholars, students, and practitioners alike can use this book as a resource. Nevertheless, the volume does not provide easy answers or solutions. The chapters' authors point at particular cases and examples to be studied from specific methodological and theoretical perspectives. Owing to this approach, a few disciplines and important fields of research, such as non-formal and informal learning, remain underrepresented. Moreover, the contributions' geographical scope is limited due to their authors' focus on the global north. Consequently, we suggest taking this volume as a starting ground to be deepened, extended, and transferred in the course of ongoing empirical work and theoretical thought and debates.

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Chapter 2
Knowledge Society, Educational Attainment, and the Unequal City: A Sociospatial Perspective

Ulrike Gerhard, Michael Hoelscher, and Editha Marquardt

Modern society is increasingly described as a "knowledge society" (Stehr & Meja, 1984), or, from a more limited perspective, as a "knowledge economy" (Sörlin & Vessuri, 2007). Following from that, education, as a process of facilitating learning and knowledge acquisition (see Fröhlich & Gerhard, 2017), has gained in importance for the individual as well as for society, since educational achievements are strongly influencing job opportunities and the ability to partake in public, social, and political life. Education, however, is acquired in a certain socioenvironmental setting that has a decisive impact on educational opportunities and achievements. In the case of formal knowledge, organizations such as kindergartens, schools, universities, and other institutions of higher education play a crucial role because they are understood as key institutions in knowledge-driven societies.

In this paper, we argue that the socioenvironmental setting influencing education is strongly related to the urban context. It is the city itself, with special atmospheres of learning and education, a manifold distribution of and access to educational institutions, the existence of different neighborhoods and specialized city quarters, as well as a diverse range of protagonists in the field of informal learning that creates an educational environment highly relevant for knowledge production. In the general discourse urbanity and the urban milieu are often regarded as seedbeds for the production of creative ideas, smart development, and knowledge invention. Even more, the condensed presence of educational organizations, creative industries, and research-oriented industries is thought to stimulate prosperous urban development. Researchers, most dazzlingly Florida (2002), but also more evidence-based scholars (e.g., Gabe, Abel, Ross, & Stolarick, 2012; van Winden, van den Berg, & Pol, 2007),

U. Gerhard (✉)
Department of Geography, Heidelberg University, Heidelberg, Germany
e-mail: u.gerhard@uni-heidelberg.de

M. Hoelscher · E. Marquardt
Chair in Higher Education and Research Management, German University of Administrative Sciences Speyer, Speyer, Germany

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mainly portray this reciprocal relationship between knowledge society, socioenvironmental settings, and education in a positive light. They accept the city's knowledge sector as the main engine for growth strategies that lure people, companies, and investments. City policymakers deliberately try to foster this relationship by supporting knowledge-intensive industries, hosting educational and research institutions, and thereby attracting creative knowledge workers.

However, the picture might not be as positive as is often claimed. In accordance with several other studies, we contend that urban stakeholders and researchers have often tended to overstate the economic impact of knowledge institutions (Addie, Keil, & Olds, 2015; Siegfried, Sanderson, & McHenry, 2007). Although it is true that knowledge institutions create employment opportunities, these jobs, as well as the related economic effects, do not necessarily benefit the whole urban population. Furthermore, the appraisal of the knowledge society, with its ubiquitous disposition of knowledge that has led to an open, more egalitarian society, increasingly appears to be a myth: Knowledge and education are not available for everybody in the same way. Knowledge-based urban development, and the concept of a knowledge society more broadly, often create new inequalities. Even Florida, once the main proponent of the "creative city," now admits that these creative urban environments are also the most unequal ones (Florida, 2017).

In this paper, we combine a sociological and urban geographic perspective to try to disentangle the assumed positive connotation of the tripartite relationship between education, knowledge-based urban development, and individual well-being. What are the consequences of knowledge-induced urban growth, especially regarding social equity? How do cities with a strong knowledge sector develop in sociospatial terms? What can we learn from an interdisciplinary analysis of the educational system in the city? In order to answer these questions, we connect the debates on urban (re)development, knowledge society, and education by following three conceptual steps. To begin, we outline the concept of knowledge-based development by looking at the involvement of knowledge institutions in urban development from a broader perspective, based on a literature review in the first section of the paper. We then consider the possible disadvantages of the acclaimed growth of knowledge cities in the second section. As a third step, we analyze the role educational systems play in producing such inequalities. For this purpose, we analyze the spatial production of educational success in the city from a cross-disciplinary perspective. We argue that educational institutions play a major role in the marketization of urban space, and, thus, contribute to the increasing urban inequalities inherent to knowledge societies. Subsequently, in the fourth section of this paper, we detail a German case study to empirically support our argument by looking at the city of Heidelberg, which is considered to be a "knowledge pearl" in Germany. This city certainly shows a high overall growth rate and economic stability due to knowledge-led urban development—as the knowledge discourse suggests. At the same time, however, Heidelberg struggles with consistent patterns of inequality that increasingly question this rosy picture. Our case study is drawn from long-term observations in this city, an active involvement in urban planning issues—such as the spatial expansion of the University—as well as the relaunching of an urban growth model. In addition,

we draw on our experience with the operation of the real-world lab Urban Office of Heidelberg that has partaken in sustainable urban development for several years in close cooperation with the International Building Exhibition (*Internationale Bauausstellung*, IBA Heidelberg), the city of Heidelberg, and urban society activists (see Gerhard & Marquardt, 2015, 2017). We contend that such an empirical investigation is a necessary element in any conceptualizations of knowledge-related urban development. In the final section, we draw out some implications of our analysis for the wider concerns that are motivating this edited volume.

Urban Development in Knowledge Society and the Role of Institutions of Higher Education

In post-industrial times, it is common to see knowledge as a fundamental resource for the development of cities. The transition from an industrial to a knowledge society has shaped the character of urbanity and has forced cities into global competition (e.g., Knight, 1995). They compete for creative talent, successful enterprises, financial support, job opportunities, and a better quality of life. In this contest, knowledge-based institutions such as schools, colleges, universities and other institutions of higher education, science and research centers, libraries, hospitals, and research-focused and creative industries all gain increasingly strategic importance for successful urban development (Florida, 2002; Scott, 2006). The support of these branches has become a focal point in local and regional policies (e.g., Anheier & Isar, 2012) and emerged into an important task in urban planning administrations (e.g., Evans, 2009; Fröhlich, 2021).

The provision and management of space for knowledge production, distribution, and integration has thus taken on new significance in recent years (Kujath, 2012; Yigitcanlar, 2009). It involves the supply of additional areas for offices and labs, for knowledge intensive enterprises, for creative start-ups, for institutions of higher education, and for attractive housing for the knowledge workers. A further aspect is the provision of opportunities for the informal exchange of knowledge in order to foster the development of creative milieus (Florida, 2005). Creative milieus are contexts for working and learning, living and perception, as well as cooperation and competition (Matthiesen & Mahnken, 2009; Merkel, 2012). They nurture the innovation-driving, creative, and cultural industries—all of these branches essentially being dependent on knowledge exchange (Kunzmann, 2004; Landry, 2008). Short distances between different organizations, available meeting points, and urban open spaces nourish a creative atmosphere, which then attracts further stakeholders. "Place matters, because a stimulating environment and a talented individual must come together and interact before a creative process can occur" (Meusburger, 2009, p. 98).

This also holds true in view of digitization. Face-to-face contacts can be reduced to a certain extent and the use of home offices is on the rise, but what is lost must be

replaced by new forms of trust relations that bear spatial implications (Growe, 2019). The development of new quarters as knowledge hubs is one option. Brownfield areas, for example, can be used to sustain knowledge parks, technology facilities, creativity centers, or institutions of higher education in one location, thus providing possibilities for networking and linkage. These networks are strongly linked to residential opportunities and urban neighborhoods. Another option is campus development by turning university sites into public arenas for discourses and knowledge production by a broad range of stakeholders with a great deal of expertise on different topics. Thus, a clear connection of place and knowledge is important: Cities are increasingly competing to attract creative minds and young people. To do that, a charming surrounding area, diverse cultural and sports activities, and public spaces are substantial aspects. Only when the provided amenities meet these needs can a city succeed in attracting skilled and educated people (Storper & Scott, 2009).

Many studies highlight universities and other higher educational institutions as key actors in the process of knowledge appropriation (e.g., Addie, 2018; Chatterton & Goddard, 2003; Goddard & Vallance, 2011). Leading global cities, for example, exhibit a comparably high rate in higher education institutions, and their economic success is attributed to the presence of high-ranking universities (Addie, 2018; Jöns & Hoyler, 2013). Silicon Valley seems impossible without Stanford University; the boom of Munich is bound to its excellent universities and other knowledge institutions; and, last but not least, China strategically locates key universities in important cities (Liu, 2019). This, however, also holds true and might be even more relevant for smaller and medium-sized cities where institutions of higher education became key players in the process of urban change (e.g., for Queensland University of Technology, Massachusetts Institute of Technology, Harvard, Twente, and Newcastle universities see Benneworth, Charles, & Madanipour, 2010; for Oxford, Leuven, and Pisa see Lazzeroni & Piccaluga, 2015; for Cachoeira see Baumgartner & Rothfuß, 2017).

Universities and colleges affect their host cities at multiple levels (Delanty, 2001; Maasen, Andreadakis, Gulbrandsen, & Stensaker, 2019). They decisively contribute to education and qualification within a city. Their members not only educate students and PhD candidates but also offer continuing training, public science, and knowledge transfer into civil society, administration, and industry (Marquardt, 2019). Through their role as a main employer in a region, they strongly foster economic development (Glückler, Panitz, & Janzen, 2019). At the same time, institutions of higher education also directly affect urban space. Nurturing in numbers—numerous universities were founded during the last century around the globe—and size, the quantity of students in cities has risen enormously as has the number of researchers (Hoelscher, 2012, p. 1714; Hoelscher & Harris-Hümmert, 2019). This again puts universities in strong competition for land with other urban stakeholders.

Thus, institutions of higher education become very influential for a city's socio-structural development. As Addie and colleagues have put it in a nutshell: "The sociospatial impacts of higher education's massification and commercialization, together with the deep restructuring associated with the new knowledge economy, are of paramount importance for our understanding of contemporary urban and

economic development" (Addie et al., 2015, p. 33). At the same time, however, the impact of knowledge-intensive institutions and industries on the urban context differs markedly, as shown in various analyses. Considering the involvement of the knowledge sector in the economic development of cities, van Winden et al. (2007) generate six types of knowledge-based cities in northwest Europe, reaching from *stars* (larger cities scoring high in all seven dimensions) to *knowledge pearls* (smaller cities within or near an agglomeration scoring high in all seven dimensions). The latter type is true for our case study of Heidelberg, as we will show later. In another quantitative study on North American city regions, Gabe et al. (2012) extract eleven different knowledge profiles according to their share of employment in knowledge-related industries. The profiles range from *making regions* (high score for knowledge on manufacturing) up to *teaching regions* (college towns with high knowledge on education and training). Knowledge-induced growth, therefore, comes in quite different forms and with a diverse range of outcomes, as visible if one focuses on knowledge-based urban development within the cities themselves. The clear prioritization of aspects of knowledge, such as creativity and innovation, favors certain areas (mostly in close proximity to the knowledge sites), whereas other areas are left out. Booming regions especially are marked by a strong disparity between knowledge quarters and peripheral neighborhoods, as discussed in the next section.

The Dark Side of Prosperity: Urban Inequalities in the Knowledge City

The authors of a growing body of literature question the generally positive evaluation of knowledge-based urban development. Bontje and Musterd (2009), for example, criticize that it is mainly a fashion fueled by "scientist-consultants," whereas a more pessimistic view is based on local experts from seven European city-regions. Similarly, Rausch and Negrey (2006) are skeptical about a positive relationship due to their empirical correlation analysis of Florida's creativity ranking and economic data of the cities at which they looked. Even when one acknowledges the innovative capacity of knowledge institutions for a region, there is a "dark side of prosperity" (Walker, 2018). Knowledge-led growth produces uneven developments because not all parts of the urban society profit from it. There is, first of all, the strong structural fact that not all former blue-collar jobs can be easily transformed into white-collar service jobs. As researchers like Friedmann (1986) and Sassen (1991/2001) already observed and forecasted for the development of highly connected global cities, labor markets in cities are strongly polarizing related to the growth of the knowledge and information society. Even more, the advance of the service industries (especially the so-called FIRE Sector composed of finance, insurance, and real estate; quintessential for the global city) produces a growing demand of low-skilled services necessary to keep the urban infrastructure of the knowledge society running. From cleaning to security, from call centers to hotel receptions, demand for

low-skilled work is increasing—whereas wages are decreasing. As McDowell and Dyson (2011) have shown, this especially affects female workers, as well as migrants, who constitute a large part of the often unsecured, low-paid service industries (precarious jobs). At the same time, an erosion of the middle class can be detected because more people can reach upper levels of social mobility (due to broader education and knowledge), whereas others, whose skills are not needed anymore in post-industrial societies, are filtered down into the lower levels of social class.

Second, there is a strong sociospatial component to knowledge-induced growth. Described with different opalescent terms, such as urban redevelopment, downtown revitalization, or reurbanization, inner cities, which used to be the home of ethnic groups and heterogeneous milieus, are now being gentrified into upscaled neighborhoods catering mainly to the new urban knowledge workers. Formerly neglected neighborhoods are becoming cool places that still reveal "gritty" authenticity from their past (Zukin, 2011, pp. 35–37) while displacing people from groups less inclined to education or with lower-income from these districts. Wilson (2018) talks about "urban growth machines" that transform these neighborhoods into touristy places that appeal especially to the transnational elite.

Third, even when an overall positive quantitative impact of knowledge institutions on regional development is ascertained, the local innovative outputs differ from case to case (see, e.g., Warnecke, 2018). Some studies state that researchers looking for excellence in research cooperation are often oblivious of their regional environment and the local labor market (Kroll, Dornbusch, & Schnabl, 2016). Thus, only stronger regions might profit from an excellent university due to an already existing innovative and creative milieu. This is the case, for example, for university sites such as Stanford, Harvard, Leuven, Groningen, or Munich. In general, however, a local involvement and prosperous cooperation between town and gown cannot be taken for granted and the role model of Silicon Valley, borne out of the seedbed of a university, cannot be transferred to every case (Hall, 1997; Knight, 1995).

From a quantitative point of view, the measurement of a university's economic impact on the surrounding region is highly dependent on the definition of the area, the use of indicators, and the role of multipliers (Siegfried et al., 2007). Furthermore, the assessment of the university's regional effect is embedded in a neoliberal framework that accounts for purely economic output, but neglects social, political, and local contexts or consequences (Bose, 2015). Audretsch (2014) argues that the university's role has shifted from an "entrepreneurial university to the university for the entrepreneurial society" (p. 313). Whereas the former was a call on universities to become more flexible, interdisciplinary, and application-oriented, as an "entrepreneurial" response to the increased demands on institutions of higher education from outside academia (Clark, 2001), the latter is a call to enhance entrepreneurial and human capital and facilitating behavior in an entrepreneurial society.

Last but not least, cities with strong universities and creative regional environments experience the highest pressure on the global real estate market. Silicon Valley and the Greater San Francisco Bay Area may sit atop galloping real estate

prices, but the sheer numbers and, even more, the sheer discrepancies of prices between and within cities in general are striking. North American cities in thinking or innovating regions (strong in IT, commerce, arts, and humanities but low in manufacturing; see Gabe et al., 2012) experience the highest growth rates of house or rental prices in comparison to all other cities. For Germany, Egner and Grabietz (2018) found two main factors that significantly impact high rents: mean income and the number of students. Higher prices, as we will show for our case study on Heidelberg, create substantial inequalities within the urban context and thus threaten the quality of life in many cities. When space is a scarce resource in competitive cities, intra-urban conflicts between different land uses arise. In addition, newly built quarters are especially tailored to the needs of academic singles, young couples, and families, providing urban flair through stylish restaurants, internationalized shops, and green spaces. This often comes with an upturn in rental and real estate prices—causing new social inequalities or even changing the character of whole quarters, as studies on "studentification" in Great Britain have shown (Smith, 2004).

Touristification, platform urbanism, and sharing economies are just a few more catchwords that, even though they sail under the flags of sustainability and authenticity, exert enormous pressure on local real estate markets. Cities as the growth engines of knowledge economies thus attract creative people and well-heeled visitors by promoting certain cool, fancy, or creative areas to the disadvantage of others.

For these reasons, the knowledge discourse needs to be closely related to the issue of urban inequalities and the factors that help (re-)produce them, such as the educational sector. While analyzing inequalities has a long tradition in urban studies (for an analytical overview, see Heynen, Aiello, Keegan, & Luke, 2018), the formation of the knowledge society has only received rudimentary attention in that context. There are, for example, a growing number of studies on social and spatial inequalities of educational opportunities and school access, especially for the U.S.-American context (see, e.g., a special issue in *Urban Studies*, Vol. 56, Issue 15, 2019). In addition, the authors of several studies have shown the connection between place of residence and the educational disadvantage of pupils with a migrant background (e.g., for Germany, Baur, 2013). These studies, however, are mostly embedded into segregation discourses that are related to race, class, and socioeconomic measures; their authors mostly provide quantitative evidence for a complex sociospatial context of school segregation (e.g., Boterman, Musterd, Pacchi, & Ranci, 2019; Oberti & Savina, 2019; Owens & Candipan, 2019) and hardly ever frame their work within the broader picture of knowledge society. Thus, they lack a comprehensive, interdisciplinary approach with which to equally analyze educational systems, knowledge discourses, and uneven urban developments, as suggested in the next section.

Linking Urban Inequalities to Education

Education plays an increasingly important role in the knowledge society, as educational achievements result in benefits in many realms of life, including better and safer jobs, increased health and well-being in general, and more social and political engagement. However, educational achievements are still unevenly distributed and are, inter alia, dependent on socioenvironmental settings. These settings, and especially the spatial distribution of educational institutions and their use, are influenced by current trends towards knowledge-based urban development. Before looking at the socioenvironmental settings in more detail, we want to address the relationship between education and inequality as a reciprocal one more generally.

First, scholars well accept that education is actively producing social inequality: Formalized educational degrees are influencing access to labor markets, especially to higher positions (e.g., Hillmert, 2011), and many researchers have shown the positive impact of education on (economic) well-being on the individual level (e.g., Harmon, Oosterbeek, & Walker, 2003; Woessmann, 2016). From a meritocratic point of view, this relationship between educational success and individual well-being is seen as legitimate, as long as there are equal chances with regard to educational achievements. As the term knowledge society suggests, proponents regard education as the main mechanism transferring ability and effort via certified degrees into (access to) higher social positions, resulting in upward social mobility and thus differentiation. Education, therefore, is not only producing inequality, but, even more, it is also legitimizing it (see also Hadjar & Becker, 2016).

Second, contrary to this legitimization, authors of empirical findings prove that equal access to educational opportunities is a "myth" (Goldthorpe, 2003). The reason is that the relationship between education and social inequality also works the other way around: Social inequality or background is heavily influencing educational achievement. The interplay of social origin (O), education (E), and social destination (D) can be conceptualized in the O-E-D-triangle (e.g., Hadjar & Becker, 2016) (see Fig. 2.1).

Some empirical researchers have indeed shown a decreasing influence of social origin on education as well as on social destination during the twentieth century,

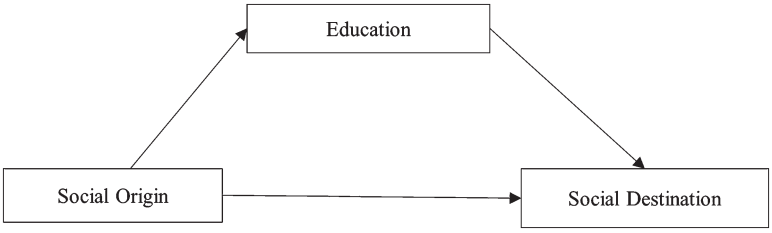


Fig. 2.1 The relationship between social origin, education, and social destination. Source: Design by authors

especially in the 1960s and 1970s (Breen, Luijkx, Müller, & Pollak, 2009), but by no means a disappearance (Goldthorpe, 2003; Pollak & Müller, 2018). With regard to the overall picture in the last decades and today, Hadjar and Becker (2016, p. 252) even conclude: "The link between educational attainment and class of destination (E-D) decreased, while the (direct) link between class of origin and destination class (O-D) slightly increased." Barone and Schizzerotto (2011), in their summary of a comparative study on five European countries, reach a similar result.[1] Bukodi and Goldthorpe (2013) differentiate three different dimensions of social origin: namely, class background, level of education, and social status. In their study comparing three British birth cohorts, they find (a) persistent levels of inequalities, which they link especially to "secondary" effects (Boudon, 1974), which are effects stemming not from differential performance in school, but from educational decisions; and (b) that "it is parental education that is of greatest, and increasing, relative importance" (Bukodi & Goldthorpe, 2013, p. 1034).

A first conclusion therefore is that contrary to modern society's promise of reducing the inheritance of social status and an increasing reliance on education as a just means for social mobility, the knowledge society instead increases the influence of social origin, and especially parental education, on educational achievements. Why is this the case?

As already mentioned above, (educational) inequalities have a spatial or socioenvironmental dimension. An important aspect is the local availability of educational infrastructure and its quality. Burger (2019, p. 182), reporting on Europe, finds evidence "of the potentially damaging effect of a sociospatial separation of students, indicating that socioeconomic segregation . . . may contribute to some extent to the perpetuation of educational and, by extension, social disadvantage from one generation to the next." Scholars are engaging in an extensive discussion on school choice and (changing) places of residence. While this topic is not new (see, e.g., already the classic studies by Coleman and others), there seems to be a growing significance in the context of the knowledge society. Lipman (2002, 2011), for example, relates inequality to the new political economy of education and argues that neoliberal school reforms in Chicago have exacerbated the already existing inequalities in the urban landscape. Candipan (2019; Owens & Candipan, 2019) showed that even with the introduction of free school choice or the establishment of charter schools in the U.S., inequalities between the schools—which were supposed to diminish—even increased, because higher-income parents tend to bypass schools with higher proportions of minority or low-income students and enroll their children outside their (gentrifying) neighborhood. This is because well-off parents are able and eager to use available information on school quality to send their children to good schools, and even possess the financial resources to move to another place if necessary.[2] For Germany, researchers have shown that "the absence of a desired school in the

[1] However, the setup of national educational systems seems to play an important role in the precise amount of these effects (see also Hadjar & Gross, 2016).

[2] As some anecdotal evidence: There is, for example, an app that helps one find the right accommodation in Oxford if one wants to live in the catchment area of a specific school.

immediate vicinity drastically increases the relocation rate. In addition, families with university degrees and without a migration background move more frequently to neighborhoods with few perceived signs of deprivation" (Oeltjen & Windzio, 2019, pp. 651–652).

From a relational perspective, educational achievement is not only influenced by the described family background and decisions, but more broadly by effects of collective socialization, such as the influence of local social networks (Zangger, 2018). There is sufficient evidence that disadvantaged districts can therefore become disadvantaging districts. Researchers have recently shown, however, that the opposite effect seems to be even more pronounced: Advantaged surroundings seem to foster advantaged children even more strongly (Helbig & Jähnen, 2018; Zangger, 2018, with an extended discussion). And although, in general, ethnic segregation is less pronounced in Germany than, for example, in the U.S., authors of a recent study have shown that social segregation is growing and especially affects families with children (Helbig & Jähnen, 2018). Interestingly though, the availability of private schools seems to possibly reduce spatial social segregation, as such schools allow better-off parents to stay in the quarter and send their children to these institutions. This, however, is producing another kind of segregation, contributing to what is sometimes discussed under the "qualitative dimension" in the concept of "effectively maintained inequality in education" (e.g., Lucas & Byrne, 2017; for Germany, Weiss & Schindler, 2017).

A second conclusion, therefore, is that the influence of social origin on educational achievements is created by the interplay of individual decisions and urban spatial structures. Our hypothesis is that knowledge-based urban development impacts these individual decisions as well as the polarization between different city quarters, thereby contributing to (new) urban and social inequalities.

In general, Germany seems to be a good case study for the analysis of the relationship between education, inequality, and the city for several reasons. First, authors of extensive reviews have shown "that a high degree of stratification . . . increases inequality in . . . educational attainment" (Combet, 2019, pp. 301–302). Germany has a highly stratified and diversified school system, combined with a strong focus on certificates in the labor market. Children, after their first four years in joint local schools (called *Grundschulen* with catchment areas), are selected into two tracks of secondary education: *Haupt-/Realschulen* (another 5 or 6 years of schooling, mainly preparing for vocational education and training) and *Gymnasium* (another 8 or 9 years, on the main road into higher education). Although access to the different types of schools is open for all children and does not depend on parental income or position, there are sturdy differences between social groups. The relationship between social origin and social destination is strong and highly mediated via education (Hillmert, 2011; OECD, 2016, p. 214; Weiss & Schindler, 2017). Second, with increasing numbers of private schools, a rapidly expanding higher education system, and other developments, the educational context has changed dramatically in recent years, combined with only sparse research in this field up to now (Helbig & Jähnen, 2018, p. 69).

Heidelberg is an interesting case in this respect, as it is a city with one of the highest participation rates in the *Gymnasium* (the highest track at the secondary educational level). It is also the location of one of Germany's most prestigious universities, which is at the same time the largest employer within the city, and it is a town with some of the highest housing prices. The sociospatial outcomes, therefore, might be especially visible.

The Example: Heidelberg

In the previous sections, we have argued that education, knowledge society, and urban development are closely related and together produce and reproduce different layers of inequality. With our case study of Heidelberg, a midsized college town and internationally esteemed "knowledge pearl" in Germany (van Winden et al., 2007; see also Meusburger, 2016) that is potentially characterized as a "thinking region" according to Gabe et al. (2012), we contend that Heidelberg's knowledge-based urban development is inherently related to (educational) inequality and segmentation. The urban landscape is highly structured by the university and other knowledge institutions and their employees, urban space is negotiated as a competitive resource that produces conflicts and displacements, and housing in central areas becomes for many an unaffordable asset that—although homelessness is not the biggest issue in the German welfare context—increasingly affects quality of life issues. On the neighborhood scale, residents have strongly entrenched social statuses, mostly related to the educational background that is already visible at the elementary school level. Thus, the strong interplay of knowledge society, education, and urban development bears sociospatial outcomes that can be illustrated with the case study of Heidelberg.

Heidelberg, situated in the flourishing Rhine-Neckar metropolitan region, is increasingly distinguishing itself as a knowledge city. The university and other institutions of higher education, several prestigious national and European research institutions, and a research-based corporate landscape have contributed to Heidelberg's dynamic development during the last decades. Large numbers of job opportunities are connected to knowledge institutions and the tertiary sector is thriving. This progress attracts new inhabitants, as seen by the fact that the urban population increased from almost 140,000 in 2000 to more than 160,000 today. The number of students and academics living in the city is especially increasing. The share of students in the city population has grown from 21.5% (2010) to 24.1% in 2016, or from 30,893 to 37,624 students in absolute terms (Eurostat, 2020). In 2019, Heidelberg was judged the German city with the highest rate of academics among its employment population—44% (Burstedde & Werner, 2019). However, this also causes a high rate of social inequality. Ninety people with incomes in the millions are opposed to 28% of the population earning less than €10,000 a year (Stadt Heidelberg, 2018a). However, this high proportion of low earners is probably also due to the high number of students (ibid.). Do these disparities also become

spatially apparent in the city of Heidelberg when we include education as a further aspect?

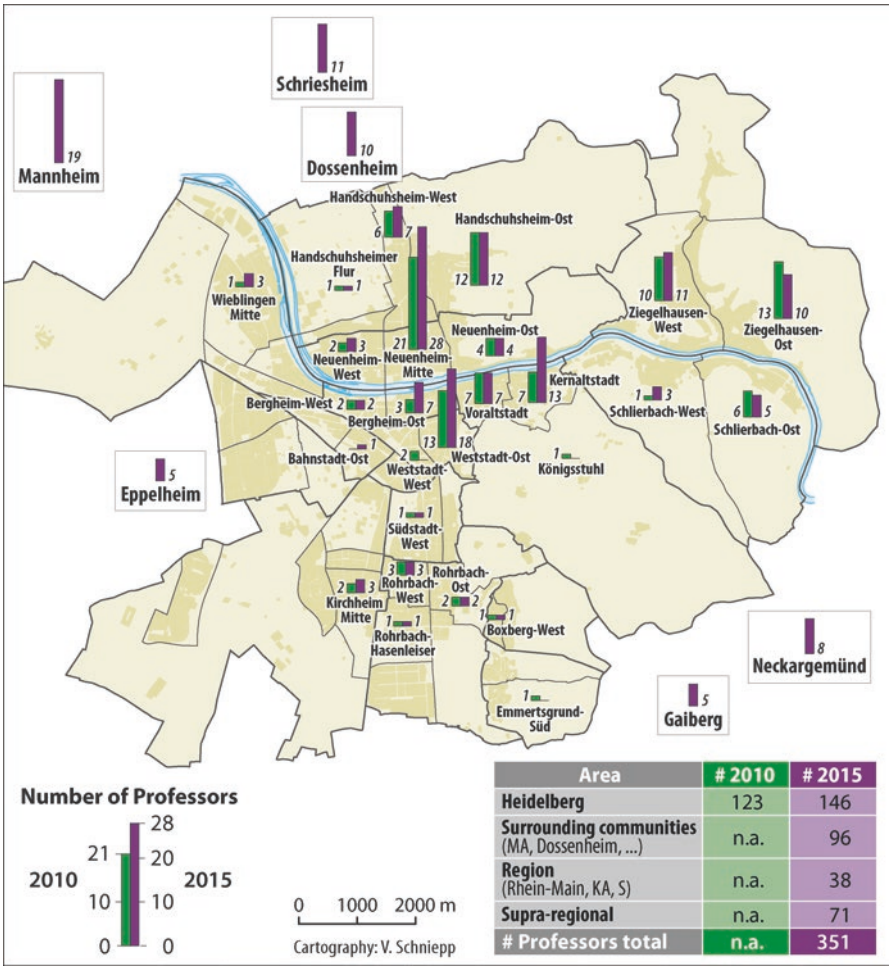
One of the central arguments made above applies to segregation along educational achievements. The spatial distribution of the employment population's educational degrees is characterized by strong discrepancies between the different neighborhoods in Heidelberg (see Table 2.1; see Fig. 2.2 for their location in Heidelberg). In 2019, three groups are distinguishable: In a first group of neighborhoods (Altstadt, Bergheim, Weststadt, Südstadt, Handschuhsheim, Neuenheim, and Bahnstadt), more than 70% of the working population hold at least an *Abitur* or *Fachabitur*, the educational level needed for university entrance qualification. A second group of neighborhoods, consisting of Schlierbach, Rohrbach, Kirchheim, Wieblingen, und Ziegelhausen, has a share of graduates with *Abitur* between 50 and 70%. On the other end of the educational spectrum lie the more peripheral locations with much lower rates: In Pfaffengrund, Boxberg, and Emmertsgrund less than 40% have this high school diploma (third group).

As laid out in Table 2.1, these differences have (slightly) increased over time: The overall share of the working population with at least an *Abitur* in Heidelberg rose by 8.3 percentage points by 2019. Above-average increases can be found in Bergheim (new social science campus on a redeveloped brownfield site) and Handschuhsheim (Group 1), as well as in Rohrbach and Wieblingen (which has the *SRH*, a growing private University of Applied Sciences, as well as a popular private *Gymnasium*, Group 2). The already low areas of Pfaffengrund, Boxberg, and Emmertsgrund (Group 3), as well as Südstadt, however, exhibit below-average

Table 2.1 Share of employed people with *(Fach-)Abitur* as highest educational degree by place of residence (in %, 2014 and 2019)

Neighborhood	2014	2019	Change
Altstadt	68.8	76.6	7.8
Bahnstadt	77.8	86.0	8.2
Bergheim	62.8	71.5	8.7
Handschuhsheim	62.7	72.0	9.3
Neuenheim	77.0	81.4	4.4
Südstadt	65.2	71.1	5.9
Weststadt	70.9	78.0	7.0
Kirchheim	43.4	51.5	8.1
Rohrbach	51.1	59.7	8.6
Schlierbach	59.6	67.6	8.0
Wieblingen	45.4	55.6	11.2
Ziegelhausen	50.7	58.5	7.8
Boxberg	25.7	31.8	6.1
Emmertsgrund	23.2	29.0	5.8
Pfaffengrund	29.9	35.9	6.0
Total Heidelberg	54.7	63.0	8.3

Note. Source: Design by authors. Data from Stadt Heidelberg, Statistics of the Federal Employment Agency



Area	# 2010	# 2015
Heidelberg	123	146
Surrounding communities (MA, Dossenheim, ...)	n.a.	96
Region (Rhein-Main, KA, S)	n.a.	38
Supra-regional	n.a.	71
# Professors total	n.a.	351

Fig. 2.2 Places of residence of university professors at Heidelberg University (absolute numbers, 2010 and 2015). Source: Design by authors. Data from Heidelberg University

growth rates. Interestingly, Neuenheim has the lowest growth rate, but was in 2014 and still is in 2019 the quarter with the second highest share of citizens with *Abitur*. A potential explanation might be that Neuenheim is a very settled urban area with the highest overall rents in Heidelberg.

Interpreting these numbers, a clear spatial pattern becomes obvious: The (most prestigious) neighborhoods adjacent to the three university locations (Neuenheim and Handschuhsheim next to the modern science campus, Bergheim and Weststadt next to the new social science campus, and the old city center Altstadt with the humanities dispersed throughout it) exhibit the largest shares of higher-educated citizens and, in most cases (with the exception of Neuenheim), show above-average growth rates. This results in increased polarization within the city.

Examining the places of residence of professors of Heidelberg University reveals a pretty similar picture (see Fig. 2.2). Most live in the affluent neighborhoods that are close to the University, very few live in the Southern part of the city, and literally none reside in Emmertsgrund, the poorest high-rise housing area. This trend increased between 2010 and 2015, with the highest gains for the first group of city quarters (Weststadt +3, Bergheim +4, Altstadt +6, and especially Neuenheim +8) and losses only in Ziegelhausen (−2) and Emmertsgrund (−1). In addition, a further trend is also becoming apparent: a trend towards suburbanization driven by searches for single-family housing in attractive locations. Out of 351 professors at Heidelberg University, 96 live in suburbs, and 109 are even commuters from other cities. Again, it is striking to note the spatial concordance between neighborhoods with high numbers of university professors living in them and neighborhoods whose inhabitants have the highest educational degrees.

As argued above, knowledge-based urban development and related segregation, evidenced here with regard to educational disparities, should also play out in economic terms. And, in fact, the comparison of rent indexes across the different city quarters displays similar patterns once more. Calculating the lowest rent in town as the standard (found in Boxberg and Emmertsgrund in 2019), we find strong deviations from that norm (see Fig. 2.3). Neuenheim and the adjacent areas of Handschuhsheim, Bergheim, and Altstadt (Group 1) have average rent prices more than 30 or 40% above the calculative norm. We also detected gentrification processes in Bergheim, with the newest campus site, which used to be a mixed-use neighborhood with low rents that are now gradually disappearing from the urban landscape, undergoing the largest increase in rents between 2011 and 2019 for the whole of Heidelberg. Boxberg (−5%), Kirchheim (−4%), and Pfaffengrund (−6%), on the other side, move closer to the least expensive quarters (Group 3).

The residents' varying involvement in the labor market in the different neighborhoods accentuates this pattern: The lowest unemployment rates can be found in the above-mentioned prestigious neighborhoods, whereas they are highest in Emmertsgrund, Boxberg, and Pfaffengrund. Overall, a spatial divide exists between a high socioeconomic status in the north and the less-educated, much lower income south/west.

To what extent do these disparate socioenvironmental contexts impact Heidelberg's educational inequalities? In the paragraphs above, we reported on studies whose authors have shown that deprived neighborhoods can become depriving neighborhoods. From the described patterns, we argue that this is increasingly also the case in Heidelberg, with the most highly educated people increasingly concentrating in certain quarters, often near central knowledge institutions such as universities. Although we are not able to track relocation processes of individuals within Heidelberg, there is aggregated data that people in the age group 30–39 (47%) and those with small children (58%) were especially prone to moving house within Heidelberg during the last 5 years (Stadt Heidelberg, 2018b).[3] As Oeltjen and

[3] These are often former students who find a job after graduation and start a family.

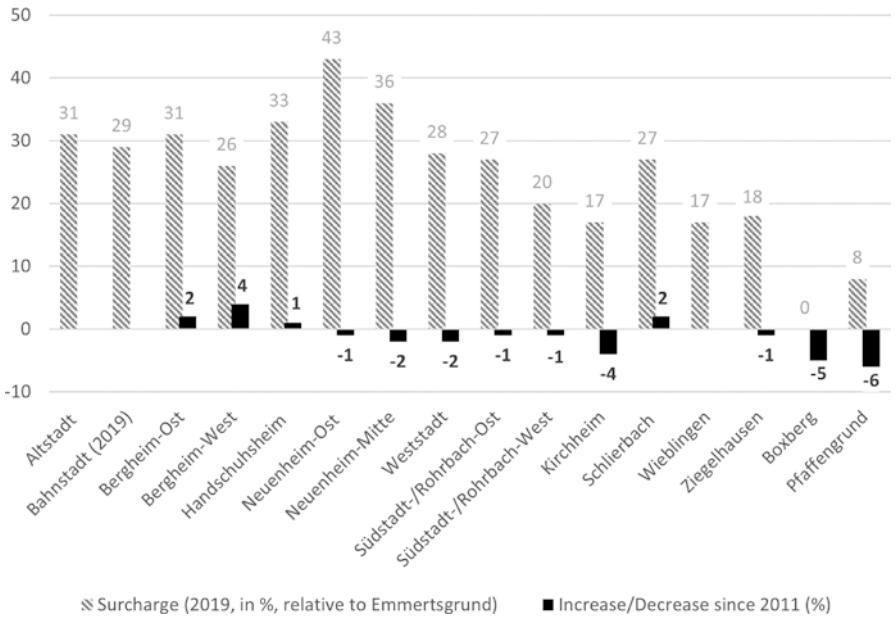


Fig. 2.3 Rent index zones in Heidelberg and their changes, 2011 and 2019. Source: Design by authors. Data from Stadt Heidelberg (2011, 2019)

Windzio (2019, see above) have shown, well-educated parents especially choose privileged neighborhoods with good schools when moving, whereas less educated parents with lower incomes have to move to deprived neighborhoods due to the huge differences in rents.

Looking at the distribution of *Gymnasiums*, we find three in Neuenheim (one public, two private ones), two in Altstadt (both public), three in Rohrbach (two public, one private),[4] and one in Wieblingen (private). A special characteristic in Heidelberg is the huge share of pupils in private *Gymnasiums* (around 50%). Even more interesting, however, are the school transition rates for pupils from elementary school (*Grundschule*) to *Gymnasium*, where the strongly inherited character of educational degrees becomes obvious (see Table 2.2). As the (public) elementary schools in Germany have catchment areas, these figures are directly related to the respective neighborhoods.

The concordance between the different neighborhood groups is striking. Elementary/primary schools (grade 1–4) in the first group of neighborhoods (high proportions of college degrees) possess much higher shares of kids going to the high schools in town (*Gymnasium*), with figures (well) above 80% in all schools of Altstadt, Neuenheim, and Handschuhsheim, and at least in one school in Weststadt. For example, Mönchhofschule in Neuenheim and the Friedrich-Ebert-Schule in the

[4] One of the public institutions is a *Gesamtschule*, combining a *Gymnasium* with other school tracks; the private one was traditionally connected to the American soldiers located in Heidelberg.

Altstadt sent all verifiable pupils to the *Gymnasium* in 2018/19, and the Heiligenbergschule all but seven pupils. This is in clear contrast to other neighborhoods, especially in the southern, more peripheral parts of the city (e.g., Waldparkschule or Emmertsgrund, Group 3), where only few pupils reached that level. The professional future and thus expected income of the latter will be strongly influenced by this fact (see previous section).

Interpreting these numbers over time, an entrenchment of these patterns becomes visible: There are (further) increases of around, or even above, ten percentage points for school transfer to the *Gymnasium* in the Altstadt, Weststadt, and Wieblingen, but also in Kirchheim (still low overall level) and (one school in) Rohrbach. Decreasing shares are reported for Boxberg (see the respective footnote, though), Emmertsgrund, and Bergheim; all three also have the lowest absolute figures of pupils overall. The overall pattern of strong disparities is maintained and, in many cases, even solidified. The only exceptions to this striking picture are Schlierbach and one school in Rohrbach.

Further socioeconomic measures could be discussed here at length, but the main message is clear: The case of Heidelberg is marked by a strong relationality between education, knowledge society, and uneven urban development. City areas near university locations have the highest rates of well-educated inhabitants, the highest rents, and the highest level of pupils reaching the highest level of school education. City quarters that are further away from university amenities are less well off. If we correlate these aspects statistically, we find strong to very strong relationships between the different variables.[5] For example, the coefficient of determination (R^2) for employed people with *Abitur* is 0.5 for professors' residency, 0.9 for rent surcharges, and 0.7 for school transitions to *Gymnasium*. The figure for rent surcharges and school transitions is 0.69. This latter number means, for example, that nearly 70% of the variance between neighborhoods with regard to school transitions is related to rent differences. Where longitudinal data is available, this relationship seems to strengthen over time. The university, therefore, is an important player in present urban society. Due to the university's very strong expansion during the last decades, with a new campus in Bergheim and an enormously growing campus in Neuenheim, the city is changing quickly. The city administration's emphasis on fostering the development of the university and other knowledge-focused stakeholders and on supporting the transformation into a "knowledge city Heidelberg" fails to include some of the city neighborhoods and, to a large extent, the people living there. By concentrating on promoting science, these districts continue to be disadvantaged places.

[5] We leave out the Bahnstadt as a very new (the very first inhabitants moved there in 2012) and specific neighborhood. See our discussion in the conclusion. Correlations, however, decrease only slightly when taking it into account (0.31, 0.9, 0.62, and 0.67 respectively).

Table 2.2 School transfers from elementary school to *Gymnasium* in Heidelberg (in %, 2013/14 and 2018/19)

Neighborhood	Elementary School	2013/14	2018/19	Change
Altstadt	Friedrich-Ebert-Schule	79.1	89.4	10.3
Bahnstadt	Grundschule Bahnstadt	—	64.7	—
Bergheim	Wilckensschule	59.3	45.8	-13.4
Handschuhsheim	Heiligenbergschule	77.8	83.0	5.2
	Tiefburgschule	87.1	82.1	-5.0
Neuenheim	Mönchhofschule	93.2	88.9	-4.3
Weststadt	Pestalozzischule	65.4	74.5	9.1
	Landhausschule	79.7	88.2	8.5
Kirchheim	Geschwister-Scholl-Schule	35.1	34.9	-0.2
	Kurpfalzschule	44.4	56.7	12.3
Rohrbach	Eichendorffschule	62.7	78.9	16.2
	IGH Primarstufe[a]	26.0	30.3	4.3
Schlierbach	Schlierbach Grundschule	84.4	75.8	-8.6
Wieblingen	Fröbelschule	61.7	74.6	12.9
Ziegelhausen	Grundschule Ziegelhausen	72.2	69.7	-2.5
Pfaffengrund	Albert-Schweitzer-Schule[a]	55.9	50.9	-5.0
Boxberg	Waldparkschule[a]	54.5	28.6	-25.9
Emmertsgrund	Grundschule Emmertsgrund[a]	33.3	25.0	-8.3
Overall Heidelberg		*62.7*	*63.9*	*1.2*

[a]Figures for Boxberg, Emmertsgrund, and Pfaffengrund as well as the IGH are especially low, as they send around a quarter of their pupils to the so-called *Gemeinschaftsschule*, which opens a path into the *Gymnasium* at a later stage for some pupils

Note. Source: Design by authors. Data from Stadt Heidelberg, Amt für Schule und Bildung, different years

Conclusions/Extrapolations

Educational institutions, and especially universities, play an increasingly important role in the knowledge society. As we have detailed in this paper, educational achievement, but also educational institutions themselves, are heavily intertwined with issues of social and spatial inequality. Cities are those places where these reciprocal processes are culminating in the most visible way. The authors of a wealth of literature have already dealt with urban inequalities, including in recent urban studies. This literature ranges through discourses on the global, the neoliberal, the postcolonial, and the mega city. In addition, educational scientists increasingly focus on unequal access to schools and educational systems. What is lacking, however, is a broader view to combine these different strands of research in order to develop a more complex picture of urban inequalities in the knowledge society. In this paper, we have argued that a reciprocal relationship exists between social origin and social destination, one that is especially pronounced in the currently acclaimed knowledge city. Although knowledge is a broad term and seems to be increasingly available for

everybody, its utilizers differentiate between groups of people and stratify individual well-being. Departing from the "meritocratic myth" that knowledge and education offset the direct causation of social origin and social destination, we claim that education in knowledge societies contributes to a stratified and polarized population—especially in cities.

In our case study of Heidelberg, we tried to pin down some aspects of this interplay. Even though Heidelberg is a city with a considerably wealthy population and an overall low rate of people dependent on welfare state transfer payments, we find a largely uneven distribution of knowledge opportunities in the city. Especially in the context of neoliberally interpreted knowledge policies, the already well-off are those profiting the most from the growing educational sector. Looking at educational success, for example, we have found a connection between neighborhood and school career. (Growing) segregation within the city leads to differing educational opportunities for people, especially children, in the different neighborhoods. The availability of good schools influences middle-class parents' decision on places of residence, and rising rents limit access to better-equipped districts to the already well-off. As a result, neighborhoods adjacent to university facilities especially benefit.

These identified effects will probably be further strengthened by the current urban policy with its emphasis on knowledge. Heidelberg started developing a new city neighborhood, Bahnstadt, in 2009, with the first residents moving there in 2012. However, the focus on sustainable construction entails high rents for housing, so that a fairly homogeneous population emerged—many double income couples, families, and the well-educated (Herrmann, 2020). Well-equipped educational facilities, often with additional support from foundations, are established in this already privileged neighborhood. Other social groups and city areas are left behind. Great attention is also paid to another strand of urban development in Heidelberg: the future-oriented planning process of the campus *Im Neuenheimer Feld*. This campus hosts university faculties and further research institutions, hospitals, a technology park, and other knowledge-based stakeholders. Again, a large part of the city's resources is tied up in this planning process with a focus on the university and other knowledge actors. In addition, in 2012, the city started a 10-year developing process, called *Internationale Bauausstellung* (International Building Exhibition, IBA) with the topic of "*Wissen-schafft-Stadt* [Knowledge-based urbanism]." The aim is to develop "urbanistic projects for the knowledge society of the future" (Internationale Bauaustellung Heidelberg, n.d.). One important project is the transformation of the Patrick Henry Village, a military brownfield area in the Southwest of Heidelberg. Under the slogan "Knowledge City of Tomorrow," the IBA is developing a vision for a modern city district that will be both a place to live and work and a model for sustainable and innovative urban development. All in all, the urban development in Heidelberg shows the important role of the university and other knowledge institutions within the process of urban development. For the city, the support of the university and other knowledge-intensive stakeholders is important to succeed in the inter-urban competition—a declared goal of the

municipality—and shall pave the way to a promising future. This future, however, is not open to everybody.

Although the empirical details on Heidelberg are important, we want to conclude this paper by addressing the increasing role universities or other higher educational systems are playing in the global network of knowledge exchange and societal development. It is the task of university members and researchers to contribute to a more nuanced understanding of the impact of knowledge on inequality and to become aware of their own role in this process. Instead of mainly serving the economy, they need to foster a more complex understanding of knowledge society. This results in rising demands for urban and societal engagement on the part of universities. Today's universities act as local entrepreneurs, engage in school education and public health, and provide technology transfer. They take on civic roles and get involved on a regional level. Under the heading of a "third mission," this new role is emphasized in the context of the knowledge society. Apart from teaching and education (first mission) and research to produce knowledge (second mission), the transfer of knowledge into the society is receiving increased attention (Berghaeuser & Hoelscher, 2020). During the last years, one can find a shift from a mere technological knowledge transfer into enterprises towards demands for multifaceted engagement in the host city. Knowledge transfer receives a stronger local dimension when universities are asked to link their activities to the local socioeconomic context and thereby take responsibility for urban society.

This change becomes especially obvious in the course of new research formats, such as urban living labs or real-world labs that have incorporated the role of transmitters between research, education, and civil society action into the very heart of their structures (Gerhard & Marquardt, 2017). Such formats are used to define the collaboration between town and gown, between city and university, in a new way; they are thus becoming increasingly popular across the world. Municipalities, enterprises, universities, and citizens are working together to meet the formidable challenges societies face today. This provides new opportunities for research and learning, but also complicates the relationship. Universities and other educational institutions have to become more self-reflective in this regard, especially when, as they nurture and promote urban growth, they are simultaneously driving some parts of urban society apart. Therefore, the shift from an "urban university" to a "university in urban society" (Addie, 2017)—one that is thus anchored in a city and taking on regional responsibilities while being aware of the host city's needs—seems an important step towards preventing new social inequalities in a knowledge society.

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Chapter 3
Educational Inequality and Urban Development: Education as a Field for Urban Planning, Architecture and Urban Design

Anna Juliane Heinrich and Angela Million

Education in Sustainable Urban Development

Experts of urban and regional planning increasingly tie questions of sustainable urban development in the transition from a service to an information society to the topic of education as a key economic and location factor in cities and regions. This is especially true in the social urban development of deprived neighborhoods, where actors discuss education (schooling/training opportunities and infrastructures) as a path to integration and societal participation, but also as a means of countering sociospatial disparities and growing polarization. Knowledge and skills acquisition, as well as lifelong learning, raise questions about a suitable neighborhood context and how places of learning are designed, along with specific issues of location development and the design of educational infrastructure and the social urban development of deprived-neighborhoods programs. These programs are created in tandem with urban planners and designers and implemented in communities to ease educational inequality.

Programs and projects based on an expanded understanding of education—in which education takes place not just in schools, but in families, with peers, and in neighborhoods—form the basis of action in German municipalities and at the German federal and state levels, demonstrating that the policy areas and action fields of urban development and education overlap both spatially and in terms of content. A look at the practice reveals shared strands of discussion and analogous and different points of emphasis in supra-local policies and in the municipalities (Heinrich, 2018; Million, Coelen, Heinrich, Loth, & Somborski, 2017).[1] Education

[1]We have based this whole chapter on the German Research Foundation (DFG) project "Lokale Bildungslandschaften und Stadtentwicklung: Schnittstellen und Verflechtungen" [Local

A. J. Heinrich (✉) · A. Million
Institute of Urban and Regional Planning (ISR), Technische Universität Berlin, Berlin, Germany
e-mail: juliane.heinrich@isr.tu-berlin.de; a.million@isr.tu-berlin.de

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as an area of policy-making and action will become more significant in the future, particularly in terms of urban development, as seen in the following passage from the German Federal Institute for Research on Building, Urban Affairs, and Spatial Development:

> New, key social challenges are emerging right now, including those arising from aspirations of environmental justice, educational justice, social health justice, or inclusion requirements . . . Each of these has far-reaching implications and needs for reform, some of which lie outside the municipal area of responsibility, such as, for example, in the field of education. These topics are . . . highly relevant to urban development (BBSR, 2015, n.p.; own translation).[2]

At the same time, German actors have almost unanimously answered calls for innovative pedagogical approaches to equal-opportunity education with the development of educational landscapes in recent years, both politically and in educational practice (Bleckmann & Durdel, 2009; Bollweg & Otto, 2011). Educational landscapes are currently important projects that bring together diverse development efforts in educational and urban planning in numerous cities and communities. In the following sections we not only discuss sociospatial educational landscapes as a field of intervention and action shared by both the urban development and education sectors, but also the motivations behind them.

Context and Background of Education as Field of Policy and Action in Urban Development and Urban Planning

Because the terms urban development and urban planning are commonly used in a fairly undifferentiated way, and because we are assuming an interdisciplinary readership, it seems helpful to make a first definition here.

Educational Landscapes and Urban Development: Interfaces and Interlacings], 2014–2017, led by education researcher Prof. Dr. Thomas Coelen, University of Siegen, with Christine Loth and Ivanka Somborski, as well as city planner and urban designer Prof. Dr. Angela Million, Technische Universität Berlin, with Dr. Anna Juliane Heinrich. We focused our research on the content-related and spatial overlap between the fields of education and urban development at the federal, state, and local levels. In this study, we analyzed key department records and interviews with representatives of federal and state ministries, as well as municipal umbrella associations. We also explored the concept of sociospatial educational landscapes. We have based this article on the monograph *Gebaute Bildungslandschaften* [Built Educational Landscapes] (Million et al., 2017) with contributions by Angela Million, Thomas Coelen, Anna Juliane Heinrich, Christine Loth, and Ivanka Somborski and have supplemented it with results from Anna Juliane Heinrich's doctoral research: *Die sozialräumliche Bildungslandschaft Campus Rütli in Berlin-Neukölln* [The sociospatial educational landscape Campus Rütli in Berlin-Neukölln].

[2] The quote comes from a preliminary study entitled *Neue Themen und Akteure für eine soziale Stadtentwicklung generieren* [Generating New Topics and Actors for Social Urban Development] (BBSR, 2015), conducted by the German Federal Institute for Research on Building, Urban Affairs, and Spatial Development (BBSR) to clarify where, or in which thematic areas, stronger cooperation is needed.

Urban Development and Urban Planning

Urban planning is understood as "the anticipatory management of the spatial development of a city" (Albers, 2005b, p. 1085; own translation). We speak of the discipline of urban planning since the first decade of the twentieth century. At the time, urban planning was understood as reactive—merely supposed to guide the "development forces of economy and society that appear to be uninfluenceable" (Albers, 2005a, p. 1067; own translation). Until the 1960s, scholars used the term urban development to refer to these development forces (Friedrichs, 2005, p. 1059). Since then, however, the term's understanding and use has shifted. The more recent understanding has increasingly included the notion that tools should be used to intervene in and steer urban development (Albers, 2005a, p. 1067; 2005b, p. 1085). In planning scholarship and practice today—and also in this chapter—the term *urban planning* is understood as the narrower term which primarily describes the "steering of spatial development" (Albers, 1983, p. 342; own translation), whereby the central subject-matter is the urban structure (Albers, 2005b, p. 1089). *Urban development*, again, is "the endeavour to act in an integrated manner in social, economic and spatial terms" (Albers, 2005a, p. 1070; own translation) and embraces both the general development of a city and interventions meant to steer and intervene in this development.

In the beginning, experts primarily saw urban planning as the sole responsibility of the public sector (Sinning, 2007, p. 303). This planning self-concept has changed since the mid-1970s—from the rational and technically justified pretense of truth and omniscience on the part of planners (Rittel & Webber, 1973) to more incrementalism and communicative planning. The still-ongoing shift of planning practice toward a more cooperative and participatory process of urban production (Altrock, 2014; Forester, 1999; Healey, 1997) spurs the development of numerous methods and techniques for participation in planning processes (Altrock, 2014, p. 23; Bischoff, Selle, & Sinning, 2007, p. 26). Planning theorists described this progressive change as the "communicative turn" (Healey, 1996), closely related to the "argumentative turn" (Fischer & Forester, 1993). Scholars, at least in the German context, now take for granted that a multitude and diverse array of actors influence and shape a city's development and need to be part of it (Selle, 2012, p. 29). Analytically, actors involved in urban development are divided into three social spheres: the political and administrative state system, the economy, and civil society (Albers, 1983, p. 342; Selle, 2012, pp. 29–30; see also Heinrich, 2018).

In line with this understanding of planning as a communicative process involving divers stakeholders urban planning is concerned with a reconciliation of interests and different demands placed on the city are organized and moderated. This ties in with the desire to take integrative or inclusive action in social, economic, and spatial areas (Albers, 2005a, p. 1070), and to deal with these issues in an extensive, future- and goal-oriented way beyond departmental limits (Sinning, 2007, p. 303). This is a city-shaping process, in which various actors have increasingly heterogeneous interests and claims-to-use regarding space. Further challenges for urban

development include globalization, demographic change and segregation, new housing requirements, and financial difficulties of the municipalities. An increasingly common refrain is that the scope and complexity of these challenges exceed the municipalities' creative and economic potentials. This is why cooperation between the aforementioned actor groups and an interdisciplinary, integrated approach to urban development is so crucial. Planners of sustainable urban development must take into account these various demands and reconcile them with one another to remain spatially compatible and viable in the future.

Education-Related Urban Development

Whereas planning practice and scholarship since the 1970s has focused primarily on the quantitative securing of spaces for formal education (schools, in particular) (Libbe, Köhler, & Beckmann, 2010, p. 43), actors are increasingly practicing and exploring qualitative approaches (e.g., "good schools") primarily, but not only, in connection with deprived neighborhoods. Reasons for the growing importance of education as part of integrated urban development include, but are not limited to, urban development's still-growing focus on physical holdings, burgeoning emphasis on the neighborhood as a key benchmark level, greater orientation towards social space, and the above-mentioned changing understanding of urban development and planning. Further planning considerations include the increased importance of local educational settings in the context of social urban development of deprived neighborhoods (Bundestransferstelle Soziale Stadt, 2006 [German Federal Transfer Office for the "Social City programme"]), the shift towards a knowledge-based society and its influence on planning (Zimmermann, 2010), and the development of so-called knowledge regions or knowledge-based urban and regional development (Matthiesen & Mahnken, 2009; Mecklenbrauck, 2015).

Municipal planning has sovereignty in Germany, which means that local authorities have the right to regulate and take responsibility for all local affairs within the existing legislative framework.[3] At the same time, in interplay and coexistence with German federal programs and policies, the German states, but also the municipal associations and numerous foundations, have an influence on education-related urban development.

[3] German formal education is organized in a division of tasks between municipalities and states, particularly with regard to schools. Cities and municipalities are "school authorities" and thus responsible for "external school matters." The state bears responsibility for "internal school matters." The "external school matters" to which towns and municipalities must attend include the construction of school buildings and school maintenance (procurement of equipment, materials, support services and the auxiliary staff). "Internal school matters" handled by the state include defining educational goals, setting curricula and hiring teachers. The split between roles is reflected in school funding. Cities and municipalities bear the costs of school operation (construction and operation of the school buildings, learning aids, building staff, special assistance, student transport, etc.), whereas states pay the teachers' salaries.

A formative factor in today's urban development in Germany is the focus on sustainable development—as mentioned above in this chapter's introduction—that emerged in the early 1990s. Proponents of sustainable development consider education as an important topic and field of action for both urban development practice and policy-making.[4] The authors of the "LEIPZIG CHARTER on Sustainable European Cities" articulate principles and strategies for sustainable urban development policy in the European Union, explicitly naming education as part of sustainable urban development (BMUB, 2007). They present and discuss education as a subject area for sustainable urban development in various forms, arguing that educational infrastructures, but also infrastructures for health and social services, influence quality of life and are economic location factors in cities. Knowledge creation and sharing in cities is to be reinforced, among other things, through high-quality educational institutions, opportunities for lifelong learning, and knowledge transfer structures—among other things through the development of networks and improvements to structures on site (BMUB, 2007, pp. 4–5). The authors of the LEIPZIG CHARTER explicitly name and promote an activating child and youth policy, as well as improvement to the vocational training and education situation, as important strategies for adding value to disadvantaged urban neighborhoods where an above-average proportion of children and adolescents are regularly affected by educational disadvantages and inequalities in education. This requirement undoubtedly reflects the challenges many European states face when dealing with increasing tendencies toward segregation (Häußermann, 2002).

Besides the Social City programme (one of the Federal Government's urban development assistance programs)—which we discuss in the following section—the so-called National Urban Development Policy and its model and pilot project funding scheme are used to support innovative, transferable approaches that put LEIPZIG CHARTER principles into municipal practice and can also be taken up by others.[5] In this context, several different projects have made direct and indirect reference to the city and the district as an educational space and opportunity (BBSR, 2017a). The leaders of a large number of funded model projects address educational events in the form of good, participatory processes as an important and "creative" boost for urban transformation (BBSR, 2017b). Other model projects implemented since 2008 are

[4] Its first aim is to contribute to "intra and intergenerational equal opportunity" (Spehl, 2005, p. 679; own translation). Legislative anchoring of the sustainability principle as a guiding idea for spatial development came in 1998 with an amendment to the Spatial Planning Act (Sinz, 2005, p. 866), whose authors envision "a sustainable spatial development that reconciles social and economic demands on space with its ecological functions and leads to an enduring, large-scale, balanced order with equal living conditions in all sub-areas" (§1 (2) ROG; own translation). These guidelines have been translated, among other things, into municipal sustainability concepts (or urban development concepts focused on sustainable development) that many cities and municipalities in Germany have set up. Education appears as a field of action here and is primarily discussed under the catchphrase "social and integrative city" (Grabow & Uttke, 2010).

[5] Website for the National Urban Development Policy: http://www.nationale-stadtentwicklungspolitik.de/NSP/EN/Home/home_node.html;jsessionid=EA95B22CD5E87733F0EC35DE5A1C8777.live11293

clearly centered around developing educational opportunities and educational landscapes in the neighborhood. Representatives from these model projects published a thesis paper as a catalyst for the planning-practice debate (Biernath et al., 2009; Steffen et al., 2009). The authors view the paper as a supplement to the LEIPZIG CHARTER and put forward three theses in "Die Rolle der Bildung in der Nationalen Stadtentwicklungspolitik" [The Role of Education in National Urban Development Policy] (Burgdorff & Herrmann-Lobreyer, 2010, p. 153):

- First, they determine that "educational facilities and opportunities shape the urban district" (Biernath et al., 2009, p. 2; own translation).
- Second, they warn that "education, and with it, equal opportunities and the integration of parents and children, can also be made more difficult by inappropriate planning measures and urban developments" (Biernath et al., 2009, p. 3; own translation).
- And third, they request that "urban development planning and educational planning must be brought together" (Biernath et al., 2009, p. 3; own translation).

Lastly, a number of international building exhibitions (IBAs) in Germany[6] have demonstrated the growing importance of education as a topic for planning innovation in dealing with the challenges of urban development. In 2010, the majority of cities in the *IBA Urban Redevelopment Saxony-Anhalt* conceived education as a strategic component in the enhancement of a city's image, and thus as an aid to coping with processes of urban shrinking (MLVLSA, 2010). The *IBA Hamburg* integrated issues related to the new, knowledge-society city and the need for novel pedagogical architecture into its considerations on the *Future of the Metropolis*[7] (IBA Hamburg, 2009). And the *IBA Heidelberg* made education the guiding theme of an international building exhibition for the first time, with its motto *Knowledge | Based | Urbanism* (Stadt Heidelberg, 2012).

Education as a Field of Action in Social Urban Development of Deprived Neighborhoods

The role of education in the social urban development of deprived neighborhoods came into focus parallel to the increased importance of education in urban development policy (in more detail see: Heinrich, 2018, pp. 41–44). In the 1990s, greater inequality between and within German cities emerged so strongly that there was

[6] The international building exhibition or IBA is a presentation and working format in cities and regions for implementing new, standard-setting concepts and solutions with international appeal for today's urban development challenges. A number of projects and initiatives are implemented, in general, for a limited period of time (about 10 years) and usually with support from a targeted combination of various public funds (IBA Hamburg, 2010).

[7] The IBA Hamburg addressed, among other things, the extent to which the spatial concentration of formal and informal educational institutions for children, adolescents and adults held particular potential for new forms of learning in the transition from an industrial to a knowledge-based society (IBA Hamburg, 2009).

talk of a "crisis of cities" by the end of that decade (Häußermann, Läpple, Siebel, 2007, p. 183; own translation). This meant both a crisis of integration in the face of growing inequality as well as a crisis in urban policy, as its actors apparently lacked the tools to support social cohesion (Häußermann & Siebel, 2004; Stegen, 2006, p. 11). One consequence of the manifold changes was an increase in the sociospatial differentiation of urban districts. Processes of social segregation have taken place, and are taking place, in many German cities in tangible terms, and they continue to be manifested to this day.

However, educationally segregated districts with dropout rates between 10% and 15% face more than just the challenge of improving school performance and qualifications for their children and adolescents. They also call for answers to many social issues that are not reflected in the curricula and, accordingly, cannot be solved in the school system alone. Many communities have also seen reinforced cooperation between schools and out-of-school educational institutions, often supported by funds from the Social City programme. Such collaboration can include the organization of transitions between day-care facilities and school, or school and work; the joint training of a district's pedagogical staff on specific issues, such as intercultural competence, violence prevention, or language development; cooperation between school and extracurricular education such as libraries or youth and cultural institutions; and improving cooperation with parents in the neighborhood.

In the 1990s, these developments led to a "political dynamic in the field of social urban policy" (Güntner, 2007, p. 147; own translation). The first programs were initiatives at the municipal level and funding programs initiated by some federal German states (Berlin, Bremen, Hamburg, North Rhine-Westphalia). With some delay, the approaches were adopted across Germany, and in 1999 the program "Social City: Investments at the Neighborhood Level" (at that time called "Districts with Special Development Needs: The Social City," or "Social City" for short) was brought into being (see Güntner, 2007, p. 147; Häußermann & Siebel, 2004, p. 171). The program's aim was, and still is, "to stabilize and upgrade developmentally, economically and socially disadvantaged and structurally weak urban areas and districts" (BBSR, 2017c; own translation). Häußermann and Siebel (2004, p. 171; own translation) describe the novelty of the program five years after implementation as follows: "The innovative thing about this program is that urban and social problems are viewed in relation to one another, and therefore projects focused on improving the social situation and developing the community should also be funded alongside structural renewal projects." This marks a departure from a primarily building-focused urban policy towards a social space-oriented urban development (Häußermann & Siebel, 2004, p. 171).

School and education as a field of action was initially of only secondary importance in the Social City programme and was reduced to the technical aspect of infrastructure (Böhme & Franke, 2015, p. 39). However, the third nationwide survey of the Social City programme areas (Bundestransferstelle Soziale Stadt, 2006) revealed an impressive boost in significance. The report's authors wrote that about three-quarters of all integrated urban development concepts discussed "school and education" as a concept (Bundestransferstelle Soziale Stadt, 2006, pp. 10–13).

Whereas only 17% of the program areas in 2002 aimed to integrate schools into the neighborhood, this figure rose to 47% in 2006. Moreover, educational institutions have become "a permanent partner in developing integrated development concepts" (Bundestransferstelle Soziale Stadt, 2006, p. 13). In 2006, some 63% of the program areas involved educational institutions in working out development concepts, compared with about 45% in 2002. A reason for the high importance of "school and education" as a field of action in the Social City programme is that an above-average proportion of children and adolescents in the program areas are regularly affected by educational disadvantages (BMUB, 2014, p. 16).

The 2014 Social City Status Report (reporting period 2009–2014; BMUB, 2014) demonstrates that actors were interpreting and treating the field of "school and education" in a much more varied way than at the beginning of the program: Its declared objective was "to complement formal school education with a variety of informal educational opportunities in the living environment 'outside one's doorstep' and also 'in the city,' or to harmonize the two" (BMUB, 2014, p. 17; own translation). The range of topics and measures covered includes, but is not limited to, cooperation between neighborhood management and educational institutions, networking between educational institutions and other actors in the neighborhood, improving transition management between educational institutions, the opening of schools and further development to neighborhood centers, expansion of the range of services offered by the schools, improvements to the living environment with a focus on learning and games, the creation of recreational activities (e.g., sports and cultural activities), language development and health promotion, parenting skills support, and violence and crime prevention (BMUB, 2014, pp. 16–17; Böhme & Franke, 2015, pp. 38–40; Million et al., 2017, p. 4).

In 2011, federal-level policymakers took up the growing importance of the "school and education" field of action in the program areas. With the further development of the Social City programme, the "improvement of child, family and elderly and other social infrastructures" (Böhme & Franke, 2015, p. 40; own translation) has become a substantive focus. Finally, the 2014 Social City Status Report states: "The topic of 'educational landscapes' has gained significant momentum in the Social City programme in recent years" (BMUB, 2014, p. 17; own translation).

Educational Landscapes

In contrast to *educational networks*—which can be found in the literature and in practice in Germany—the term *educational landscapes* is more frequently used in the planning and design professions, but also by architects and planners, as it apparently implies a spatio-physical situation on different levels of scale (for example, building, plot, block, neighborhood, district, entire city, region, as well as public and private spaces) (Million et al., 2017, p. 8). There is no consensus definition of *educational landscapes* as a new guiding concept (Mack, 2008), even across different disciplines. For instance, Bleckmann and Durdel (2009, p. 12; own translation)

define educational landscapes as "long-term, professionally designed and local, politically desired networks around the topic of education that—taking the learning subject's perspective as a starting point—are comprised of both formal educational facilities and informal learning worlds and refer to a defined local area."

In 2009, Berse offered a first typification considering the underlying conceptions of space and education, the actors involved, the importance of cooperation between youth welfare services and schools, and the type of control applied. He distinguishes between four types of educational landscapes:

1. Cooperation between youth welfare service and school
2. School and school development design
3. Lifelong learning, further training, economy
4. Social space as educational space

The fourth type is particularly productive with regard to overlaps and interdependencies between education and urban development as topics and fields of action. Researchers use it to refer to educational landscapes that are "characterized by the orientation of education policy networking towards social space as an educational space" and "the design of the socio-spatial living conditions . . . as a basis for educational processes" (Berse, 2009, p. 202; own translation). Implementing sociospatial educational landscapes brings a "spatial perspective" to education and the shaping of sociospatial living conditions is considered a basis for educational processes.

Characteristics of Sociospatial Educational Landscapes

Drawing upon the empirical data of eight case studies on sociospatial educational landscapes, education and planning scholars Million et al. (2017, pp. 205–208) sharpen the broader definitions by reconstructing four constitutive elements of educational landscapes and calling them "sociospatial educational landscapes." They describe the common features of sociospatial educational landscapes in practice:

Diversity of participating institutions: The first constitutive element of sociospatial educational landscapes comprises the broad and diverse spectrum of actors, which is also characteristic of other types of educational landscapes. Partners in sociospatial educational landscapes are frequently organizations from the fields of early childhood education, (all-day) school education, child and youth work, cultural education, adult education, and health care. Cooperation in sociospatial educational landscapes is not limited to education-related topics, but equally includes urban(−spatial) relationships between organizations. A particularly important factor here is the creation of spatial proximity between partner institutions, which, among other things, is meant to intensify cooperation and communicate their connection to the outside world.

Various forms of organizational cooperation: The second constitutive element of sociospatial educational landscapes is the organizational cooperation between participating institutions. The participants characteristically understand themselves as partners and develop and establish structures that enable long-term cooperation. They usually set up non-formalized networks and use various forms of voluntary participation (e.g., shared mission statement, cooperation agreement), always basing cooperation on joint objectives.

Integration of educational and urban planning aspects in the overall concept: Another common feature is that pedagogical and spatial aspects are linked in the mission statements, goals, concepts, and the implementation of strategies and measures of sociospatial educational landscapes. This becomes particularly clear on the basis of practical cases implemented using the urban development concept of the campus. The campus is intended to create attractive open spaces and make integrated use of infrastructures, on the one hand, while also facilitating school career-related transitions through users' familiarity with the clearly defined space.

Sociospatial relations: Sociospatial relations form the fourth constitutive element of sociospatial educational landscapes. Space is a key category in conceiving and implementing sociospatial educational landscapes. This means that the projects are understood not only as actor networks, but also as urban development projects. In particular, the physical materialization of sociospatial educational landscapes includes, for example, the creation of new or existing green and open spaces, the connection of existing buildings with new architectures, as well as spatial networking through additional pathways. A key question here is often to what extent and in what form relationships between the district and educational landscape are designed and how open and public an educational landscape is.

These unique features of sociospatial educational landscapes (particularly in contrast to educational landscapes that function primarily as institutional educational networks) presuppose another characteristic: In action, not only educators but also architects, urban, and landscape planners are co-designers of sociospatial educational landscapes. The actors, with their different motivations, pursue shared goals (presented in the following sections) that are based on a common understanding, especially in respect of deprived neighborhoods. Heinrich (2018, pp. 296–297; own translation) elaborates on the unifying understanding that underpins the actors' engagement in educational landscapes in the social urban development of deprived neighborhoods[8]:

– "mutually-reinforcing problem areas in local education and neighborhood development (esp. the links between segregation and the quality and image of educational institutions);

[8] Based on interviews and document analyses, Heinrich (2018) analyses the sociospatial educational landscape *Campus Rütli*.

– low impact of disciplinary and department-specific approaches to urban planning and pedagogy and the realization that complex problems can only be resolved with integrated, holistic solutions;
– educators and/or urban planners lack the necessary power and access to impact their own area of responsibility, and this can only be done through cross-disciplinary and interdepartmental cooperation;
– similar, in some cases identical, objectives between urban planners and educators;
– the realization that actors at points of overlap (e.g., neighborhood management) create special qualities with their work and have a high innovation potential;
– the expectation that the integrated conception and implementation of [a socio-spatial educational landscape] […] will tap into synergies and thereby increase project effectiveness;
– realization that the integrated use of existing resources (e.g., know-how, funding) can help implement measures and increase project efficiency;
– urban planning methods, procedures and tools promote the structuring of cross-cutting issues (e.g., integrated urban development concepts);
– various policies and programs promote integrated action (e.g., the Social City programme, the policy framework to enhance social space orientation)"

In our view it is indeed remarkable that actors from very different disciplines and departments share this understanding. The reference to an earlier empirical study by Duveneck (2016) describing conflicts between actors suggests that a common understanding has, at least partly, grown out of the process of cooperation. However, based on the case studies and with a view to the broad field of practice, Heinrich (2018, p. 248; own translation) asserts that at present "we cannot speak of a matter of course or even 'mainstreaming'".

Implementation of Educational Landscapes: Examples

Germany had an estimated 400 educational landscapes in 2017, of which around two dozen can be classified as sociospatial educational landscapes (Million et al., 2017, p. 9); not all are implemented in deprived neighborhoods. Compared to the number of single school buildings eracted in the same time span educational landscapes are (still) a numerically rather small phenomenon. It is striking that this small number of soci-spatial educational landscapes have gained very high visibility in politics, practice, and research. Although sociospatial educational landscapes are by no means representative of educational landscapes, this type dominates the debate in practice. Sociospatial educational landscapes regularly appear in planning—but also in education-related—professional congresses, events, or publications that examine the practice.

Million et al. (2017) have studied examples of sociospatial educational landscapes intensively. Those that are completed and in operation include *Bildungszentrum Tor zur Welt* ["Gate to the World" Education Center] (Hamburg),

Campus Technicus (Bernburg), and the *Campus für lebenslanges Lernen* [Campus for Lifelong Learning] (Osterholz-Scharmbeck). Sociospatial educational landscapes that are currently being conceived and realized include the *Bildungslandschaft Altstadt-Nord* [Altstadt-Nord Education Landscape] (Cologne), *Campus Rütli* (Berlin), and the *Quartiersbildungszentrum Morgenland* [Morgenland Neighborhood Education Center] (Bremen).[9] All these examples show that the practical implementation of sociospatial educational landscapes is typically embedded in co-funding structures (federal or state funding together with foundations) (see sections on *Education-Related Urban Development* and *Education as a Field of Action*)[10].

Some projects outside of Germany can also be characterized as sociospatial educational landscapes. Examples include *brede scholen* in the Netherlands or *extended schools* in the United Kingdom (see Baumheier & Warsewa, 2009, p. 24; du Bois-Reymond, 2011, pp. 519–521; Million, Heinrich, & Coelen, 2015, pp. 595–596; 2017, p. 9).

In the following sections, we take a closer look at the *Campus Rütli* in Berlin, which scholars often cite as an educational landscape in the context of social urban development of deprived neighborhoods. Before this, however, we explore another case, the *Quartiersbildungszentrum Morgenland* [Morgenland Neighborhood Education Center] in Bremen. These two cases show how differently sociospatial educational landscapes in deprived neighborhoods are designed and arranged.

Morgenland Neighborhood Education Center in Bremen-Gröpelingen

The Morgenland Neighborhood Education Center is the third district education center (QBZ) set up in the city of Bremen to date. Neighborhood education centers accommodate various institutions and provide (further) education and counseling services. Managers of neighborhood education centers are also obliged to support the organizational cooperation of educational institutions in the neighborhood. The neighborhood education center as a building should serve as a place of exchange for the target groups, neighborhood residents, and representatives of the educational institutions. Usually, neighborhood education centers are implemented as new and supplementary buildings at existing elementary schools. Physical proximity to an elementary school is meant to ensure that the neighborhood education center is visited often, and to foster a connection to the local residents via the catchment area.

[9] An in-depth description of this and other sociospatial educational landscapes can be found in Million et al. (2017, pp. 80–203). Heinrich (2018) presents a detailed analysis of *Campus Rütli*.

[10] Sociospatial educational landscapes are funded in the context of state and federal education ministry programs, as well as by and with foundations, such as the *Lernen Vor Ort* [Learning On-Site] program (German Federal Ministry of Education and Research, 2009–2014), the *Ein Quadratkilometer Bildung* [One Square Kilometer of Education] program (One Square Kilometer Foundation, since 2006), the pilot project *Selbstständige Schule* [Independent School] (State of North Rhine-Westphalia and Bertelsmann Foundation, 2002–2008), or various projects headed by the German Youth Institute (DJI).

Neighborhood education centers are aimed at stabilizing neighborhoods or entire urban districts by enhancing the framework conditions for the growth of children and adolescents through improved educational opportunities and successful transitions between them. Adults are to be provided with counseling and continuing education programs. Neighborhood education centers are conceptually grounded in integrated, cross-departmental, and social space-oriented action. Although policymakers planned several neighborhood education centers for Bremen from the outset, they applied no uniform concept to different locations. Instead, the neighborhood education centers are being developed on a local basis and focused on local potentials from a resource-oriented perspective (Fig. 3.1).

Neighborhood education centers are not (yet) socioeducational landscapes as we conceive them. Rather, we interpret neighborhood education centers as a funding structure for the development of sociospatial educational landscapes. They can also be seen as an instrument for the social urban development of deprived neighborhoods. Compared to the other educational landscapes we are examining here, it is particularly interesting that neighborhood education centers make an entire neighborhood—an entire urban district, in the case of Morgenland Neighborhood Education Center—an educational landscape.

With 35,000 residents, the urban district of Gröpelingen is a structurally disadvantaged area in the Hanseatic city of Bremen. It joined Bremen's WiN (*Wohnen in Nachbarschaften/Living in Neighborhoods*) program in 1998. Ten years later, the Senator for Education and Social Affairs in Bremen decided to establish three neighborhood education centers in structurally disadvantaged neighborhoods, including Gröpelingen. Initiated by the *Lernen vor Ort* [On-Site Learning] program, a working group was founded to set up a local educational bureau to address the following questions: "How can long-term educational barriers in Gröpelingen be overcome? How can local educational institutions make their cooperation more coherent? How can educational services be tailored to the needs of children, young people and families in order to overcome educational disadvantages?" (Senatorin für Bildung und Wissenschaft [Senator for Education and Science], 2014, p. 1; own translation).

Policymakers planned the Morgenland Neighborhood Education Center (see Fig. 3.2) in the following years, and in 2014 it opened on-site beside an existing elementary school. Schools, day-nurseries, and urban district institutions work together in the neighborhood education center to improve educational opportunities for the district's children and youth. Actors view it as a new building block for the Gröpelingen education landscape, which complements already existing opportunities. It is home to a workshop for project-related work (MO 34), uses the elementary school cafeteria, which can be used for events in the afternoon, provides office space for the local educational bureau tasked with overall coordination, outreach educational counselling, and includes the office of the WiN (*Wohnen in Nachbarschaften/Living in Neighborhoods*) program. "QBZ MORGENLAND also offers numerous services to support parents, advise residents and strengthen families" (Kultur Vor Ort e.V., 2017; own translation) (see Fig. 3.2).

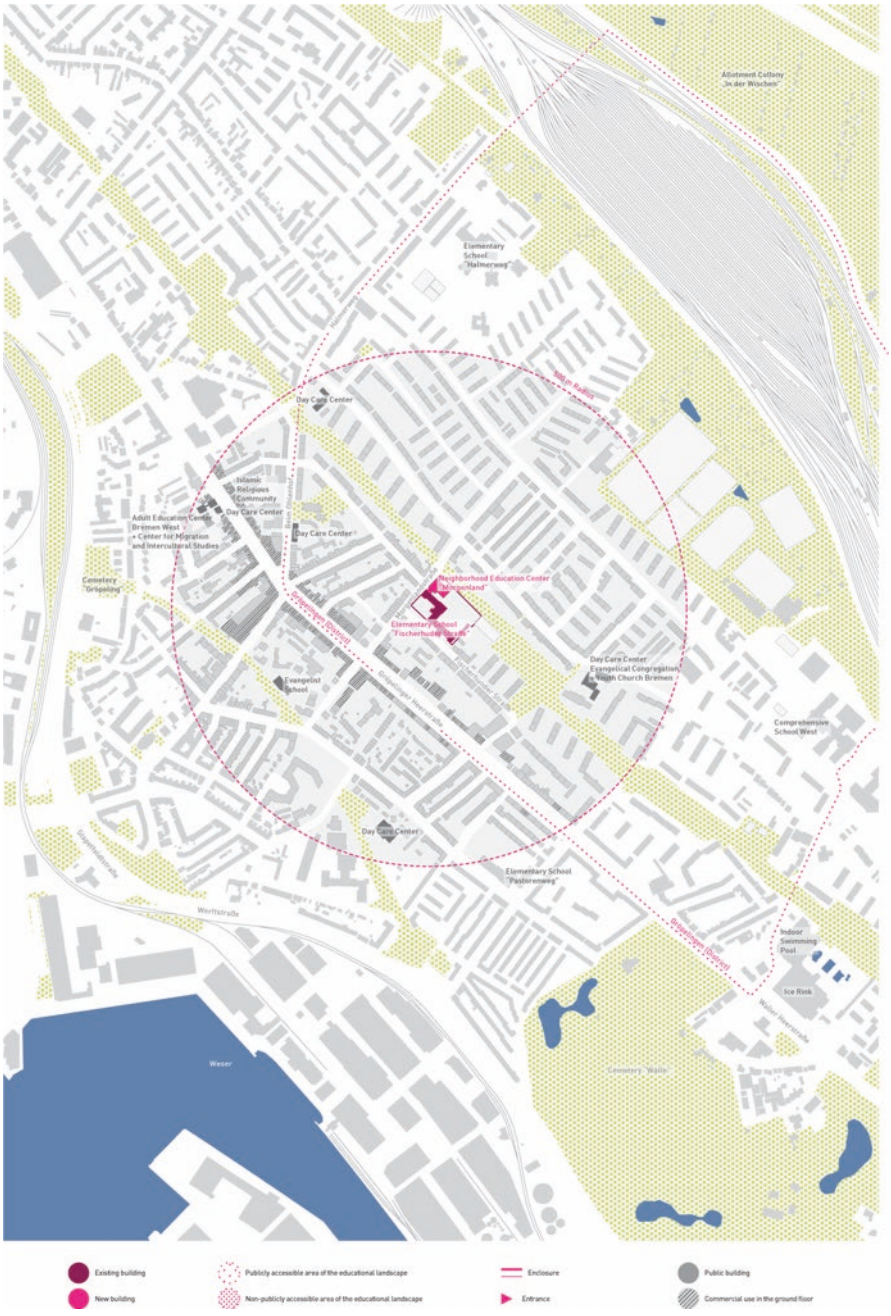

Fig. 3.1 The sociospatial educational landscape QBZ Morgenland Neighborhood Education Center in the "Gröpelingen" neighborhood in the city of Bremen. Reprinted from Million et al. (2017, p. 87). Copyright 2017 by jovis Verlag GmbH. Reprinted with permission. Map data: © OpenStreetMap contributors (License: www.openstreetmap.org/copyright)

Fig. 3.2 Homebase and office of the QBZ MORGENLAND. Reprinted from Million et al. (2017, p. 86). Copyright 2017 by jovis Verlag GmbH. Reprinted with permission

With the neighborhood education center as a location and the education authorities as partners, the local educational bureau provides five important building blocks for the Gröpelingen education landscape: It coordinates joint activities, points of contact, and transitions in the educational landscape; it provides spaces for general use for educational purposes; it initiates and hosts language and cultural education programs for children up to age 16; it organizes district-related further education opportunities that are used by schools, day-care centers, the library, youth facilities, and others; and it provides space for topic-relevant coordination centers (WiN, educational counseling). The local education bureau is run by the *Kultur vor Ort* [Culture On-Site] association.

Bremen's neighborhood education centers aim to contribute to equal opportunity and upgrading processes in disadvantaged neighborhoods by supporting organizational cooperation between existing institutions and formal and informal educational settings. With this approach, neighborhood education centers are potential incubators for sociospatial educational landscapes. The spatial relevance of neighborhood education centers and their importance for district development is particularly striking compared to other educational landscapes that we have examined.

The Morgenland Neighborhood Education Center is intended to modify an entire urban district's educational landscape. Its objective is to achieve closer integration between institutions and actors, not to concentrate on a few educational institutions

in the district. This significantly expands the reference framework, beyond the other examples. We believe that turning an entire neighborhood into an educational landscape with the help of educators and planners, and making it the focus of social urban renewal strategies, is highly ambitious. At the moment, the specific design and implementation seems limited primarily to organizational cooperation. Observers will have to wait and see how the educational landscape's vision is developed in future in relation to public urban space.

Campus Rütli Berlin[11]

Two day-care centers, a community school, a youth club, a music school, a community college, and other partners have forged an alliance under the title *Campus Rütli* and have joined forces to improve the living conditions in Berlin's neighbourhood called "Reuterkiez"—for children and adolescents specifically, but also for all residents. Today the institutions are coordinating and working together to design harmonious transitions between institutions, life phases and different activities.

The starting point for Campus Rütli was the problematic situation in the so-called *Reuterkiez* neighborhood and serious grievances at *Rütli High School*, made famous by an urgent letter sent by the teaching staff to the Senate Administration for Education in 2006 that later became public. Campus Rütli is located in the Neukölln district of Berlin, and Reuterkiez is the neighborhood around Campus Rütli (see Fig. 3.3). Land development in the Reuterkiez and in the urban district is characterized by five-story, high-density, block-perimeter buildings from the Wilhelmenian period. The playground coverage rate is approximately 45% of the Berlin standard; green and open spaces account for only 15% of the standard value (Quartiersbüro Reuterplatz, 2016). Almost half of the inhabitants have a migration background (SenStadt, 2013a, p. 12). The district has an average unemployment rate of 9.5% (Berlin average: 8.1%) and a high proportion of inhabitants receiving social welfare benefits (SenStadt, 2013b, p. 9). As early as 2001, the Reuterplatz neighborhood management area was defined as part of the *Social City* programme, the funding of which expired in 2016.

Actors brought together various parallel initiatives to create the campus, as it became clear that they comprised similar topics and partially had the same aims. The neighborhood management was instrumental in the conception and realization of Campus Rütli, above all by building on its familiarity with actors in the Reuterkiez and existing networking activities, and by supporting the development of an education network. Two directors were in charge of the development of the Campus Rütli

[11] Heinrich (2018) conducted an empirical study is to understand the conceptual framework of the sociospatial educational landscape Campus Rütli from the stakeholders' perspective. Two research questions are answered: What are the reasons for stakeholders of urban planning and urban development to engage in the design of sociospatial educational landscapes? And: What significance do the stakeholders of urban planning and urban development attribute to sociospatial educational landscapes?

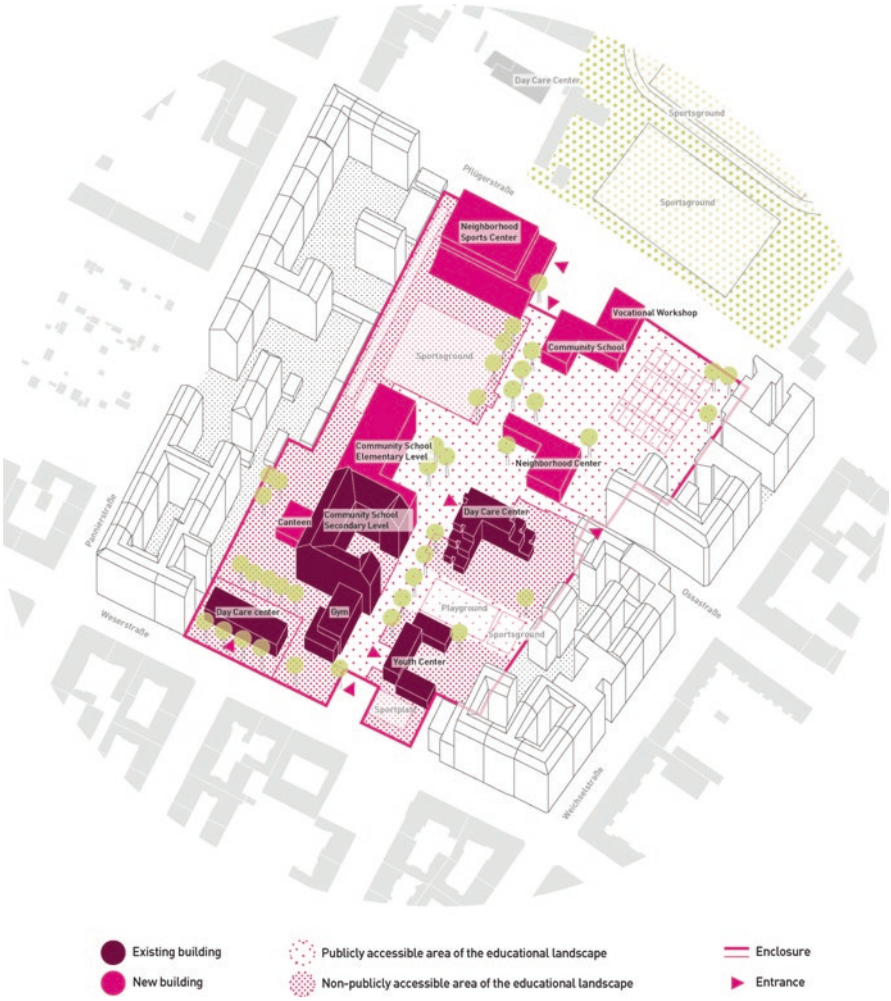

Fig. 3.3 The sociospatial educational landscape Campus Rütli in the "Reuterkiez" neighborhood in Berlin. Reprinted from Million et al. (2017, p. 121). Copyright 2017 by jovis Verlag GmbH. Reprinted with permission. Map data: © OpenStreetMap contributors (License: www.openstreetmap.org/copyright)

at the operational level: A retired school principal took over as pedagogical supervisor and a neighborhood manager led the networking and construction management effort. Dual leadership remains a key principle today, despite personnel changes.

In 2011, the signing of the *Rahmenkonzeption Campus Rütli* [Framework Concept for Campus Rütli] (CR2 2011) formalized the cooperation between actors as a voluntary undertaking. Besides the institutions, signatories included the independent *Elterninitiative Reuterkiez* [Reuterkiez Parents' Initiative], the neighborhood council, and the *Ein Quadratkilometer Bildung* [One Square Kilometer of

Education] program. The Senate Department for Education and the Senate Department for Urban Development, among others, provide administrative support. The involved partners state that the monthly meetings are extremely important for day-to-day cooperation. These are complemented by a bi-annual "political steering committee" for feedback with politicians and representatives of the municipal and state authorities. Other committees include a building committee, which follows the initiated structural measures, and other features include joint training programs (Heinrich, 2018, p. 197).

The first building block of the campus' structural design came with the construction of a new neighborhood sports center, which was completed on campus at the end of 2012. The three-part gymnasium is used for school and club sports. The sports hall and the foyer can also be used for events such as concerts or art exhibitions. Large parts of the campus have been under construction since late 2015. Starting in 2018, the newly built neighborhood center will be home to, among other things, a parent center, the pedagogical workshop, neighborhood coordination, parts of the Youth Welfare Office, a dental service, and the community college. The facility will also provide space for networking activities in the neighborhood. The neighborhood center is intended to serve the goal of lifelong learning. Though the institutional offerings on site and attractive open spaces are meant to encourage neighborhood residents to use the campus, opening the campus to the public is controversial. The neighborhood has seen an influx of artists, creative people, education-minded groups, and high-income households since around 2010, and affordable rental housing has become scarce. A legal protection order for the area was issued in 2016. The school reports initial, tentative changes to the composition of the student body.

The Campus Rütli educational landscape is a good example of how closely the development of an educational site and the development of an entire neighborhood can be intertwined and interrelated. Its conception and realization offer insights even today. The starting point and one of the reasons for creating Campus Rütli was an existing concentration of educational institutions in a small area. Actors saw, and still see, this spatial proximity as a potential factor in the success of organizational cooperation (see Fig. 3.4). Thus, a further concentration of institutions on site should draw additional partners, and transitions in and across young people's school career can be harmoniously organized. Whether the spatial juxtaposition of facilities on a campus also contributes to their harmonious coexistence and cooperation will have to be seen in future day-to-day campus life. Likewise, whether an attractive campus with public spaces can lessen the fear of educational institutions, or whether children and young people will have better educational opportunities, cannot be answered at present.

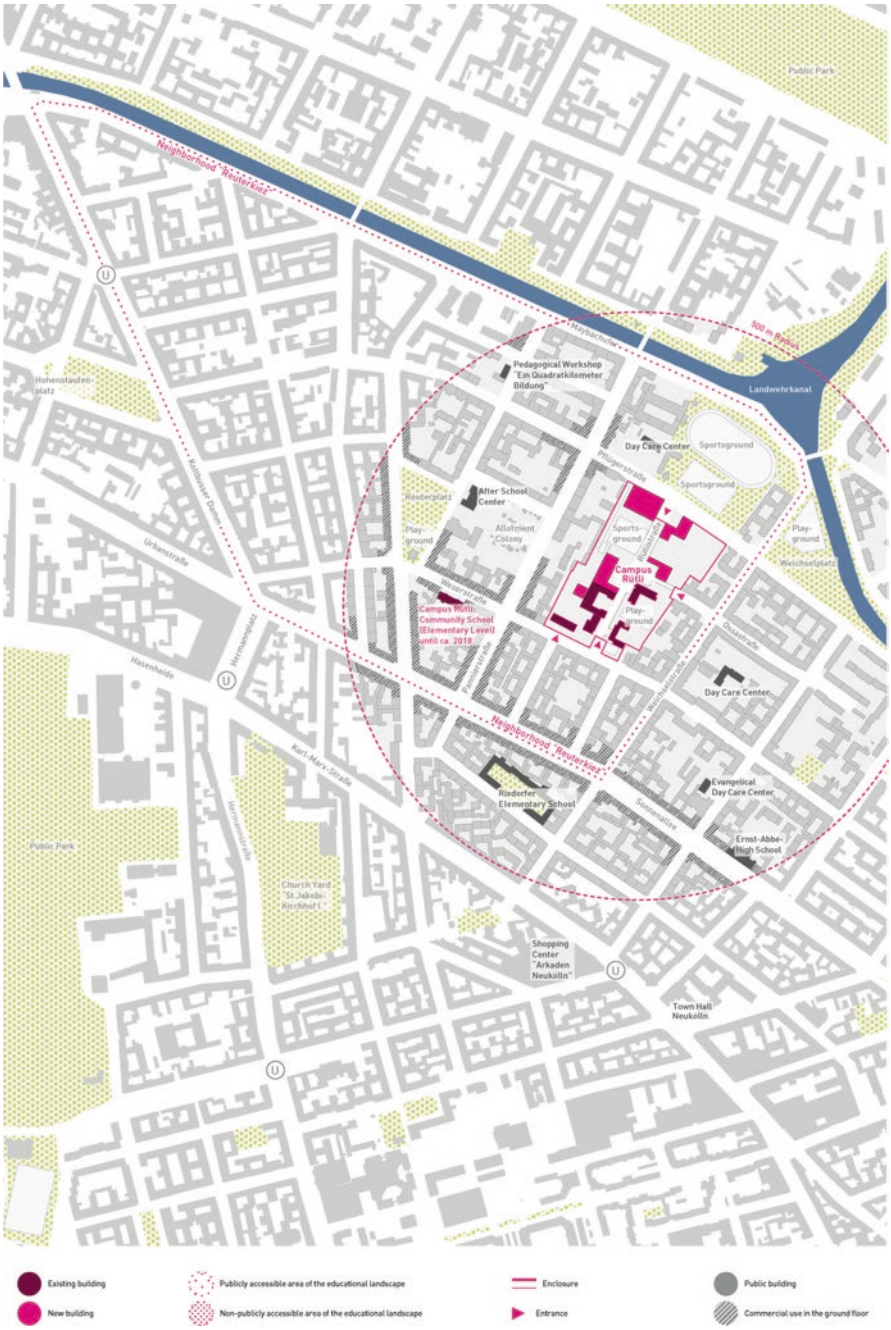

Fig. 3.4 The (possible) future urban design of the Campus Rütli. Reprinted from Million et al. (2017, p. 127). Copyright 2017 by jovis Verlag GmbH. Reprinted with permission. Map data: © OpenStreetMap contributors (License: www.openstreetmap.org/copyright)

Motives for Creating a Social Environmental Setting to Improve Opportunities for Learning

The study *Gebaute Bildungslandschaften: Verflechtungen zwischen Pädagogik und Stadtplanung* [Built Educational Landscapes: Interdependencies between Pedagogy and Urban Planning] (Million et al., 2017) sheds light on the perspective of actors involved in shaping sociospatial educational landscapes. The study's researchers use a detailed analysis of eight cases to explore four main themes of sociospatial educational landscapes: centralization and concentration, networking and interdependence, access and transition, opening and closing (Million et al., 2017, pp. 208–216; see Fig. 3.5). The study of Campus Rütli in Berlin-Neukölln by Heinrich (2018) adds three further motives to the basic characteristics of sociospatial educational landscapes: proximity and connectedness, heterogeneity and individuality, and presentation and representation.

These motives are utilized to answer the question of the deeper meaning that influencing actors (especially educators and urban planners) attribute to their projects. They are the expression of existing and envisaged, idealistic and spatial interdependencies in these stakeholders' thinking and actions—also in the light of targeting inequalities in education.

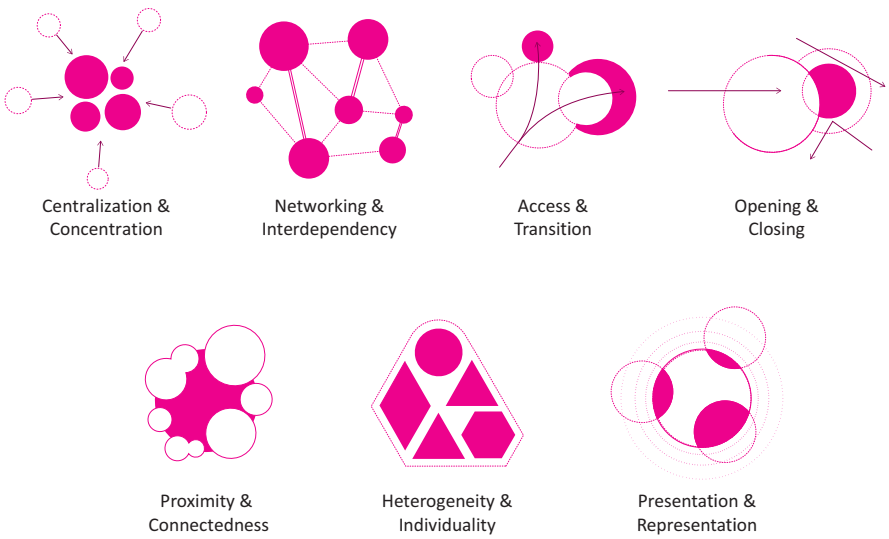

Fig. 3.5 Motives for the creation of sociospatial educational landscapes. Adapted and translated by permission from Springer Nature Customer Service Centre GmbH & jovis Verlag GmbH: Springer, Die sozialräumliche Bildungslandschaft Campus Rütli (p. 270), Anna Juliane Heinrich (2018); and jovis, Gebaute Bildungslandschaften (p. 209), Million et al. (2017)

Centralization and Concentration

The realization of sociospatial educational landscapes concentrates institutions, times, opportunities, and activities at the educational landscape site. Very often, policymakers take the existing spatial proximity between various educational institutions and settings as the starting point and establish further institutions in the direct vicinity. This usually happens in a central location. This concentration of organizations is meant to intensify exchange and communication between actors and thus help improve organizational cooperation. Concentrating the various institutions attended throughout a student's school career in one place allows children and adolescents to find all the relevant educational institutions at a location already familiar to them. This is meant to alleviate anxieties. The various offered opportunities serve to create points of contact between the educational landscape and all residents in the surrounding area, helping to reduce the fear of entering these educational institutions. Finally, the concentration of facilities should also enable the sharing of infrastructures and contribute to cost reduction.

The concentration of time at the educational landscape location happens in the course of developing full-time school projects. Most sociospatial educational landscapes are centered around an all-day school. With the introduction of all-day educational facilities, curricular and extra-curricular activities, such as homework completion and recreation, are concentrated at the school. As a result, children and adolescents spend much more time at school than before.

The overlapping of various services and activities offered on-site within the educational landscape is meant to create additional added value. Sociospatial educational landscapes should, for example, develop into important meeting places for neighborhood residents and thus become places of communication. This would in turn enhance the attractiveness of the surrounding residential areas. Actors in sociospatial educational landscapes that are implemented in the urban development "campus" framework have particularly high expectations of this added value (Million et al., 2017, pp. 209–211).

Networking and Interdependency

Sociospatial educational landscapes are a form of organizational cooperation between various actors, settings, institutions, and organizations. Participating partners often organize themselves in the form of a network. Another form of interplay or interdependency in educational landscapes is cross-disciplinary and interdepartmental cooperation in designing sociospatial educational landscapes. The importance of multi-professional teams also increases within individual institutions, for example in neighborhood management and all-day schools.

Another envisioned principle in the conception and realization of sociospatial educational landscapes is spatial networking on different levels of scale. In the case

of concentrated educational sites, especially campus facilities, this is implemented in two ways: On the one hand, policymakers seek to create "small-scale and close-knit, overlapping of uses in one location" (Million et al., 2017, p. 212; own translation). They also facilitate networking between the educational landscape and the surrounding neighborhood. This can lead, for example, to the creation of visual axes and specially designed entrance situations. In the case of less concentrated and more expansive sociospatial educational landscapes covering a larger area, a further focus would be to create spatial links between different educational settings. However, at the moment it remains largely unclear how this is to be implemented in practice (Million et al., 2017, pp. 212–213).

Access and Transition

The design of pedagogical and spatial access and transition contexts is an important factor in developing sociospatial educational landscapes. Pedagogically, it is about the smooth success of school-career transitions in childhood and adolescence. Young people should have the opportunity to achieve the highest possible level of formal education and to take advantage of leisure and support opportunities throughout their school career. The transition from school to vocational training or a profession should be facilitated and made easier. In the interest of lifelong learning, adults should be able to access both further education and counseling service, as well as options for re-entry into educational programs.

The structural and creative implementers of sociospatial educational landscapes aim to dismantle not only intangible barriers, but concrete structural impediments as well. Inviting entrances to educational landscapes need to be created and enclosures removed. These measures are based on the assumption that the removal of physical barriers also eases access to an educational landscape's uses and institutions. As a result, the boundaries between public spaces and school spaces may blur, and transitions between areas supervised by educational staff and the less-controlled neighborhood become easier (Million et al., 2017, pp. 213–214; own translation).

Opening and Closing

Opening is a key objective for all eight of the social-educational landscapes studied. Pedagogues understand opening as a programmatic substantive opening of educational institutions, especially schools. Examples of this include cooperation between various educational organizations and settings, or the opening up of opportunities and infrastructures to new user groups. Structurally, opening means improving an educational landscape's accessibility both to the public and to groups that specifically address the participating institutions. Whereas a structural and creative opening is factored into the design of most educational landscapes, the tension between

closure and opening manifests itself very differently in implementation. Actors of the less central, larger-scale educational landscapes are building up structurally creative networks and reducing physical barriers in order to ease users' transitions between the various educational settings.

Highly concentrated campus locations discuss opening in two directions. On the one hand, if a campus-centered opening is the objective, institutions understand opening as the "openness of the educational site to the residents of the neighborhood" and invite various target groups to enter the campus and make use of its opportunities and offerings (Million et al., 2017, p. 215). On the other hand, if opening means outward movement from the educational landscape into the urban space and the neighborhood, institutions also use educational settings located outside of the educational landscape. As a result, learners not only spend time on campus but also visit other places in the neighborhood (Million et al., 2017, pp. 214–216).

Proximity and Connectedness

Proximity and connectedness are core ideas of many sociospatial educational landscapes. The spatial proximity of different educational institutions was one of the starting points for the design of almost all of the examples examined. Spatial proximity favors institutional proximity—this is the conviction of many stakeholders of educational landscapes. For this reason, the spatial realization of an educational landscape often comprises the creation of a campus for all partners or some other form of spatial proximity. The proximity of the actors to each other in terms of contents and concepts as well as common goals are also evaluated as important prerequisites for cooperation. The development of a common concept should strengthen the connectedness among the actors. Accordingly, the actors develop different forms of demonstrating and in some cases formalizing their commitment (e.g., concept papers, contracts).

However, the creation of an educational landscape is not only about the efficiency and effectiveness of the educational institutions, but also about facilitating access to education, harmoniously managing educational transitions and promoting social interaction within the neighborhood. In many places, services directed towards the residents of the neighborhood are created on-site the educational landscape (e.g., sociocultural activities, a public canteen, public open and green spaces). Through meeting and communicating on campus, a place of social interaction in and for the neighborhood is to be created. Social cohesion in the neighborhood is to be strengthened. Consequently, the connectedness among the residents of the neighborhood shall be strengthened (Heinrich, 2018, pp. 270–273).

Heterogeneity and Individuality

An educational landscape is a heterogeneous landscape of cooperation. In all the cases analyzed, a great variety of actors and settings (e.g., departments, disciplines, institutions) was the starting point of the conception and realization of the respective sociospatial educational landscape. A further diversification and the cooperation with additional partners (not only from the field of formal education and child-care, but also with companies and cultural institutions in the neighborhood or region) is also part of the conception of all projects.

The heterogeneity of the partners makes it possible to offer a wide range of services and activities in and around educational landscapes. This, in turn, allows to address diverse target groups. The aim of many educational landscapes is to address all residents of the neighborhood with their individual needs and interests—especially in the sense of lifelong learning. Moreover, this heterogeneous range of services is intended to increase the attractiveness of the neighborhood or district as a place to live, thus reducing the out-migration of young people and middle-class households. This is supposed to contribute to a more heterogeneous neighborhood and ultimately to the stabilization of (deprived) neighborhoods.

The motive of individuality is particularly pronounced at the Campus Rütli in Berlin. On account of the newly created institutional structure, young people here can nowadays achieve all school-leaving qualifications. The aim is not for all students to achieve the highest school-leaving certificate, but rather for all students to be able to decide individually on a suitable career path according to their personal wishes, plans, interests and abilities (Heinrich, 2018, pp. 273–277).

Presentation and Representation

The stakeholders of educational landscapes ascribe great importance to their projects for various forms of presentation and representation. Through their materialization, sociospatial educational landscapes not only become visible, but can also be perceived and experienced with different senses by the users and residents of the neighborhood. The educational landscapes—especially those in the urbanistic figure of the campus—are understood by the actors as a medium of communication. The design of sociospatial educational landscapes is intended to represent the cohesion of the partners and thus to develop an internal identity-forming effect and advertise the educational location to the outside world.

The actors of those educational landscapes in which comprehensive constructional changes have been implemented, pursued the objective to create transparency, visibility and visual relationships through design. Through participatory processes, designs are to be developed that represent the partners and users of sociospatial educational landscapes. By this means, identification with the campus is to be strengthened (Heinrich, 2018, pp. 277–279).

Critical Discussion and Outlook: Interdisciplinary Perspectives on Education and the Pedagogization of Space

In this chapter, we have argued that sociospatial educational landscapes are highly significant projects for the social urban development of deprived neighborhoods and beyond. They are innovative approaches to optimizing socioenvironmental settings with regard to learning, based on joint actions by policy and practice in urban planning, design, and education.

We have pointed out that although motivations for creating a social environmental setting to improve opportunities for learning differ, they have a number of key points in common. Heinrich (2018, p. 238) categorizes the objectives and motivations formulated by actors in the educational landscape into four thematic areas: (1) networking; (2) value-enhancement and stabilization of a deprived neighborhood; (3) designing school-career transitions; and (4) reinforcing the neighborhood connection on campus, in educational institutions and opportunities. An essential insight from the empirical work of Heinrich (2018), but also that of Million et al. (2017), is that, with these shared objectives and motivations, the separation maintained in municipal practice, and to some degree in scholarship, has already been overcome (even if only in such highly condensed situations as the development of sociospatial educational landscapes in deprived neighborhoods). This raises the interesting question of when and how this interdisciplinary perspective on the part of the actors emerged: whether it already existed, or whether it appeared at the beginning, during, or at the end of the process of developing a sociospatial educational landscape project—although an educational landscape is presumably never finished, but in a constant process of "developing." With regard to educational landscapes, Duveneck (2016, p. 88) concludes critically that willingness to engage in educational networking is a reaction to policy pressure to produce human capital, which is passed on to social subjects and results in improvement of young peoples' opportunities in life. Because communities engaged in intermunicipal competition are under pressure to make their local resources competitive, they develop structures to make them comply with public policy. With this approach, Duveneck's (2016) study is one of the few critical contributions to the debate on educational landscapes where hardly any critical views have been heard (Mattern & Lindner, 2015, p. 83).

There are several reasons to believe that urban planning will also address educational issues in the future, and that actors will develop more sociospatial educational landscapes to solve urgent social problems. These issues include the importance of origin and background for educational success, social segregation in cities, and the overdue renovation of many school buildings in Germany. There will be a need for action in these areas in the future.

Finally, we have shown that sociospatial educational landscapes are a highly coherent conceptual framework for diverse groups of actors. Different aims and objectives can be pursued, and goal conflicts tend to be few (Heinrich, 2018). At the same time, it is as yet impossible to say whether the quality of learning in

sociospatial educational landscapes has improved. The implemented examples are still young and need to prove themselves as educational settings in practice, and as a benefit for the neighborhood. There are voices that criticize the concentration of learning activities in socioeducational landscapes, the scholarization of the leisure time of children and adolescents in and through sociospatial educational landscapes (Million et al., 2017, p. 228), and the unbounding (*Entgrenzung*) of pedagogy in these sociospatial contexts (Castillo Ulloa, Million, & Schwerer, 2022). It is a pedagogy that underpins space. It refers to a spatialization which advances arrangements subtle or directly, in order to establish specific perceptions and uses of space. The pedagogical then is not limited to formal processes and arenas of school. It includes the wider spatial context of neighborhoods and even homes as designed and planned setting for learning and co-education—with open outcome on growing up in such an optimized environment.

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Chapter 4
Bringing the Full Picture into Focus: A Consideration of the Internal and External Validity of Charter School Effects

Douglas Lee Lauen and Kyle Abbott

In the United States, students enrolled in primary and secondary school attend a wide variety of schools operating in different settings and under various institutional arrangements. Of those enrolled in public or private schools, about 71% attend a neighborhood-based assigned traditional public school. The rest attend alternatives that serve students from many neighborhoods: 15% attend a public magnet school, about 5% attend a public charter school, and about 10% a private autonomous school (Snyder, De Brey, & Dillow, 2019). In this chapter, we focus on public charter schools, which are publicly funded semiautonomous schools designed as alternatives to traditional public zoned schools attended by most students. Charter schools challenge the notion that the state should control the practices and curriculum students experience. They serve a small fraction of students in most areas of the U.S., but this portion is growing rapidly, and, in some big cities, charter schools serve more than one third of students. These schools began as laboratories of educational innovation in the early 1990s. They are freed from many important financial, hiring, and curriculum regulations state and local authorities impose on schools. In exchange, they have a *charter*, a performance agreement, that a chartering agency, or authorizer, monitors and can rescind if violated. Depending on the state, these authorizers are state and district boards of education, higher education institutions, or nonprofits. Some states have only one charter school authorizer; others have many. Charter schools, therefore, are an example of an alternative institutional approach to state oversight of education. The sociological setting of interest in this chapter is therefore the institutional arrangements that surround education—the norms, practices, laws, and regulations that govern how schools operate (DiMaggio

D. L. Lauen (✉) · K. Abbott
Department of Public Policy, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA
e-mail: dlauen@unc.edu; kyleta@live.unc.edu

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& Powell, 1983; Meyer & Rowan, 1977; Meyer & Scott, 1992; Scott, 1998; Weick, 1976).

Some observers view charter schools as the central mechanism for educational reform because they have the potential to free students from low-performing traditional public schools and provide them with a different, and potentially better, education at no cost to the family (Budde, 1996; Chubb & Moe, 1990; Friedman, 1962; Hanushek, 2006). Others view charter schools as a neoliberal ploy to drain public schools of funding and public support, turning a public institution (the "common" school that educates everyone in the same way) into a fragmented collection of schools serving narrow interests in private markets in which schools compete for students (Fiske & Ladd, 2000; Lubienski, 2003; Ravitch, 2010).

Where one stands on this debate depends at least in part on how one feels about markets providing public goods. Clearly, education has positive externalities (spillover effects that create benefits not only for the student who receives the education, but for society as a whole). For example, teaching a student to read helps that student progress in school and get a decent job later in their life. Teaching everyone to read creates an educated populace that can create jobs, foster innovation, and promote healthy behaviors, as well as many other social goods. If schooling's only goal were to promote reading skills, we might not be too concerned if these skills were imparted by different types of schools. The key problem is that policymakers and parents want schools to teach many academic, social, and cultural skills; impart specific kinds of knowledge and not others; and promote cultural socialization. Moreover, many stakeholders want all students to attend the same types of schools with the same curriculum, so they receive the same educational opportunities and gain appreciation for cultural difference, thereby maintaining support for public schools, community ties, and the common welfare. Accordingly, critics of charter schools question whether liberalizing educational markets will promote the socialization mission of public schools and are troubled when taxpayer dollars are spent on a sector, such as charter schools, that is less accountable to elected officials.

In this chapter, we focus on the evidence of whether an institutional experiment in the delivery of education to students—charter schools—has succeeded in developing student academic skills in reading and math. We concentrate less on the theory of change and more on empirical evidence across a wide range of quantitative studies about test score effects. After 30 years of research in the effects of charter schools, there is now ample evidence on test score achievement effects to draw conclusions. This focus necessarily leaves aside the question of whether charter schools fray the social fabric, harm other types of schools, or promote harmful social values, as well as other important questions for which there is much less empirical research available to summarize.

We argue that charter school research provides an interesting case study for the interplay between internal validity and external validity. Most studies are strong in either internal validity or external validity, but not both. Therefore, policy conclusions are difficult to draw from any one study. But, when considering the studies in this review from over three decades of empirical research, we can draw a few conclusions: (1) charter school studies with the strongest internal validity (a

randomized controlled trial, RCT) are rare, involve small and unrepresentative samples, and produce quite positive effects on test-score achievement; (2) studies with good external validity are quite common and produce small and mixed results, but are viewed as having lower internal validity than RCTs; and 3) as the number of schools in the study sample increases, the charter school effect size (relative to the effect of traditional public schools) shrinks toward zero. This chapter is relevant to the theme of this volume in a second sense: Empirical findings can vary a great deal across both geographic settings and studies with smaller and larger collections of schools. Therefore, considering variation across settings in empirical research is essential to understanding effectiveness.

We begin this chapter with a brief introduction to the nature and extent of charter schools in the U.S., with some reference to similar types of schools in other countries. We then outline a theoretical framework that defines estimation error as a function of both treatment selection error (a threat to internal validity) and sample selection error (a threat to external validity). We argue that policy conclusions should be based on a critical assessment of the research base that comprises both internal and external validity. A critical summary of the empirical research on the effect of charter school enrollment on test-score achievement follows. In this review, we carefully consider sample size (the number of schools in the analysis), setting (urban centers, statewide, nationwide), and research design in drawing conclusions from the research. Following this summary, we conclude with a discussion of this review's implications for research and policy, with a focus on what types of evidence are needed and at what level (local, state, or federal).

Charter Schools in the U.S.

Over the last 30 years, charter schools have become increasingly popular attempts by state and local governments to insert market forces into education delivery, with the goals of improving outcomes for students and containing costs for units of government. Charter schools are public schools that are exempt from residential assignment and many other regulations that govern traditional public schools. In this section, we describe charter schools in detail, including how they came to be, how widespread they have become and where they are located, and we place them in the context of education internationally.

In the United States, education is decentralized with a limited role for the federal government. State and local governments have traditionally maintained nearly all responsibility for primary and secondary education, with local school districts playing the largest role. School districts are organized as their own local governments and corporate entities, with governing boards that are elected separately from other local units. School district boundaries do not necessarily follow from city or county borders. In total, the U.S. has 13,598 school districts. The state of Texas has the most at 1081 and the state of Hawaii has the least, with just a single statewide school district (Snyder et al., 2019). These local school boards have varying authority by

state, but most are able to raise revenue via property and sales taxes, issue bonds (with approval by voters), acquire and hold real property, set standards and curricula, hire staff, and supplement staff salaries.

One way to measure the federal government's role is to look at their education expenditures relative to state and local governments. In fiscal year 2016, the federal government provided $56 billion in revenue to public schools, only 8.3% of the total. Most federal funding goes to economically disadvantaged schools and special education programs. In contrast, state governments provided $318.5 billion and local governments provided $303.8 billion (National Center for Education Statistics, 2018). As the federal government has a very limited role, we focus this section on the state and local government role in charter school oversight.

A charter school is a public school that operates under a contract or charter with the state or an agency empowered by the state to authorize the charter. This could be a university, local school district, or state board of education. Charter schools are generally exempt from most state regulations but are held to similar performance standards. As public schools, they cannot charge tuition or set admissions requirements. If more students want to enroll than seats are available, schools must admit students via lottery. Unlike traditional public schools (TPS), which have catchment zones, they do not serve students in particular neighborhoods or zones. Any student within a state may apply to enroll in a charter school. Nearly without exception, charter schools are schools of choice, where families must take affirmative steps to enroll, whereas the neighborhood TPS is the default schooling option (Epple, Romano, & Zimmer, 2016).

As of 2018, more than three million students in 44 states enrolled in over 7000 charter schools. Enrollment has increased by more than one million students since 2011. Although this is significant growth, charters enroll less than 5% of all students nationwide. Six states do not have authorizing statutes and therefore no charter schools operating within them (National Alliance for Public Charter Schools, n.d.). States vary widely in the proportion of students that enroll in charter schools. At 12%, Arizona has the most students enrolled in charter schools as a share of all public school students. In terms of total enrollment, California has the most students enrolled in charter schools, as they have 20% of all charter students nationwide (Epple et al., 2016).

Although there are many charter schools in rural and suburban areas, they are disproportionately located in densely populated areas. Only about one in four TPS's lie in urban areas, whereas more than half of charters schools are in cities. Of the 30 locales with the highest percentage of students enrolled in charters, all are majority urban or based in urban areas. Students in charter schools are more likely to be nonwhite and lower income than students in TPS's (Epple et al., 2016).

U.S. charter schools can be compared to similar school types in international contexts. Academy schools in the United Kingdom are similar. They are publicly funded and cannot charge tuition, yet they are operated by mostly nongovernmental entities such as nonprofit trusts, universities, other schools, or faith groups. They are also exempt from many state regulations, but must follow the same rules on admissions, special needs, and exclusions as state schools. They do not have to follow the

national curriculum, but still must perform to standards as measured by the same standardized tests. They are periodically inspected by the Office for Standards in Education, Children's Services, and Skills. Academies are much more common than charter schools. As of 2015, 61.4% of public secondary schools in the U.K. were academies. In the U.S., only 6.5% of secondary schools are charters (Government Digital Service, 2016; National Center for Education Statistics, 2018).

Other European governments have implemented similar arrangements. German private schools may only operate if they do not cause segregation by income. If the school abides by this rule, they receive public funding and maintain some degree of autonomy, similarly to U.S. charter schools. The Netherlands has a system of universal school choice, where families can choose public or private schools at no cost to them (Government of the Netherlands, 2017). Public schools operate similarly to charters in the U.S., where if schools are oversubscribed, the local government must provide a seat elsewhere.

Theoretical Framework

We posit that research to inform policy should have high validity—specifically, that policy decisions about charter schools should be based in large part on evidence from large-scale quantitative studies with high internal and external validity. In other words, researchers should be confident in assessments of policy effects from the past and reasonably sure that if they designed new policy, they would could predict positive results for students, on average. The key idea is that researchers should be able to draw a causal inference from their findings; in short, they should be confident that their observations are not the result of anecdotal evidence, biased reporting, confounding, selection bias, or random chance, but instead reflect some reliable and repeatable relationship from cause to effect. Consider a simple example: Suppose you want to get rid of a headache and are considering taking an aspirin. If you take the aspirin (the cause), you want to know if your headache is likely to go away (the effect). Similarly, researchers want to know whether educational interventions will reliably improve student outcomes for students on average.

Our definition of causality is informed by the extensive literature on causal inference (Holland, 1986; Imbens & Rubin, 2015; Morgan & Winship, 2015; Pearl, 2000). These authors refer to all outcomes as *potential outcomes*, some of which researchers can observe and some of which they cannot because they were never realized. For example, suppose one is considering a charter school's effect for student i on outcome Y and that one can observe whether the student attended the charter school (coded as 0 if she did not and 1 if she did). In theory, student i has two potential outcomes: $Y_i(1)$, if she attended the charter school, and $Y_i(0)$, if she did not. Suppose she in fact attended a charter school—then $Y_i(1)$ is observable as Y and $Y_i(0)$ is unobserved and is called her *counterfactual* outcome. Conversely, if she in fact did not attend a charter school, $Y_i(0)$ is observable as Y and $Y_i(1)$ is her unobserved counterfactual. The treatment effect for student i is $TE_i = Y_i(1) - Y_i(0)$, or the

difference in individual potential outcomes. In short, to determine the causal effect of attending a charter school for student *i*, one must compare her outcomes from simultaneous enrollment in a charter and in a non-charter school, which is obviously impossible in practice, but is useful to consider as a theoretical ideal.

Although the individual treatment effect for person *i* is not observable, under some conditions it is possible to calculate average treatment effects across many persons. Averaging over either the sample or the population produces either the sample average treatment effect (SATE) or the population average treatment effect (PATE), where I_i is an indicator for being in the sample, n is the total sample size, and N is total population size (Imai, King, & Stuart, 2008):

$$SATE = \frac{1}{n} \sum_{i \in \{I_i = 1\}}^{n} TE_i$$

$$PATE = \frac{1}{N} \sum_{i=1}^{N} TE_i$$

The credibility of either SATE or PATE rests on assumptions for making causal inferences, such as randomization balancing units on pre-treatment observable and unobservable confounds in either the sample or a population. For example, suppose there are 100 charter schools in a state. A researcher conducts a study of ten of these, each of which has more student applicants than seats (i.e., they are oversubscribed) and are willing to allocate seats through a random lottery. We will call this the *lottery study*. For this study, we will assume that the ten schools volunteered to be part of the study. The estimate from this study would be the SATE, because not all charter schools participated. Although the individual treatment effect for a student who attended this school is unknown, one can usually safely presume that the average counterfactual outcome for students who were randomized to attend one of the charter schools is the average outcome for students who were randomly denied admission to a charter school. In other words, because the charter schools randomly accepted students, one can construct a reasonable counterfactual for the students who attended.

Now, consider a nonrandomized study. A researcher conducts a study of all 100 charter schools in the state but does not use the lottery information as part of his research design. One can call this the *observational study* and assume that schools did not need to consent to be part of the study and were not necessarily oversubscribed (i.e., some had more seats than applicants). Assuming the population of interest is the state (rather than a national estimate), the estimate from the observational study is the PATE.

If potential outcomes are generated through an additive model (no interactions between the component parts of the equation below), one can decompose total estimation error, Δ as (Imai et al., 2008):

$$\Delta = \Delta_S + \Delta_T = \Delta_{SX} + \Delta_{SU} + \Delta_{TX} + \Delta_{TU}$$

This decomposition makes clear that error can arise from sample selection error (Δ_S) and from treatment selection error (Δ_T). Both types of error can be further decomposed into observable (X) and unobservable (U) errors (ibid). An ideal design is one in which units are first randomly drawn from a well-defined population and then individually randomized to treatment. Assuming no loss to follow up, this design would have no sample selection error and no treatment selection error, in expectation. This type of design is costly and rare unless sites can be forced or strongly incentivized to participate in the study. It is perhaps not surprising that perhaps the only two U.S.-based studies of this type in social research are large federally mandated studies of federal programs, Upward Bound and Head Start (U.S. Department of Education, 2009; U.S. Department of Health and Human Services, 2010).

Returning to the charter school example, the lottery study would likely have high internal validity because $E(\Delta_T) = 0$. Unless there is selective attrition, the lottery should remove treatment selection error as a threat to validity because randomization balances units on pretreatment observable (Xs) and unobservable (Us) confounds. For this reason, the lottery study may be a good estimate of the SATE. On the other hand, because the researcher relies on volunteer schools that were all oversubscribed, one might expect that $E(\Delta_S) \neq 0$. In other words, perhaps the more effective charter schools were oversubscribed, could hold a lottery, and were willing to agree to evaluation. These facts could lead to misleading estimates, where $SATE \neq PATE$.

Conversely, the observational study may have lower internal validity because $E(\Delta_T) \neq 0$ due to omitted confounders in the analysis. For example, suppose the study does not adequately capture parenting skill, student motivation, or family socioeconomic status. The omission of these factors could result in biased estimates of the charter-school effects if these factors cause families to choose charter schools and result in observed student outcomes. On the other hand, the observational study may have $E(\Delta_S) = 0$ because the study includes all charter schools in the population of interest (i.e., the entire state). Therefore, even though the observational study may include all schools in the state, it may produce a biased estimate of the PATE due to treatment selection error.

In summary, studies about school effects face a tradeoff between internal validity (treatment selection error) and external validity (sample selection error). Studies generally fall into two categories: (1) small convenience samples of nonrepresentative schools that hold lotteries and consent to be part of a study, or (2) large district-, state-, or multi-state population wide samples of nonlottery estimates. We argue in this chapter that policy conclusions should be made on the totality of the evidence from many different studies and that both internal and external validity are important for this purpose.

Evidence About Effectiveness

The literature on charter school effectiveness is vast and summarizing it all is well beyond the scope of this section. However, we can summarize what we consider a representative sample of the literature. We categorize studies along two dimensions, internal validity and external validity. Generally, high-quality studies have one or the other, depending on their specific methodology. We will examine each type of methodology by describing a sample of studies within each category in chronological order. Below, you will find a graph categorizing each study by internal and external validity. The categorization scale is simply ordinal: A study rated a five is not 20% better than a study rated a four along any dimension. Each is judged relative to the others in the sample, so we are not saying that any study is the best or worst ever done on the subject. We judge internal validity based on the study design's ability to reduce treatment selection error. We evaluate the external validity of each study by the number and type of settings where it takes place. For example, a single school lottery study has very low external validity, whereas a near population level study (e.g., CREDO, 2013) has high external validity. We define single locale studies as those conducted in only one city. Multiple local studies are either done in an entire state or across multiple cities or states.

Single Locale Lottery Based Studies

Lottery-based studies in a single locale have high internal validity and low external validity. They also tend to produce the largest and most consistently positive effects. This may be because schools that conduct lotteries are the highest performing with the best reputations, and high-performing schools are generally more willing to subject themselves to evaluation. Of the five single-locale, lottery-based studies (see Table 4.1), none found negative effects of attending a charter school on student achievement. However, because of their low external validity, it is very difficult to generalize these results to charter schools or students in the broader population.

Hoxby and Murarka (2009) conducted a lottery study of virtually all charter schools in New York City (42 schools) and found a positive and significant impact of 0.09 standard deviations per year of attendance in math and 0.04 standard deviations per year in reading on standardized tests for grades 3–8. The largest contributor to these gains was the extended school year. Abdulkadiroğlu, Angrist, Dynarski, Kane, and Pathak (2011) found positive and statistically significant results of eight Boston charter middle and high schools using lottery data. The most consistently positive effects were in oversubscribed, *No Excuses* charter schools. *No Excuses* charters emphasize frequent testing, increased instructional time, strict discipline relative to TPS's, and a constant focus on math and reading achievement.

Table 4.1 List of studies in review

Study	Location	Number of charter schools	Number of students	Method	Result	Effect size: Mathematics	Effect size: ELA/Reading
Fortson, Gleason, Kopa and Verbitsky-Savitz (2015)	Multiple	N/A	22,152	Random assignment by lottery, within study comparison	No statistically significant impact except OLS specification (+)	.06 (OLS), 0 otherwise	.06 (OLS), 0 otherwise
Gleason, Clark, Tuttle and Dwoyer (2010)	Multiple	36	2904	Random assignment by lottery	No statistically significant impact	Null	Null
Abdulkadiroğlu, Angrist, Narita and Pathak (2017)	Denver, CO	31	10,203	Random assignment with propensity score	Positive effects in math, reading, and writing	0.42	0.17
Hoxby and Murarka (2009)	New York City	42	37,242	Random assignment by lottery	Positive effects in reading and math	0.09	0.04
Abdulkadiroğlu et al. (2011)	Boston, MA	8	3370	Random assignment by lottery, supplemented with observational analysis	Positive effects in reading and math	0.38	0.20
Angrist, Cohodes, Dynarski, Pathak and Walters (2016)	Boston, MA	6	3205	Random assignment by lottery	Positive effects in reading and math	0.59	0.41
Curto and Fryer Jr. (2014)	Washington, DC	1	5487	Random assignment by lottery	Positive effects in reading and math	0.20	0.20
Credo (2009)	Multiple	2403	1,733,758	Matching	Negative effects in math and reading	−0.03	−0.01
Credo (2013)	Multiple	5068	20,172,202	Matching	Negative effects in math, positive in reading	−0.01	0.01

(continued)

Table 4.1 (continued)

Study	Location	Number of charter schools	Number of students	Method	Result	Effect size: Mathematics	Effect size: ELA/Reading
Davis and Raymond (2012)	Multiple	2242	618,522	Matching, fixed effects	Negative effects in math and reading	−.074 (FE), −.063 (Matching)	−.034 (FE), −.024 (Matching)
Zimmer, Gill, Booker, Lavertu and Witte (2012)	Multiple	617	N/A (only reported as student-year observations)	Student fixed effects	Insignificant or negative effects with the exception of math in Denver and Milwaukee	−.18 to .17	−.08 to null
Baude, Casey, Hanushek, Phelan and Rivkin (2020)	Texas	366	Approximately 11,000,000	Matching, fixed effects	Positive effects in reading and math	0.07	0.03
Bifulco and Ladd (2006)	North Carolina	34	495,943	Student fixed effects	Negative effects in math and reading	−0.16	−0.10
Ni and Rorrer (2012)	Utah	65	467,216	Student fixed effects	Negative effects in math, language, and reading	−0.09	−0.13
Zimmer and Buddin (2006)	Los Angeles and San Diego, CA	62	3,035,150	Student fixed effects	Mostly negative or null. Only one positive effect across 8 outcomes	−.09 (SD) −1.12 (LA)	−.08 (SD) .10 (LA)
Witte, Weimer, Shober and Schlomer (2007)	Milwaukee	22	??	Student fixed effects	Positive effects in math, no significant results in language	0.12	0.09
Imberman (2011)	Large, urban district in the southwest	32	Approximately 100,000 (only student-year n reported)	Student fixed effects	Positive effects in math, no significant results in reading	0.07	Null

Note: Source: Design by authors

Curto and Fryer Jr. (2014) use lottery data from one charter school, SEED Washington, which combines *No Excuses* instruction with a 5-day-per-week boarding program. They find 0.2 standard deviation increases in math and reading per year of attendance, with effects largely driven by female attendees. This study has the weakest external validity in our sample because SEED schools are unique in their treatment (*No Excuses* plus boarding), the sample sizes are small because the authors only used a single school's lottery, and all lottery applicants are black.

Angrist, Cohodes, Dynarski, Pathak, and Walters (2016) use lottery data from six Boston charter and pilot schools to build on the work of Abdulkadiroğlu et al. (2011). They find that attendance at one of Boston's charter high schools increases scores in the tenth-grade Massachusetts standardized test by 0.4 standard deviations in English and almost 0.6 standard deviations in math. This study matches a pattern we see in the literature about age of the charter sector. Outcomes tend to improve as high-performing schools improve and low-performing schools lose students or are shut down by an authorizing body.

Abdulkadiroğlu, Angrist, Narita, and Pathak (2017) use a design with randomized elements in Denver, Colorado public schools (DPS) from 2011–2012 to 2013–2014. This study is unique because the Denver school district has central assignment, where families request a seat at any public school in the district and are not bound by residential assignment. Parents rank up to five schools of any type, then students are assigned to a school based on eligibility for free or reduced lunch status, whether a sibling attends that school, and other factors. This helps correct for selection into charters, as each family must state school preferences. The authors used these lists to construct propensity scores to summarize the assignment mechanism, similarly to how researchers employ a stratified randomized design to estimate a causal effect conditional on one or more blocking variables. The lists allow them to match on each student's stated school preferences, not just observed demographic characteristics and test scores. Their matching estimates of pooled 4th–10th graders show large, positive effects on the state standardized test. Students offered admission into charters score 0.4 standard deviations higher in math, 0.2 higher in reading, and 0.3 higher in writing. These gains were largely driven by students in *No excuses* charter schools operated by large charter management organizations (CMO's). This study has high internal validity because of its unique matching design (includes observable demographics, a pre-test, and preferences of all DPS students). It has low external validity for a matching study because it is only in one locale.

Thus far, all the studies mentioned have been in a single locale, which limits external validity. If we expand that scope and maintain the lottery structure, we can improve external validity while maintaining internal validity. This is very difficult to do in practice, so there are fewer studies that have been able to achieve that result. The few studies we discuss in the following section do so and report much smaller or null effects.

Multi-Locale Lottery Studies

Gleason, Clark, Tuttle, and Dwoyer (2010) conducted a multi-state lottery study that included 36 charter middle schools across 15 states. In total, they had 2330 ++applicants in their sample. All schools were recruited and voluntarily enrolled in the study. On average, they found no significant results in test scores after 2 years of charter school attendance. When broken out by subgroup, they did find that lottery winners with higher incomes (defined by free or reduced-price lunch eligibility) performed significantly worse on standardized tests than high-income lottery losers. For low-income students, the reverse was true. Low-income lottery winners scored 0.17 standard deviations higher than lottery losers. There was no significant result in reading. They found the same when comparing schools with higher or lower proportions of low-income students.

Fortson, Gleason, Kopa, and Verbitsky-Savitz (2015) built on Gleason et al. (2010) by comparing lottery results to nonexperimental designs including ordinary least squares (OLS) regression, matching, and student fixed effects regression. In other words, they conducted a within-study comparison by benchmarking nonexperimental estimates against experimental estimates (Cook, Shadish, & Wong, 2008). They collected data from some of the sites' studies in Gleason et al. and restricted the nonexperimental sample to students who attended the same TPS's at baseline. In other words, treatment and control students attended the same school before treatment but treated students attended charter schools. Control students remained in the same TPS's. Internal validity was strong in both studies. Their experimental (RCT) estimates matched Gleason's with no statistically significant differences. With regard to nonexperimental designs, Fortson et al. (2015) found OLS was biased upward relative to experimental estimates, suggesting their models had unobserved confounding variables and weaker internal validity. With their exact matching, propensity score matching, and student fixed effects designs, they found no statistically significant results, suggesting all but OLS were unbiased estimates.

Single Locale Fixed Effects Studies

Many of the first and most-cited studies of charter schools fall under the fixed effects umbrella. A student fixed effects analysis requires longitudinal data with repeated outcome observations on the same students over time, at least some of which must switch into or out of a charter school. This technique estimates the within-student deviation in test scores (relative to the student's average test score) over time from switching into or out of a charter school (Allison, 2009). This approach has some advantages over lottery studies. Fixed effects designs tend to have higher external validity than single locale lottery studies, as they do not rely on a sample of schools that are oversubscribed and may have to agree to be evaluated. With fixed effects, researchers examine all students who start in a TPS and subsequently enter a charter

school, because they can identify a treatment effect given that the treatment (switching from a TPS to a charter) is time varying. Fixed effects also allow researchers to control for all time-invariant factors that may affect individual students' success or failure at a given school. However, at least in theory if not in practice, fixed effects designs tend to have lower internal validity due the absence of a randomized design.

Witte, Weimer, Shober, and Schlomer (2007) examined the effects of 22 charter schools in Milwaukee, Wisconsin using student fixed effects. The authors only used data from the Milwaukee school district because the rest of the state's charter schools are geared toward at-risk students and have less of an emphasis on academic achievement. Results indicate that students who switch into charters scored, on average, 0.09 standard deviations higher on the Terra Nova test than students who remained in TPS's. Gains were especially prevalent in math, where students in charters scored 0.12 standard deviations higher on average than students in TPS's. The authors suggested that this could be due to a high concentration of charters that focus on science and mathematics curricula more than a typical TPS.

Imberman (2011) used 9 years of data from an anonymous urban district in the American southwest to examine the effect of charter attendance on cognitive and noncognitive skill formation. His outcomes of interest were math, reading, and language scores on the Stanford Achievement Test. Using student fixed effects, he found that students who switch into a charter school score 0.07 standard deviations higher in math on average than students who stay in TPS's. He found no significant results on reading and language test scores.

Multi-Locale Fixed Effects Studies

Bifulco and Ladd (2006) used student fixed effects to examine the effect of charter attendance on end of grade test scores for five cohorts of 4th–8th graders in the entire state of North Carolina from the 1995–1996 to 2001–2002 academic years. In both reading and math, they find significant negative effects of charter school attendance. Students who switch into a charter school score, on average, 0.10 standard deviations lower in reading and 0.16 standard deviations lower in math. Ni and Rorrer (2012) used student fixed effects to measure outcomes for charter school switchers in Utah. They used longitudinal data of every public school student in the state from 2004–2009, finding that elementary students who switch into charters score 0.10 standard deviations lower in math and language arts than students who stay in TPS's. Effect sizes are smaller as students age, with no significant effects in grades 7–11.

Zimmer, Gill, Booker, Lavertu, and Witte (2012) used fixed effects to estimate the effect of switching into a charter school across seven locations: Chicago, Denver, Milwaukee, Philadelphia, San Diego, Ohio, and Texas. Years of data vary by location but span the academic years 1994–1995 to 2006–2007. Because standardized tests varied by location, the authors standardized each student test score. Overall, effects are null or negative for math and reading. The only exceptions are a 0.17

standard deviation increase in math for students who switch to charters in Denver and a 0.05 standard deviation increase in math for charter entrants in Milwaukee. The Milwaukee results replicate Witte et al. (2007)'s findings.

Multi-Locale Propensity Score Matching Studies

The final major approach researchers take in evaluating charter schools is propensity score matching (PSM). Pioneered by Rosenbaum and Rubin (1983), PSM is a way to estimate program impacts on a matched sample of treatment and comparison units who are matched on a summary statistic: the probability each unit took up treatment, based on observable background variables. For PSM to produce unbiased impacts, the matching model must include a complete set of confounds to construct a matching model capable of matching truly exchangeable treatment and control units. The stronger the set of confounds, the less likely unobservable characteristics will bias the model. This method can have higher external validity but will typically have lower internal validity than lottery/RCT designs. Unlike fixed effect studies, PSM designs do not require baseline test scores. However, evidence presented above (Fortson et al., 2015) suggests that baseline test scores are essential for bias reduction and strong internal validity. As both types of designs require the same covariates (crucially at least two consecutive test scores), we rate them the same on internal validity.

Researchers can tailor this method further by choosing to match with or without replacement (i.e., whether any control unit can be matched onto more than one treated unit) or using different numbers of control cases to compare to each treated unit. *Nearest neighbor* matching refers to a single control unit with the propensity score closest to the matched treatment unit. Researchers can also use a decision rule called a caliper, which establishes a clear boundary (10% of a standard deviation is common) within which one can compare control and treatment units. There are a variety of propensity score methods, such as coarsened exact matching (Iacus, King, & Porro, 2012), full matching (Hansen, 2004), and inverse probability of treatment weighting (Cole & Hernán, 2008), but in the charter school literature, variants of nearest neighbor matching are used most often.

Baude, Casey, Hanushek, Phelan, and Rivkin (2020) used matching in a statewide study of the state of Texas. They tracked the growth of charter schools from 2001–2011 and compared student outcomes across these same years to gauge how the sector performed. They constructed the comparison group based on students of the same grade, school, and demographic group as those that exited the school and entered a charter. Then they estimate a value-added model conditional on factors not used in the matching process: prior behavioral infractions, family factors, and school fixed effects. They found that students in *No Excuses* schools performed 0.12 standard deviations higher in math on standardized tests, although therewas no difference in reading.

Stanford University's Center for Research on Education Outcomes (CREDO, 2009) nationwide evaluation of charter schools is an example of matching with a

baseline test score, which strengthens internal validity. Because of its large sample (over 70% of charter students nationwide across 16 states), this study also has very strong external validity. CREDO's model matches on grade, gender, race, poverty status, English language-learner status, special education status, and prior score on state achievement tests. Their approach is unique in that they only use potential matches from schools that have schools transfer into charters. All student records are then pooled within schools and a virtual control student is built for each student that attended a charter. This method resembles a hybrid between PSM and synthetic control, a method for constructing control units (see Abadie, Diamond, & Hainmueller, 2010 for more detail) CREDO's study found different effects by state. Five states had positive effects, seven had negative effects, and four were null. When pooled together, charter school students showed 0.01 standard deviations lower scores in reading and 0.03 lower standard deviations in math.

Davis and Raymond (2012) built on CREDO's prior work by using similar multistate data and comparing CREDO's matching estimates to the more commonly used fixed effects impacts. They found very similar results, which validated CREDO's results against designs many scholars found more legitimate. Their fixed effects estimates were of the same sign and similar in magnitude to results using matching. Pooled results showed students in charters scored 0.06 standard deviations lower in math and 0.02 lower in reading than matched control cases. They found negative effects in most states using both methods. Davis and Raymond (2012) and Fortson et al. (2015) both showed that impact estimates from matching designs that include a pre-test are virtually identical to fixed effects designs that also require a pre-test.

In 2013, CREDO updated the estimates from the original sample of 16 states. Students in charters in these states scored 0.01 standard deviations higher than TPS students. Effects in math improved but were still negative: −0.01 standard deviations in 2013 vs. −0.03 in 2009. This report also included estimates from 11 additional states. In total, their sample included 95% of charter school students in the U.S. A pooled analysis of all 27 states estimated gains of 0.01 standard deviations in reading and no significant impact in math. Although the nationwide estimates for charter schools were not impressive, effects varied significantly across states. They found positive effects in reading for 16 states, negative in eight, and null in three. In math, they reported positive effects in 12 states, negative effects in 13, and null effects in two. This study has the highest external validity of any in our review, because it included nearly all students in charters across the United States.

Overall Assessment

In Table 4.1 and Fig. 4.1, we classify studies on two dimensions: internal validity on the horizontal axis and external validity on the vertical axis. We score studies on internal validity with only two scores: a 3 for fixed effects and matching studies, because we view them as equivalent as all the matching studies incorporate

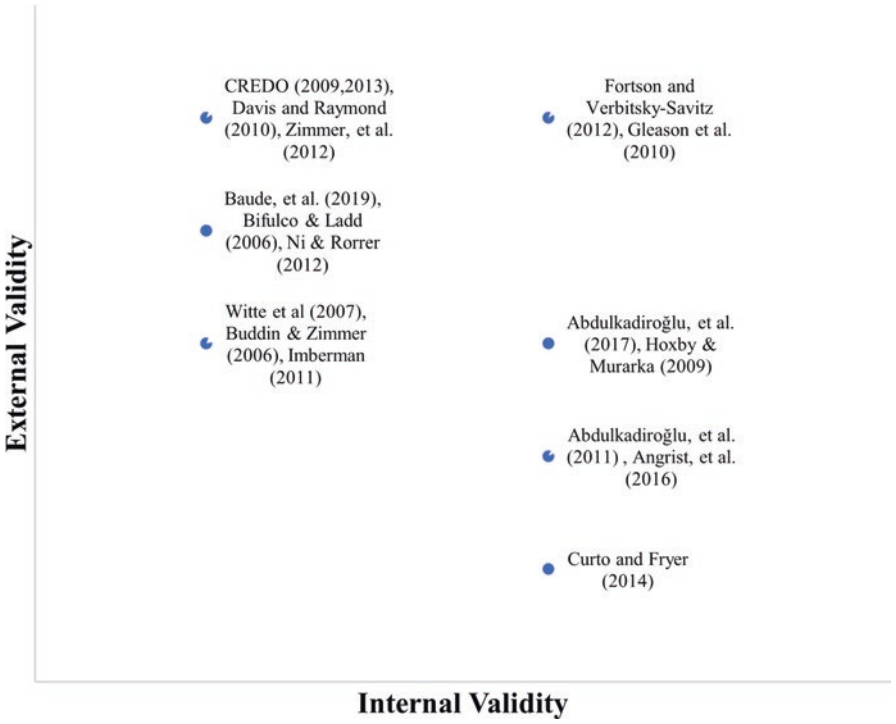

Fig. 4.1 External and internal validity. Source: Design by authors

pre-tests, and a 5 for lottery-based analyses. We score studies on external validity with five scores: 1 for single school studies, 2 for single type studies (*No Excuses* charters) with more than one school, 3 for studies based in one or two urban areas, 4 for whole state studies, and 5 for multiple state studies. For example, to take two extremes, the CREDO (2013) study covers nearly all charter school students in the country, but uses a nonexperimental matching design, so it is scored as 5 in external validity and 3 on internal validity; the Curto and Fryer Jr. (2014) lottery study, on the other hand, is of only one very unique charter boarding school, so we score it a 1 on external validity and a 5 on internal validity. In our view, the highest quality studies are those that use randomized designs across multiple states, scoring 5s on both internal and external validity. We note, however, that even these studies had their limitations given that they focused on middle schools, which reveals about elementary and high school charter impacts.

Several patterns emerge from this review. Lottery studies tend to have the largest positive effects, which is perhaps not surprising if oversubscribed schools have higher average quality than non-oversubscribed schools. Though systematic evidence on this point is challenging to obtain, authors of a national evaluation of charter middle schools discussed above found that only about one in four charter middle schools are oversubscribed (Gleason et al., 2010, p. 6), which means that if

this statistic holds across elementary and high schools as well, the vast majority of charter school could not hold lotteries. Therefore, impacts from nonlottery schools are essential if the most important question to answer is not whether some charters can be effective but whether charter schools are more or less effective than TPS overall. Fixed effects studies tend to show negative results. These studies are older, so they could be reflecting that charter schools were ineffective in the past. More recently, researchers have employed various matching approaches in larger, national samples and found not negative, but mostly null effects in math and small positive effects in reading. In general, the larger and more nationally representative the sample, the smaller the effects. We also see that as the sector ages, it tends to improve, as shown in national studies (CREDO, 2009, 2013). Initially, school quality was quite variable, but has grown more consistent and improved over time.

Conclusion

In this chapter, we have discussed charter schools in the United States in terms of the institutional environment they occupy, the methods researchers use to study them, and the body of available evidence as they approach 30 years in existence. This chapter is relevant to the theme of this volume in two respects: (1) Charter schools are a challenge to the standard institutional arrangement of state-run and controlled schooling in the sense that they are an alternative and deregulated setting in which education is delivered to students; (2) empirical findings can and do vary across geographic settings, across studies with different research designs, and across studies with smaller and larger collections of schools. Therefore, understanding this variation in research findings about ostensibly the same intervention is essential to understanding its effectiveness.

We see a consistent tradeoff between internal and external validity in each method. This raises the question of whether internal or external validity is more important for drawing conclusions about effectiveness of charter schools. We do not find randomized controlled trials in one locale particularly convincing for one reason: Charter schools likely vary a great deal in their instructional approaches, so there is no reason to expect that their effects would be uniform if implemented elsewhere. If charter schools were like educational aspirin manufactured with the same ingredients to solve the same educational problem, we would argue that there is consistency of the intervention and be more convinced by RCT evidence from one place. This does not accurately describe the reality of charter schools in the United States, however. Due to the wide diversity of charter school types, external validity becomes an important consideration for drawing policy conclusions about relative effectiveness. Therefore, we argue that both internal validity and external validity should be weighed in these assessments.

Although they often have lower internal validity, authors of cross-state studies point out a key empirical puzzle that deserves future research. Charter-school effects vary a great deal by state. It should be noted that education in the U.S. has always

been decentralized. Charter schools are perhaps a clear expression of this desire for local control. Today, the federal government spends less than 10% of all education dollars in the country. States have always taken the lead in this policy area. Almost all states delegate much of the operational aspects of education to special local governments called school districts. These districts manage the day-to-day aspects of running a school and in many cases can raise their own revenue through property and sales taxes. States generally have a more policy-relevant role in setting standards and mechanisms by which schools are financed.

States have developed quite different approaches to authorizing and regulating charter schools. Some types of schools consistently raise test scores, such as *No Excuses* institutions. It is possible that the prevalence of these schools varies by state. State charter laws vary among many dimensions, including who can authorize a charter, what accountability measures are in place, and the types and thresholds of sanctions states can place on schools that fail to perform. What types of incentives do operators respond to when improving the school? Do nonprofit operators respond differently than for-profits? Answering these types of questions would allow us to further explore the mechanisms charters use to improve student outcomes.

In general, charter school studies report larger effects for disadvantaged groups, which could reflect the effectiveness of the charter schools or the quality of the nearby traditional public schools. Effect sizes are larger for nonwhite, poor, and urban students than their white, nonpoor students, and rural students. CREDO's 2009 and 2013 studies allow comparison of these groups across states. In their 2013 study, they found that all learning gains are driven by the lower half of the achievement distribution. All effects in the top half are null or negative. They also find gains concentrated in poor students, among all races. English Language Learners (ELL's) also show significant gains from attending a charter school. However, more advantaged groups in charter schools (white, nonpoor, non-ELL) show declines in learning relative to their peers in TPS's (CREDO, 2009, 2013). Therefore, future researchers could unpack the reasons for these larger effects for these important subgroups and why charter school do not seem to have positive effects for high-achieving and more affluent students.

Finally, without evidence from so-called within-study comparisons of RCT and non-RCT impacts from the same treatment group (Cook et al., 2008), one would not know that these types of designs produce very similar estimates of effectiveness for test-score outcomes with controlled baseline test scores. This is critical because it strengthens the argument that studies with strong external validity such as CREDO's may have functional equivalent internal validity as well. Another approach is to attempt to generalize the impacts from charter schools that have produced RCT impacts to charter schools that have not. Authors of more recent show that conducting this type of analysis requires one to assess sample selection and heterogeneity of the treatment effect across the same factors that predict sample selection (Stuart, Cole, Bradshaw, & Leaf, 2011). If the same factors that predict sample selection (e.g., family poverty) also predict causal heterogeneity in the charter school effect, one can use these factors to adjust the charter school effect for the target population.

In future, researchers could attempt to use the techniques applied to within-study comparisons and generalization to better understand charter school effects.

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Chapter 5
Neighborhood Effects, the Life Course, and Educational Outcomes: Four Theoretical Models of Effect Heterogeneity

Brian L. Levy

There is growing scientific consensus that the socioeconomic conditions of the neighborhood(s) in which an individual grows up play an important role in their educational outcomes. Socioeconomic (dis)advantage in children and youth's residential neighborhoods (hereafter "neighborhood (dis)advantage") is associated with their test scores (Burdick-Will et al., 2011), the likelihood of dropping out of high school (Wodtke, Harding, & Elwert, 2011), and chances of earning a bachelor's degree (Levy, 2019). In recent studies, researchers suggest that these relationships are, at least in some cases, likely to be causal (Chetty, Friedman, Hendren, Jones, & Porter, 2018).

Yet, the causal nature of the relationship between neighborhood conditions and educational outcomes was, until recently, in doubt. Following strong observational and quasi-experimental evidence that neighborhoods affect life chances (Massey & Denton, 1993; Rosenbaum, 1995; Wilson, 1987), the United States (U.S.) federal government established the Moving to Opportunity Demonstration Program (MTO) in the late 1990s. MTO used a randomized controlled trial research design by assigning program participants from highly impoverished neighborhoods of five large cities to either receive housing vouchers to move out of their neighborhood and into a low-poverty neighborhood (treatment group) or not receive the vouchers but still remain eligible for other standard government services (control group). To the surprise of many, the interim and final impact evaluations of MTO found little to no effect of moving to a low-poverty neighborhood on students' academic achievement, course selection, or educational attainment (U.S. Department of Housing and Urban Development, 2011). Given MTO's gold-standard design for estimating causal effects, these results led researchers to conclude that neighborhood effects reported in prior studies may be of limited validity.

B. L. Levy (✉)
Department of Sociology and Anthropology, George Mason University, Fairfax, VA, USA
e-mail: blevy4@gmu.edu

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One potential reason for the underwhelming overall impacts of MTO, however, is heterogeneity in effects. For example, in their reanalysis of MTO, Chetty, Hendren, and Katz (2016) find that treatment-group children who moved to a low-poverty neighborhood before age 13 had better subsequent educational outcomes (than control children), whereas those treatment-group children moving at age 13 or later had, if anything, slightly worse outcomes. This aligns with the notion that neighborhood effects are strongest when the duration of an individual's exposure is long (Clampet-Lundquist & Massey, 2008; Sampson, 2008; Wodtke et al., 2011). Other researchers find that neighborhood effects on children's educational outcomes vary by several individual or family-background characteristics (e.g., Levy, Owens, & Sampson, 2019; Wodtke, Elwert, & Harding, 2016). This research begins to address recent calls for greater attention to heterogeneity in neighborhood effects (Harding, Gennetian, Winship, Sanbonmatsu, & Kling, 2011; Sharkey & Faber, 2014; Small & Feldman, 2012).

Adopting a life-course perspective (Elder Jr, Johnson, & Crosnoe, 2003) on neighborhood effects fosters explicit integration of such heterogeneity in theory development for the neighborhood effects literature. Proponents of the life-course perspective seek to understand individuals' lives, including their trajectories and transitions, in the context of their social, structural, and historical situations. In terms of individuals' neighborhoods, this requires attention to the nonrandom selection into neighborhoods that results from individuals' life histories. As Sampson (2012) argues, selection into neighborhoods is a phenomenon of scientific interest itself, both as generative of and potentially resultant from neighborhood effects themselves. In addition, the life-course perspective emphasizes the interconnectedness of individuals' lives, which necessitates exploration of family and individual backgrounds in analyzing neighborhood effects.

In this chapter, I consider past research on neighborhood effects and educational attainment from a life-course perspective to explicate four recently hypothesized and distinct models of neighborhood effect heterogeneity: cumulative advantage, cumulative disadvantage, advantage leveling, and compensatory advantage (Levy et al., 2019). With each model, one can predict a unique combination of individual/family backgrounds and levels of neighborhood socioeconomic (dis) advantage that is most likely to combine to substantively affect educational attainment. A nascent body of research suggests that the relevant model of neighborhood effects likely varies depending on the outcome (e.g., high-school graduation versus college graduation).

I begin by describing the life-course perspective, its relevance for research on neighborhood effects, and four potential forms of effect heterogeneity. Next, I review the literature on neighborhood socioeconomic conditions and educational attainment, focusing specifically on effect heterogeneity by family socioeconomic background, to evaluate the extent to which each model accords with current research. I conclude with a forward-looking agenda for researchers examining neighborhood effects on educational outcomes.

Neighborhood Effects and the Life Course

The life-course perspective (Elder et al., 2003) offers five general principles for studying individuals' development and status attainment: embeddedness in time and place, linked lives, constrained agency, life-span development, and timing of events during the life course. The first three are central to the traditional literature on neighborhood effects. Embeddedness in time and place highlights the salience of individuals' specific social locations for their development. The linked lives principle emphasizes the interdependence of individuals in a network of social relationships as their lives unfold. Constrained agency underscores how individuals construct their lives through choices made within the opportunities and constraints of their own unique circumstances. Combining the three principles, one can argue that the neighborhoods in which children and youth are embedded, including the social relationships formed in those neighborhoods, potentially constrain their opportunities, choices, and ultimate life chances.

A long-running body of research indicates that growing up in a socioeconomically disadvantaged neighborhood is negatively associated with a child's educational outcomes (Chetty et al., 2016; Sharkey & Faber, 2014). There are several potential mechanisms for this relationship, including neighborhood social organization, relative deprivation or affluence, exposure to violence, quality of neighborhood institutions, and exposure to environmental toxins. I review these mechanisms briefly here; for in-depth discussion, see Galster (2012) and Jencks and Mayer (1990).

In terms of social organization, proponents of the collective socialization hypothesis (e.g., Wilson, 1987) posit that neighborhood adults serve as evidence of local life chances. To the extent that few adults are working in middle- or upper-class jobs, economic disaffection is likely to increase and diminish the perceived value of education. Alternatively, the density of adults with college degrees or high-status jobs is positively associated with child outcomes (Duncan, 1994), which might reflect the salience of neighborhood advantage for the perceived value of a college degree and social capital to support degree attainment. A somewhat related, though distinct, mechanism of neighborhood socialization is collective efficacy. Neighborhoods high in collective efficacy evince shared social norms and the willingness of adults to intervene to enforce those norms (Sampson, Morenoff, & Earls, 1999). Scant research investigates how neighborhood collective efficacy affects educational attainment, but it is associated with other health and behavioral outcomes (Browning, Burrington, Leventhal, & Brooks-Gunn, 2008; Browning & Cagney, 2002). The norms and attitudes of students' neighborhood peers may also play an important role in their educational decisions. For example, Harding (2011) finds that adolescents living in neighborhoods where their peers have significant heterogeneity in attitudes toward school and future schooling are less likely to matriculate to college—even if that is their stated preference. In sum, the social norms of a neighborhood may affect the educational outcomes of its residents in several ways.

Socialization processes reflect one way in which the lives of a neighborhood's children and youth are linked with those of their fellow residents. Another example

of linked lives is the level of relative deprivation or affluence an individual child possesses in comparison to their neighborhood peers. Supporters of relative socioeconomic (dis)advantage theories posit that relative deprivation leads to feelings of dissatisfaction or inferiority, whereas relative affluence can increase self-efficacy (Jencks & Mayer, 1990). The few researchers specifically investigating this phenomenon tend to focus on relative deprivation, and their findings are mixed (Nieuwenhuis et al., 2017; Turley, 2002). It is possible, however, that any detrimental effects of relative deprivation are offset by benefits of affluent peers. Family income is increasingly strongly associated with academic achievement (Reardon, 2011), and having high-achieving peers is beneficial to a student's own levels of achievement (Hanushek, Kain, Markman, & Rivkin, 2003). Thus, neighborhood peer effects on educational outcomes may be quite complex and difficult to empirically assess.

Growing up in neighborhoods with high levels of violence negatively affects students' cognitive abilities and test scores. For example, exploiting exogenous variation in the timing of homicides and survey interviews in Chicago, Sharkey (2010) finds that in the week following a homicide in their neighborhood, children's cognitive performance declines by one half to two-thirds of a standard deviation. Using a similar study design in New York City, Sharkey, Schwartz, Ellen and Lacoe (2014) find that this effect generalizes to exposure to any type of violent crime on a child's street segment. Because violence is disproportionately concentrated in economically disadvantaged neighborhoods (Sampson & Groves, 1989), it is another potential mechanism for the negative relationship between neighborhood disadvantage and residents' educational outcomes.

Neighborhood institutions and organizations can provide residents with important resources as well as connections to other services or resources (Small, 2006). One neighborhood-based institution that likely affects educational outcomes is the school itself. Generally, school assignment in the United States is neighborhood-based. Both neighborhood and school segregation by family income are significant and growing (Owens, Reardon, & Jencks, 2016; Reardon, Bischoff, Owens, & Townsend, 2018). Because U.S. school funding is based, in part, on local property taxes—along with other federal, state, and local revenue—variation in property values can create substantial inequalities between districts. Still, reforms and legal challenges beginning in the 1970s have led to much more equitable funding across districts (Jackson, Johnson, & Persico, 2016). Currently, school districts serving low-income populations actually receive slightly more funding per student than districts serving middle- or high-income populations. Yet, the cost to educate a low-income student is significantly higher than to educate a high-income student, especially in low-income school districts. As a result, funding parity does not imply students' needs are equally met. Moreover, low-income school districts have, on average, teachers that are less experienced, less likely to be certified, and paid less (Owens & Candipan, 2019). In sum, differences in school quality might explain the relationship between neighborhood (dis)advantage and educational attainment.

Environmental toxins represent another potential mechanism for neighborhood effects. In the United States, industrial facilities are disproportionately concentrated in nonwhite and lower income neighborhoods, yielding sizable disparities in

exposure to air pollution that persist over time (Ard, 2015; Crowder & Downey, 2010; Pais, Crowder, & Downey, 2014; Taylor, 2014). These industrial air pollutants are negatively associated with student academic and health outcomes (Mohai, Kweon, Lee, & Ard, 2011). In addition to air toxins, soil and water pollutants represent other sources of environmental inequality. For example, lead exposure is highest among low-income, nonwhite populations (Sampson & Winter, 2016). Given its negative effects on academic outcomes (Muller, Sampson, & Winter, 2018), lead exposure may help explain the race and class achievement gaps. In sum, through myriad environmental, institutional, and social pathways, children and youth's embeddedness in specific neighborhoods likely affects their educational trajectories in important ways.

The three life-course principles discussed above—embeddedness in time and place, linked lives, constrained agency—have long been the domain for research on neighborhood effects. Yet, the two other, less-applied principles offer important insights into how and for whom neighborhoods might matter. The principle of life-span development emphasizes a long-term perspective on individual development (Elder et al., 2003). For example, examining inequalities in academic achievement and educational attainment as outcomes of decades-long processes of life-span development requires analysis of prolonged neighborhood exposures. Galster (2012) alludes to this idea with the notion of durability of the dosage for neighborhood effects, and authors of a growing body of research are exploring the impact of cumulative neighborhood exposures within one generation (Levy et al., 2019; Sampson, Sharkey, & Raudenbush, 2008; Wodtke et al., 2011, 2016) or across generations (Sharkey & Elwert, 2011). The timing principle notes that the impacts of various events and experiences likely differ by their timing within the life course (Elder et al., 2003). Although recent evidence suggests that neighborhood conditions during adolescence are likely salient for high-school graduation odds (Wodtke et al., 2016), researchers nevertheless lack sufficient evidence to develop a general theory of age heterogeneity in neighborhood effects.

Research on neighborhood effect heterogeneity has only recently begun in earnest. A particular focus of recent work is heterogeneity by family socioeconomic background. This research emphasizes children and youth's embeddedness in multiple contexts—neighborhoods and families—that have interacting effects to constrain or augment their life chances. It also applies dual conceptions of linked lives. First, children are socialized in neighborhoods with adults that have a range of economic and social capital while simultaneously cocreating peer effects with their neighborhood peers. Second, children grow up in families that have varying levels of socioeconomic resources to support their development; these resources structure both neighborhood attainment and the ways in which children experience their neighborhoods. Drawing on the principles of life-course research, I proceed to elucidate four models of neighborhood effect heterogeneity by family socioeconomic background.

Four Theoretical Models of Neighborhood Effect Heterogeneity by Family Socioeconomic Background

Cumulative Advantage

A cumulative advantage model of neighborhood effects represents one way in which neighborhood-based inequalities might develop over individuals' life spans. Supporters of the cumulative advantage model posit widening inequality over time as past advantages beget and compound with present and future advantages (Dannefer, 2003; DiPrete & Eirich, 2006). In the context of neighborhoods, this suggests that long-term residence in an advantaged neighborhood will produce large benefits for educational outcomes, whereas only episodic residence in advantaged neighborhoods will yield little to no benefit. Given that those who reside in advantaged neighborhoods tend to remain in them (South, Huang, Spring, & Crowder, 2016), these types of long-term exposures seem likely to occur. In addition, a strict cumulative advantage model would predict little to no difference in educational outcomes between long-term residence in disadvantaged neighborhoods and long-term residence in middle-class neighborhoods—those that are neither especially advantaged nor especially disadvantaged.

Of course, neighborhood conditions represent just one of the many predictors of children's educational outcomes. Parents' socioeconomic status and educational attainment, for example, are other key predictors of educational attainment (Davis-Kean, 2005; Duncan & Magnuson, 2005). The principle of linked lives identifies these types of social (dis)advantages in individuals' networks as salient features affecting their development over the life-course. Considered from a cumulative advantage perspective, growing up in a high-income, highly educated household is likely to interact with advantaged neighborhood conditions to yield especially strong benefits for educational outcomes. That is, the individuals most likely to benefit from growing up in advantaged neighborhoods are those with other social advantages.

The cumulative advantage model aligns well with past research on educational outcomes. With his classic "skill begets skill" argument (2000), Heckman theorizes that early advantages are critical for academic success. Advantages in early childhood correlate with higher levels of cognitive skills in the same period; these higher levels of cognitive skills leave children poised to leverage subsequent advantages in schooling and social environments into even greater returns to their cognitive skills. An advantaged neighborhood environment in adolescence, for example, would have an overall stronger positive relationship with academic achievement for youth who also lived in advantaged neighborhoods during early childhood than youth who lived in disadvantaged neighborhoods during early childhood because of the early achievement differences associated with early neighborhood environments.

Cumulative Disadvantage

Conceptually related to, though distinct from, the cumulative advantage model is the cumulative disadvantage model. Proponents of the cumulative disadvantage model similarly posit widening inequality over time; in this case, however, it is past disadvantages that beget and compound with present and future disadvantages (Dannefer, 2003; DiPrete & Eirich, 2006). Thus, a cumulative disadvantage model of neighborhood effects predicts that long-term residence in a disadvantaged neighborhood will negatively affect educational outcomes, whereas short-term neighborhood disadvantage will have more modest, if any, effects. In addition, other family, school-related, or social disadvantages may compound with neighborhood disadvantage to yield especially strong negative effects.

Although cumulative disadvantage may at first appear to be a corollary to cumulative advantage, a strict cumulative disadvantage model would predict little to no difference in educational outcomes between long-term residence in advantaged neighborhoods and long-term residence in middle-class neighborhoods. In other words, it is only residence in disadvantaged neighborhoods that has a significant effect on educational outcomes. This distinction between cumulative advantage and disadvantage underscores potential nonlinearity in neighborhood effects. Nonlinearity occurs when the impact of a specific change in neighborhood conditions varies across the distribution of neighborhood conditions. For example, a 10-percentage-point increase in neighborhood poverty from 30% to 40% poverty might be much more (or less) impactful for educational outcomes than an equivalent increase from 20% to 30% poverty. In their reanalysis of MTO effects by study site, Burdick-Will et al. (2011) find suggestive evidence for nonlinearity in the impact of neighborhood disadvantage on academic achievement. Other researchers similarly argue for critical threshold effects in conditions like neighborhood poverty. Crane (1991) finds that in neighborhoods where four percent or fewer of adults work in high-status jobs, teenagers' risks for dropping out of high school or becoming pregnant increase significantly. Levy (2019) observes that for neighborhood poverty, 25% may be a key threshold above which neighborhoods negatively affect postsecondary educational attainment.

Cumulative advantage and disadvantage models can evoke the notion of path dependence—initial (dis)advantages definitively causing future (dis)advantages—but this is not necessarily the case. It is true that an individual's level of neighborhood disadvantage at one point in time is predictive of their future neighborhood disadvantage (South et al., 2016). This reflects long-running racial and class inequalities in neighborhood segregation in the United States (Bischoff & Reardon, 2014; Massey & Denton, 1993; Sharkey, 2013). Yet, children often make residential moves during their childhood, and a sizable majority of children will reside in neighborhoods that fall within different quintiles of disadvantage while growing up (Wodtke et al., 2011). Many of these changes reflect moderate changes in neighborhood disadvantage—increases or decreases in disadvantage of one or two quintiles. Some of the changes, however, are more dramatic. Using the Panel Study of Income

Dynamics (PSID), Wodtke et al. (2016) find that among both black and white children born between 1966 and 1980, roughly 2.4% of each group had a change in neighborhood disadvantage level of three or four quintiles from between childhood and adolescence. These findings suggest that although substantial changes in neighborhood disadvantage across the early life course are not commonplace, they are not extraordinary either.

Advantage Leveling

The variability in neighborhood conditions across one's life course highlights the possibility that adolescent neighborhoods may counteract childhood neighborhood effects—or the effects of other social (dis)advantages earlier in the life course (Levy, 2019). An advantage leveling model draws upon both the life-course principles of timing and life-span development to consider trajectories or sequences of exposures in modeling individual's outcomes. There may be a sensitive period for the impact of neighborhood disadvantage, such as adolescence (e.g., Wodtke, 2013; Wodtke et al., 2016), but this is not a requirement. Neighborhood conditions across childhood and youth may matter in roughly equivalent ways. With respect to the advantage leveling model, living in a relatively disadvantaged neighborhood during adolescence would counteract the benefits associated with neighborhood advantage during childhood.

In addition to the sequencing of neighborhood environments, the advantage leveling model also has implications for the impact of neighborhood disadvantage on children from socioeconomically advantaged families. Researchers broadly conclude that children from advantaged families and environments have, on average, higher levels of academic achievement and educational attainment (Sirin, 2005; Walpole, 2003). Yet, to realize these positive future outcomes, children and youth require developmentally rich environments that promote achievement and attainment (Alexander, Entwisle, & Olson, 2014; Leventhal & Brooks-Gunn, 2000). Living in a disadvantaged neighborhood may not provide such a context, thus leveling past advantages. The advantage leveling model builds upon earlier research emphasizing stage-environment fit in youth development (Eccles et al., 1993; Roeser, 2005). Proponents of stage-environment fit posit that when a social context does not meet adolescents' developmental needs, it will negatively affect their motivation and wellbeing. Researchers applying stage-environment fit theory have focused on school and family contexts and generally found that those contexts aligning with adolescents' developmental needs are associated with better individual and academic outcomes (Booth & Gerard, 2014; Gutman & Eccles, 2007; Zimmer-Gembeck, Chipuer, Hanisch, Creed, & McGregor, 2006).

Compensatory Advantage

Variability in disadvantage levels of neighborhoods—and other social contexts—across individuals' life courses presents opportunities for compensatory effects as well. Whereas the advantage leveling model predicts negative effects of disadvantaged neighborhoods for previously advantaged individuals, the compensatory advantage model posits that residence in an advantaged neighborhood might ameliorate past exposure to disadvantaged neighborhoods or other social disadvantages. Observational research examining a compensatory advantage model of neighborhood effects is scant (Levy et al., 2019), but there exists some basis for the model in the school-effects literature. Among children from socioeconomically disadvantaged backgrounds, the resources available from attending school can improve cognitive skills and reduce socioeconomic disparities in skills (Downey & Condron, 2016). Raudenbush and Eschmann (2015) similarly theorize that schooling can be compensatory, especially early in the life course.

This model of neighborhood effects most closely matches the intentions of the MTO intervention. MTO provided low-income families living in high-poverty neighborhoods with vouchers to move to low-poverty neighborhoods. In essence, this reflects an attempt to attenuate disadvantages associated with past residence in concentrated poverty and low levels of family income through advantages associated with subsequent residence in low poverty neighborhoods.[1]

Summary of Four Models of Effect Heterogeneity

Drawing on the life-course perspective, I present four potential models of neighborhood effect heterogeneity: cumulative advantage, cumulative disadvantage, advantage leveling, and compensatory advantage. Each model describes a unique form of neighborhood effect:

- **H1 (cumulative advantage):** Neighborhood advantage will positively affect educational outcomes for children and youth with long histories of living in advantaged neighborhoods and/or other types of social advantages.
- **H2 (cumulative disadvantage):** Neighborhood disadvantage will negatively affect educational outcomes for children and youth with long histories of living in disadvantaged neighborhoods and/or other types of social disadvantages.
- **H3 (advantage leveling):** Neighborhood disadvantage will negatively affect educational outcomes for children and youth with past histories of living in advantaged neighborhoods and/or other types of social advantages, diminishing some of the benefits associated with these past advantages.

[1] The case can also be made that MTO interrupts the cumulative disadvantage model of neighborhood effects, especially for children who were very young at the time of treatment.

- **H4 (compensatory advantage):** Neighborhood advantage will positively affect educational outcomes for children and youth with histories of living in disadvantaged neighborhoods and/or other types of social disadvantages, ameliorating some of the negative impacts associated with these past disadvantages.

It is important to note that each of these models describes two types of background processes that moderate or compound the impact of neighborhood (dis)advantage. The first is the sequencing of neighborhood conditions: how current neighborhood (dis)advantage augments or counteracts the impact of past neighborhood (dis)advantage. The second is heterogeneity in the effect of neighborhood (dis)advantage based on an individual's socioeconomic background. Although researchers have found that neighborhood effects are stronger when exposures are long lasting (Wodtke et al., 2011), most researchers studying effect heterogeneity examine variation in neighborhood effects by family socioeconomic background. Hence, I will focus on the latter in the next section, noting when researchers have indicated that long-term neighborhood conditions are salient. I now turn to research on neighborhood effects to evaluate the strength of evidence for each of these models.

Current Evidence on Neighborhood Effect Heterogeneity

Extant research on neighborhood effect heterogeneity is limited, and the topic warrants greater attention (Harding et al., 2011; Sharkey & Faber, 2014; Small & Feldman, 2012). In their recent review, Sharkey and Faber (2014) note that

> [w]ith some important exceptions, much of this research is descriptive and exploratory in nature, without a clear alignment between the empirical assessment of effect heterogeneity and a theoretical basis for why the residential environment is likely to be experienced differently by specific segments of the population. (p. 569)

In the preceding section, I defined four theoretical models grounded in a life-course perspective and relevant theory. Current research provides evidence in line with several of these models.

In Fig. 5.1, I summarize relevant research finding significant neighborhood effect heterogeneity that aligns with one of the four theoretical models above. The X-axis represents background family socioeconomic status (SES). Studies to the left of the origin on the X-axis find significant neighborhood effects for individuals in families with lower SES backgrounds—lower levels of household income, parental education, and the like. Studies to the right of the origin on the X-axis find significant neighborhood effects for individuals in families with higher SES backgrounds. The Y-axis represents whether neighborhood advantage or neighborhood disadvantage is more salient; studies above the origin find positive effects of neighborhood advantage, whereas studies below the origin find negative effects of neighborhood disadvantage. By placing studies in one of the four quadrants, I identify the theoretical model supported by the study's findings. Along with the study citation, I include the educational outcome(s) affected by neighborhood (dis)advantage, as

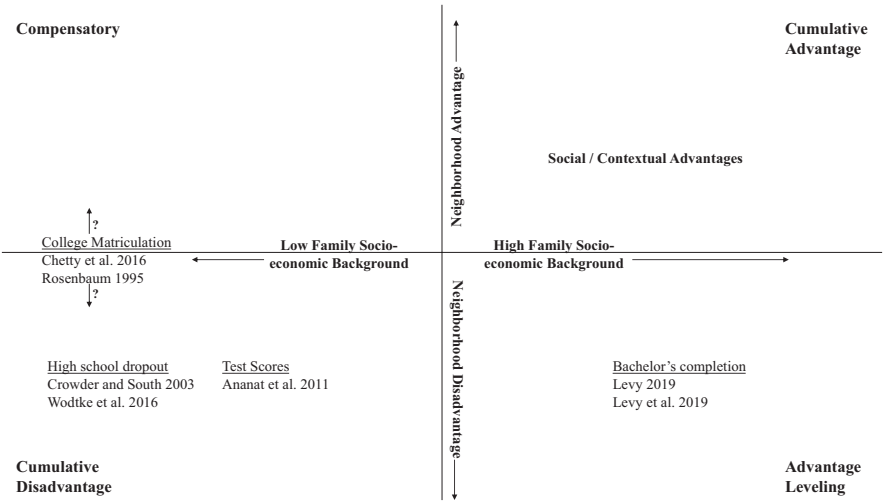

Fig. 5.1 Evidence for neighborhood-effect heterogeneity on educational outcomes. (Source: Design by author)

neighborhood-effect heterogeneity may vary by outcome. Note that specific location within quadrant does not connote strength of estimated neighborhood effect; rather, studies are grouped by outcome(s) affected by neighborhood (dis)advantage.

Several studies find evidence of a cumulative disadvantage model, both for test scores and odds of dropping out of high school. Capitalizing on county-level[2] variation in job loss across North Carolina during the Great Recession that began in December 2007, Ananat, Gassman-Pines, and Gibson-Davis (2011) find that area job losses were associated with reductions in eighth-grade students' test score achievement. Not only was the overall magnitude of these declines greater for children of parents with high-school diplomas or less, but this group also experienced immediate reductions in test scores following county job losses. Among children whose parents had more than a high-school diploma, test scores only declined after two quarters of consistent job loss—indicating buffering effects of high family SES—and were smaller in magnitude. With respect to high-school dropout risk, two studies using the PSID also find heterogeneous neighborhood effects indicative of cumulative disadvantage. Crowder and South (2003) find that for black adolescents from single-parent households and white adolescents from low-income households, the association between neighborhood disadvantage and dropout risk is particularly strong. Wodtke et al. (2016) similarly observe that neighborhood disadvantage has the strongest increase in dropout likelihood for adolescents from low-income families, although they find that this interaction applies generally to black and white adolescents. Further, they find that the relationship between neighborhood

[2] Although counties are a higher level of geography than neighborhoods, variation in job loss across North Carolina's counties gives a plausible signal for neighborhood-level variation in job loss.

disadvantage and dropping out of high school is plausibly causal for adolescents from low-income families.

Recently, researchers have also found support for the advantage leveling model. Two studies of the likelihood that an individual will complete a bachelor's degree find that the impact of neighborhood disadvantage is strongest for adolescents with socioeconomically advantaged backgrounds. A counterfactual analysis of a nationally representative sample[3] of adolescents enrolled in school in the late 1990s finds that those adolescents least likely to be living in concentrated poverty experience the strongest reductions in likelihood of bachelor's attainment from living in a high-poverty neighborhood. Among the most salient family characteristics that predict avoidance of concentrated poverty are high household income, high parental educational attainment, and not receiving means-tested cash assistance or in-kind benefits—all of which indicate middle to upper family SES (Levy, 2019). Similarly, a counterfactual model of adolescents in Chicago using the Project on Human Development in Chicago Neighborhoods finds that black adolescents in high-income families experience a significant, plausibly causal reduction in their likelihoods of earning a bachelor's degree from increases in cumulative neighborhood disadvantage. The relationship between neighborhood disadvantage and bachelor's attainment is insignificant for low- or middle-income black adolescents as well as both low- or middle-income and high-income white adolescents (Levy et al., 2019).

Why might the detrimental effects of neighborhood disadvantage vary by outcome? Specifically, why is neighborhood disadvantage most negatively associated with high-school graduation odds and, to a lesser extent, academic achievement among *lower* SES students, whereas it is negatively associated with bachelor's degree completion only among *high* SES students? Extant research does not provide a specific answer to this question. One possibility is that compared to completing high school, bachelor's degree completion is difficult and often costly. Among a recent cohort of U.S. public high-school students, 85% graduated on time (The National Center for Education Statistics at IES, 2020), and even more will eventually graduate or earn an equivalent credential. Of all high-school graduates, however, less than 70% will enroll in a 2-year or 4-year postsecondary institution (U.S. Bureau of Labor Statistics, 2020), and among first-time enrollees in 2011, only 61.8% had completed a degree within 8 years of enrollment (National Student Clearinghouse Research Center, 2019). The myriad pitfalls along the pathway to a bachelor's degree are well documented (Goldrick-Rab, 2016; Tinto, 2006), and they significantly reduce individuals' odds of college graduation. Thus, a single form of disadvantage may be decisive—even for relatively advantaged adolescents. By comparison, there are greater institutional supports and fewer personal costs to high-school completion and, perhaps, academic achievement. The extent to which this explanation or some other phenomenon accounts for the variation in heterogeneous effects of neighborhood disadvantage described above merits further research.

[3] This study analyzes students participating in the National Longitudinal Study of Adolescent to Adult Health.

Results from two prominent social-policy experiments yield evidence that could be interpreted as supportive of the compensatory advantage model or the cumulative disadvantage model. Both the MTO experiment and the Gatreaux Assisted Housing Program[4] yielded increases in college matriculation for children and youth from low-income backgrounds whose families moved to low-poverty neighborhoods when compared to those who stayed in high-poverty neighborhoods (Chetty et al., 2016; Rosenbaum, 1995). Given that the increase in college attendance is associated with a move to a lower-poverty neighborhood, one could argue for the existence of a potential compensatory effect of neighborhood advantage for past disadvantages. Yet, one could just as easily explain the results through a pattern of cumulative disadvantage; in this latter scenario, those who moved to low-poverty neighborhoods would have avoided neighborhood effects arising from prolonged exposure to a disadvantaged neighborhood.

Chetty et al. (2016) interpret their MTO results—finding significant increases in college matriculation only for youth that moved before age 13—as avoidance of a prolonged exposure throughout childhood and adolescence. Alternatively, the MTO results are equally consistent with a sensitive-period hypothesis that neighborhood effects on college matriculation operate only during adolescence. Perhaps the only way to adjudicate between these interpretations would be to compare children who moved to a low-poverty neighborhood and those remaining in a high-poverty neighborhood against a third group—those moving to a neighborhood with moderate levels of poverty. This third group, of course, does not exist in either study.

In sum, there is emerging evidence for the cumulative disadvantage and advantage leveling models of neighborhood effects. The former operates most clearly in the context of secondary achievement test scores and high-school dropout risk, whereas evidence for the latter exists for bachelor's degree completion. There is potential, though not definitive, evidence for the compensatory advantage model, and I am aware of no evidence explicitly in support of a cumulative advantage model, although there have been few tests of this model to date.

Future Directions

Research on neighborhood-effect heterogeneity remains in its nascency, particularly for a specific outcome like academic achievement or educational attainment (Sharkey & Faber, 2014). Yet, there is growing consensus that neighborhood effects are unlikely to be uniform. In this chapter, I use a life-course perspective to describe four distinct, theory-based forms of heterogeneous effects of neighborhood (dis) advantage. Moving forward, it is important for researchers examining neighborhood effects on a variety of educational outcomes to explicitly theorize and estimate

[4] Gatreaux was a quasi-experimental housing desegregation program in Chicago that induced moves to destinations with variable neighborhood poverty rates. See Rosenbaum (1995) for additional details.

heterogeneous effects. The concern here is more than substantive; failure to model effect heterogeneity can significantly bias treatment effect estimates (Wodtke, 2018). Along with this general recommendation and description of specific models of heterogeneity, I identify four important future directions for research.

First, when informed by theory and prior research, models of neighborhood effects should go beyond estimating the impact of average cumulative neighborhood exposures across the early life course on educational outcomes. Estimating this type of neighborhood effect was an important development in recent research (e.g., Sampson et al., 2008; Sharkey & Elwert, 2011; Wodtke et al., 2011). Yet, many individuals experience substantive changes in their levels of neighborhood (dis)advantage throughout childhood and adolescence (Wodtke et al., 2011, 2016). Applying the life-course principle of timing, neighborhood conditions may be more important during certain life stages than during others. For example, Wodtke et al. (2016) find that neighborhood disadvantage during childhood is unrelated to one's odds of dropping out of high school, but neighborhood disadvantage during adolescence significantly increases the likelihood of dropping out. Thus, models of neighborhood effects should consider potential sensitive periods. In addition, it may be possible to estimate the impact of individuals' full trajectories of neighborhood conditions by integrating growth-curve analysis of neighborhood conditions (e.g., South et al., 2016).

Second, greater attention to and measurement of neighborhood advantage is warranted. Researchers of neighborhood effects have recently emphasized the impact of a multivariable conception of neighborhood disadvantage (e.g., Wodtke et al., 2011, 2016). Authors of an earlier body of research concluded that various forms of neighborhood advantage—neighborhoods with high occupational expectations, high-income households, and large shares of adults having college degrees or high-status jobs—are positively associated with educational outcomes (Ainsworth, 2002; Brooks-Gunn, Duncan, Klebanov, & Sealand, 1993; Duncan, 1994). Disadvantage and advantage in neighborhood conditions may be thought of as two sides of the same coin, but they appear to be distinct constructs. Neighborhood disadvantage is determined more by economic characteristics like poverty, unemployment, and public assistance receipt, whereas neighborhood advantage is determined by status characteristics like high educational attainment and high-status job holders (Levy et al., 2019). That is, neighborhood disadvantage is not simply the absence of neighborhood advantage, and neighborhood advantage is not simply the absence of neighborhood disadvantage. The salient aspect of neighborhood conditions may vary by the outcome under study. In recent years, researchers have focused more on analyzing impacts of neighborhood disadvantage rather than explicitly analyzing neighborhood advantage. Because this took place as increasing attention is given to effect heterogeneity, few researchers have explored heterogeneous effects of neighborhood advantage. This may explain the lack of evidence in the current literature for the cumulative advantage model of neighborhood effects on educational outcomes.

Third, researchers examining neighborhood effects should continue to push beyond concentrating solely on the residential neighborhood. Although I focus here on residential neighborhood effects, which is the domain of the vast majority of research on neighborhoods and educational outcomes, individuals live their lives in activity spaces that extend well beyond their residential neighborhoods (Wang,

Phillips, Small, & Sampson, 2018). Hence, patterns of linked lives extend well beyond the residential neighborhood, and although one's residential neighborhood undoubtedly influences one's activity space, these broader exposures are distinct—and not perfectly correlated—phenomena (Browning, Cagney & Boettner 2016; Krivo et al., 2013). Researchers of neighborhood crime, for example, highlight the importance of adjacent neighborhoods (Peterson & Krivo, 2010) or non-adjacent neighborhood connections forged by residents daily rounds (Levy, Phillips, & Sampson, 2020). At the individual level, Browning, Soller, and Jackson, (2015) find that adolescents' broader activity spaces play a significant role in explaining their engagement in various risky behaviors. These nonresidential activity space exposures may compound with—or counteract—residential neighborhood effects; that is, non-residential exposures could function in any of the four models of effect heterogeneity highlighted here. Researchers studying neighborhood effects should continue their push to leverage various forms of data on broader activity space exposures, from mobile phone data (Palmer et al., 2013) and geolocated social media data (Phillips, Levy, Sampson, Small, & Wang, 2019; Wang et al., 2018) to travel diaries/summaries (Jones & Pebley, 2014) and census-based data (Graif, Lungeanu, & Yetter, 2017).

Finally, it will be worthwhile to consider other models of neighborhood effect heterogeneity. This chapter is necessarily limited in scope, and I have used it to elaborate models of effect heterogeneity informed by the life-course perspective. There also exists documented evidence of neighborhood-effect heterogeneity by race, gender, and age, some of which is likely associated with life-course history of disadvantage (for a review, see Sharkey & Faber, 2014). Moving forward, researchers should further develop these and other models of effect heterogeneity. In doing so, it will be especially important to iterate between ethnographic work and quantitative analyses; ethnographic research can be particularly helpful as researchers continue to build theory for neighborhood-effect heterogeneity (Small & Feldman, 2012). Although the size and scope of data currently available is unprecedented, the exploration of neighborhood-effect heterogeneity should not proceed indiscriminately. Rather, researchers should continue developing a rich set of models for how, why, and for whom neighborhoods matter (Sharkey & Faber, 2014). Integrating past insights from a diverse set of scholarship to explicate and test heterogeneous models of neighborhood effects is a necessary path forward.

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Chapter 6
Space, Marginality, and Youth in Urban Spaces: Pedagogical Practices in the *Quartieri Spagnoli*

Matías Nestore

> This is the place with the highest number of children leaving school, the highest criminality, this place is known for having fewer green spaces than any other place in the world, an insane population density … this place is excess on all levels. (Paola, teacher, Interview No. 8, 2019)

The *Quartieri Spagnoli* (QS) in Naples are a central urban area located on a slope between *Via Toledo* and *Corso Vittorio Emanuele*, two of the city's wealthiest streets. The QS are affected by high levels of disadvantage: here there are informal economies operating on crime and violence (Laino, 2012) alongside high unemployment and school dropout rates (Cavola, di Martino, & de Muro, 2010; Laino, 2012). With the highest population density in the city, the area has a low level of basic services and poor access to green spaces, and the narrow streets restrict accessibility (Cavola et al., 2010; Laino, 2012). Their lanes form networks of relations, informal economies, and social tensions that both isolate and make this space unique. In an attempt to define the sociourban structure of the QS, Laino (2012) identified precarious labor, social deviance, immigration, dropping out from school, informal and illegal networks of activities, and exclusion as defining traits. Moreover, the area's inhabitants have seen a proliferation of youth organized crime, the so-called *paranze di bambini'*[1] (REVES, 2016).

In this work, I seek to identify the QS as a liminal space, one that acts as both a boundary and a *frontier* (Balibar, 2007) that separates those who are seen as legitimate citizens from those who are constructed as illegitimate. I focus on this space as I am interested in exploring how processes of *expulsion*, disenfranchisement, and

[1] Originating from a combination of sociocultural and material deprivation, lack of social services, and schooling, the *paranze di bambini* or *baby gangs* are a growing phenomenon in the Italian South, particularly in Naples. These gangs, involving children and adolescents, lead to the proliferation of violence among youth (see Iavarone & Girardi, 2018).

M. Nestore (✉)
Homerton College, University of Cambridge, Cambridge, UK

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the complex constellations of inclusion/exclusion emerge in what might be seen as instances of Sassen's (2014) concept of urban expulsion. I have chosen the term *liminal* to indicate such boundaries, as well as portray such spaces as placed at the margins of *North* and *South* binaries of world development. Spaces of this kind can be understood through concepts that range from more technical notions, such as *coldspots* (Social Mobility Commission, 2019) or *deprived neighborhoods*, to more cultural and sociological ones, such as liminal spaces or sites of abjection (Wacquant, 2008).

In this chapter, I will be arguing that the QS represent a liminal space in one of the wealthiest parts of the city, made invisible by the proliferation of commercial streets, *smart-city* development, and neoliberal narratives of globalization and merit. In this site, children are among those who are most affected by the intersection of material inequality, violence, and sociocultural deprivation. Moreover, the QS not only represent economic marginality within the seemingly advanced global North, but also produce a number of sociocultural and historical injustices. Indeed, what is particular about the QS, and other similar urban spaces, are the ways in which historical narratives of stigma start to sediment and become embodied in the space by its people, constantly negotiating with the subjectification of marginality. Whilst inequalities and social exclusion are not new features of the urban context under study, exploring the new urban social divisions of Naples provides insight into potential sociological futures in "developed" urban realities so as to reveal and make visible the impacts of these configurations in children's lives, education paths, and futures.

In this chapter, I draw on a research project I carried out in collaboration with a school in the QS in April 2019, aimed at understanding the ways in which urban marginality, childhood, and schooling, as they are shaped by global processes, are interrelated. I constructed this empirical project with two main aims in mind: first, to enhance an understanding of liminal spaces in the Global North through the study of the QS, with a focus on the ways in which children and youth in this space relate to each other and those beyond, and who narrate their lived experiences as liminal. Second, to understand teachers' conceptualizations of their role as pedagogical actors in the QS, the nature of the pedagogies they deploy in relation to young people, and how these pedagogical acts might contribute to whether or not they are marginalized in the neighborhood. Throughout the research design, process, and analysis, I have explored the question of what constitutes childhood in liminal spaces, and what this means for education and social change.

I develop the chapter as follows: I begin by sketching out the study's theoretical underpinnings, broadly engaging with the idea of liminal spaces, youth, moral inequality, and conceptions of childhood. I then present my research's findings: the lived experiences and place-based identities of children, on the one hand, and teachers' understandings of schooling and pedagogy in marginal urban areas, on the other. I conclude by arguing that taking into account place-based identities and

realities is fundamental for the development of educational interventions in marginalized urban areas in which children are marked by processes of cultural exclusion, social marginality, criminality, and ethnoracial tensions.

Theoretical Underpinnings: Liminal Spaces, Youth, and Moral Inequality

> The QS are still seen as a ghetto, as a place on its own … as if they were a bubble.… The children perceive that they are society's waste. (Camilla, teacher, Interview No. 9, 2019)
>
> I want to conclude with a question: What are the spaces of the expelled? They are invisible to the standard measures of our modern states and economies. But they should be made conceptually visible. (Sassen, 2014, p. 222)

The modern development of cities, its relation to wider questions in sociology, spatial power, and its embodied narratives, cannot be detached from the experiences of those occupying and identifying with urban spaces. Sassen (2014) argues that a central issue emerging from transnational political economies of urbanization and privatization is the emergence of both novel and longstanding logics of expulsion, that is, the people, ways of life, and places that are excluded from (and by) the normative core of the socioeconomic logics of our time. This notion, in Sassen's (2014) view, takes one from the traditional idea of urban inequality (taking as a given that some are rich and some are poor) to a radical reconceptualization of urban life, in which accelerated ideals of modernity threaten society's relationship to public life and ecosystems, both denied by its most advanced and economic technical achievements.

The spaces of the expelled, which I have identified as liminal spaces, are developing across cities globally and comprise a different face of globalization and normative development (Sassen, 1991, 2005; Settis, 2019; Wacquant, 2008). Cities around the world are taking shape through three convergent forces: a verticalization of their architecture; urban sprawl; and new intra-urban borders associated with vast privatization (Settis, 2019). These three processes determine the proliferation of urban liminality, which becomes complementary to the growth of smart/resilient cities.

Balibar (2007) has defined the global proliferation of liminal spaces as the development of *global banlieues*. Indeed, in his work he guides the reader through the historical, political, and sociocultural segregation of those living in liminal spaces, and the ways in which the 2005 Paris uprisings were a result of a number of expulsions. Moreover, Balibar points to the docility of responses and failed resistance to the lack of recognition and social conditions of abjection experienced by the Parisian youth—something that led to a sudden explosion, or rather the implosion, of uncontrolled violence. His analysis of frontier zones in urban realities parallels Sassen's

(1991) work on global cities, on the one hand, but also goes beyond it, on the other. Balibar introduces the experience of youth marginalization and deprivation to the discussion, reinforcing Sassen's point about young people being amongst the most affected by the condition of liminality. Balibar highlights the ways in which youth live and embody such spaces through processes of bordering and marginalization, and colonial and racial memories.

Liminal spaces take shape, not just as products of particular modes of economic governance, political projects, and material exploitation, but also as relational spaces characterized by memories, emotions, and relationships amongst people, which affects the ways in which children and youth relate to their sociocultural environment. These are spaces where normative modes of governance and traditional citizen-state relations do not exist, with people feeling more and more deprived and estranged (Rumford, 2013). Arguably, they are created and maintained through processes of the globalisation of strangeness (Dillabough & Yoon, 2018; Rumford, 2013), and what Kearney and Taylor (2005) refer to as the sacrificial stranger. By sacrificial stranger, Kearney refers to the process of social groups defining a normative sameness based on the perversity of another group that they identify and sacrifice as a scapegoat. Rumford defines strangeness as a sense of disorientation that results from the loss of reference points that once made it easy to identify who the "we" and who the "other" were (Rumford, 2013). In Balibar's (2019) global and territorial space of "absolute capitalism," it becomes more and more difficult for people to identify as "we" with those who surround them, because they have traditions, customs, and religions that are often in conflict or at odds with the other. When people find themselves in liminal spaces where physical borders are no longer the defining feature of citizenship, they create new societal borders—through normative identities of class, race, and gender—in order to re-establish the distinctions between us and the other.

In this moment, a group affirms its identity by building a normative sameness whilst demonizing those who act differently or hold other views. The fears and anxieties caused by the feeling of strangeness, as well as a general attitude of mistrust towards the young often identified as risky or lost (Dillabough & Kennelly, 2010), leads to experiences of exclusion amongst urban youth from disadvantaged backgrounds.

Although the conceptual tools Kearney and Taylor (2005) provide do not explicitly include spatial logics of exclusion and stigmatization, I here join them to Loïc Wacquant's (2008) work on *advanced marginality* so as to more fully conceptualize the liminality of space in urban realities. Indeed, liminality could be considered a condition of those residing in "sacrificial spaces," that is, the places in which the urban outcasts reside. Here they are vilified by the media (Wacquant, 2008) and ignored in the state's amelioration programs. In the same way as urban youth are deemed violent, risky, or lost, societal actors sacrifice these spaces for the sake of a normative idea of progress and development. They are sites that are "feared, fled from, and shunned" (Wacquant, 2008, p. 1). Yet these spaces are at the very center of global capital, serving as "reservoirs of low-skill labour forces, …, warehouses

for supernumerary populations that no longer have any identifiable political or economic utility in the new polarised capitalism …, spatial containers for the ostracisation of social categories and activities" (Wacquant, 2008, p. 1). The QS is a liminal space in all of these senses, with the condition of advanced marginality. That these youth are children seems to disappear from view, leaving a new kind of moral inequality, both in the way children are perceived by others and in the way they perceive themselves.

> You know Matías … we would be good children if we didn't have problems. (Claudia, student, from fieldnotes, 2019)

Being able to draw the links between spatial marginalization and childhood is at the core of this work. In exploring the ways in which sociocultural forces, power dynamics, and spatial constraints determine children's conceptions of themselves and their realities, it becomes essential to understand how childhood in marginalized communities is conceptualized. Researchers of conceptualizations of childhood and inequality tend to function on the hemispheric distinction of developed and developing worlds. Hopkins and Sriprakash (2015) argue that the "… poor child at the centre of development activity is often measured against and reformed towards an idealised, globalised and normalised child subject" (p. 3). This is an embodied and normatively styled Western child, bearing the idealized traits of whiteness, masculinity, and middle-class status.

However, combining the concept of subalternity to the theories of critical childhood studies and postcolonial approaches, I wish to suggest that the idea of the *subaltern child* is a more useful concept to understand stigmatization, cultural violence, and disadvantage in children in subaltern conditions, both in the postcolonial world and in Western urban spaces. Hopkins and Sriprakash (2015) consider the Western child as being "unmarked by categories of difference or specificity" (p. 5), something which allows this ideal child-subject to be universalized. However, the subaltern child is marked by historically reproduced cultural stigmas, territorial fixation, and embodiment of colonial proximities (Mawani, 2009).

In the same way that the discursive dominance of the ideal Western child in development discourse affects the postcolonial child-subject framed as in need of aid and culturally deficient, the invisibility of the subaltern child within North/South dichotomies and literature furthers the reproduction of context-blindness in education and development policymaking. Given that the cultural politics of childhood can be understood as involving the struggle for redistribution, equality, and diversity (Mawani, 2009), there is an important need to frame my understanding of the subaltern child within a conceptualization of social justice and moral equality, so as to highlight the structural and cultural violence at play in the proliferation of liminality across world cities. I do so by combining an understanding of liminal spaces, spatial sociology, and subaltern childhoods with the work of Sangiovanni (2017) on moral inequality and human dignity.

Central to this analysis is the concept of social cruelty as preventing someone's ability to develop a sense of self, that is, one's conceptions of those values and

concerns that are central to one's life, and also the understanding of the "kind of person" one is (Sangiovanni, 2017). As Sangiovanni (2017) argues:

> Underpinning our practices of treating each other as moral equals, I claimed, is the rejection of social cruelty as an attack on our capacity to develop and maintain an integral sense of self, and therefore on a structural element of a flourishing life. (p. 76)

The sense of self theorized by Sangiovanni is one created through two central points of view: oneself as a creator and enactor, and oneself as created and enacted by others. When these two aspects are combined in a sense of self, it becomes integral. However, the opposite can also happen, with a subject losing control of the factors that determine their own sense of self, becoming more and more determined by external factors, actions, and forces.

The condition of childhood is one in which the construction of one's sense of self is more critical, with external factors considerably impacting on one's self-perception. Indeed, the conditions of youth and children not only reflect reality but also "produce" it. However, these conditions also "reproduce" the dominant cultural and social order, through processes of misrecognition, re-representation, and assimilation of children in certain cultural and social norms. By applying Sangiovanni's (2017) insights to the concept of subaltern childhood, it could be argued that children in urban liminal spaces are likely to have little control over the determination of their own sense of self, given that this is constantly determined by the already mentioned external factors, such as territorial fixation, violence and proximity, historical stigmatization, and cultural deprivation. This conceptualization is central to my analysis of interviews and observations.

The *Scuola Diffusa*: Site, Scene, and Seeing

My research design began to take shape in September 2018, during my first visit to a school in the QS, and I collected the data I present in this chapter during January and April 2019. The *Scuola Diffusa*, started by the social enterprise *Dalla Parte dei Bambini* within the FOQUS urban regeneration project, is a pedagogical initiative aimed at providing free educational opportunities to children aged 11–14 in the QS, the age with the highest rate of school abandonment in the area. Its creators aimed to include all children from the neighborhood and developed it in response to the neighborhood's high rates of school dropouts and youth criminality. They launched it as an area-based educational project in the QS, in order to complement the low degree of state educational provision. Whilst in the past the children who abandoned or were excluded from the city's state education were involved in religious educational institutions, after their closure in 2012, social enterprises or cooperatives had to fill the void, as levels of school abandonment in the neighborhood remained abnormally high. The school's curriculum is based on place-based pedagogies, aimed at helping the students engage with their own neighborhood in educational ways. This is done through using the QS, and its community, as a pedagogical

resource: spending time talking to and learning from local artisans, shopkeepers, and farmers. Educators blend together norms of formal, informal, and experiential learning in order to provide students with a broader pedagogical experience.

The program is not intended to be limited to children with special needs or family difficulties. Rather, the aim is to actively integrate children across and beyond the QS. However, repeated processes of exclusion in the mainstream school have led to the *Scuola Diffusa's* demographics predominantly constituting the former. As a researcher, I am aware that this will have implicitly affected my perception of the students, as the lived reality of the classroom composition overshadowed the school's stated aims in my daily interactions and data collection. Furthermore, this understandably affects some students' perceptions of themselves and their education, with one student in particular expressing repeatedly her sense that the *Scuola Diffusa* taught them less than others, and her desire to move "upwards" to the mainstream school. Most students, however, stated that they enjoyed and appreciated their schooling. As such, although the students at the *Scuola Diffusa* may experience a particular form of alienation directly resulting from their special educational needs or behavioral challenges, the alienation with which I am dealing in this chapter stems from the physical, economic, social, and cultural marginalization of the QS as a whole.

I met the teachers at the school on my first visit, and we collaborated in designing a 2-week long pedagogical workshop. Engaging with them helped me tailor the activities to the students' characteristics, needs, and backgrounds. The aim was to design a workshop that could give the participants a chance to negotiate knowledge with the researcher while also being pedagogical.

Following Griffiths (1998), the workshop's purpose was to make the research highly collaborative, through the construction of a space of communication and joint action between the participants and the researcher. The workshop involved leaving the classroom and exploring the neighborhood with the participants through walking and talking activities. This required giving up most of my authority as researcher, given that participants were in charge of guiding me through the neighborhood, talking about the resources and issues they encountered, and taking photographs of the places they identified as matching the research's purposes.

During the course of this phase, each of the participants guided me through the QS, sharing their thoughts and perceptions as we walked along their lanes. The choice of including a photographic element in the research process was one that came about after deliberating how to represent the children's perceptions in the best possible way. The photographs were constructed collaboratively, with the participants choosing the subject and composition of the pictures. Following Pink (2013), I argue that effective use of images can help reveal the ways we experience and perceive the world, placing them at the center of how people represent and express meaning. I utilized participatory photography to capture those affective aspects of social reality that cannot be fully expressed through textual interpretation (Rose, 2007).

I used the material and fieldnotes I gathered during the workshop in the third phase of the research process as elicitation devices—that is, in the semistructured

interviews I conducted with students and teachers. The interviews involved a total of six out of the twelve students participating in the workshops, as well as five teachers. I designed them to capture a shared moment with individual students, moments aimed at exploring their identity-management strategies, their perceptions of the QS, and the ways in which they related to the schooling and learning. I aimed my interviews with teachers at corroborating the information gathered in my field-notes and during the workshop, gaining knowledge about the context of the QS and the students' backgrounds, as well as collaboratively reflecting on the teachers' conceptualizations of their own roles in the neighbourhood. During the course of my time in the QS, I invested heavily in collaborating with the teachers and carried out sustained dialogue with them about the progress of my research. I used these dialogues to reimagine future methods and revise existing methods to improve the process. Such an approach allowed me to gather portraits and imagined spatial maps of the neighborhood, children's liminal experiences, and teachers' accounts of their work and their challenges. The themes I explored with the teachers during the interviews included the nature of the QS as a periphery, stigmatization, and the difficulties encountered in classrooms. I coded the interviews thematically in order to drive the analysis and identify the intersections between my experiences on the field, the students' narratives and perceptions, and the theoretical framework for the study.

Identity, Schooling, and Liminality

I derive my analysis from the stories of the children and the teachers I worked with during my time in the QS. In framing children's conceptualizations of identity, space, and liminality in the QS, in what follows I begin by exploring how children's sense of selfhood is shaped by their understanding of place, how they perceive belonging and selfhood in the QS, and the implications of the space's violence, deprivation, and stigma for the children's everyday lives. I also examine the identity-management strategies young people utilize as a means of everyday survival, their condition of advanced marginality, and the strategies through which they classify and reclassify themselves and others. I then turn to teachers' narrated accounts of the neighborhood and of their role as pedagogical actors. I can thus explore the links between schooling and the wider socioeconomic environment, and the ways teachers perceive their role in liminal spaces such as the QS.

Violence, Stigma, and Marginality in Children's Lives

How do these processes and relations shape identity building and spatial marginalization, so as to construct a sense of belonging and not belonging? I begin with the voices of two teachers:

You can't disregard their stories, because they are marked by them. (Camilla, from teachers' interviews)

She [Francesca] told me about it the other day in tears—"Miss, … I cannot understand my rage—I can't—I don't understand—… I can't find a way of stopping this rage, I know I'm violent and aggressive, but it's inside me and I can't—." (Paola, teacher, Interview No. 8, 2019)

Francesca, a white girl aged 12, was one of the most talkative children in the classroom, both during the workshop and during the interview. Having been personally affected by the violence—structural and physical—that characterizes the QS, she repeatedly expressed her concern for the violence in the neighborhood. Yet this did not prevent her from developing a deep attachment to the QS, proudly embodied in her ways of speaking, moving, and behaving.

F: It's as if I come to your area and I can't do anything—I'm in your territory, I'm alone. Instead, here we are all united.

M: Do you like living here?

F: Yes—but—the Quartieri have one bad thing—they always fight … but after all it's not a bad place. It's a place where children are always around—are always around playing—it's a nice place, it's not bad—. (Francesca, student, Interview No. 2, 2019)

Francesca's words point to the symbolic worlds that young people in the QS experience and navigate, generating ambivalent feelings towards their own realities. She describes the QS as relational, with her own experiences and memories of them forming a complex constellation of feelings and associated tensions of belonging-non-belonging. This relational understanding made it difficult for her and for other children to place the neighborhood into categorizations of good or bad, problematic or marginalized. Indeed, ambiguous experiences, feelings, and identities blended within the same spatial borders. Such findings are not atypical of other studies of youth, place, and power where advanced marginality rests at the center of such spaces (Dillabough & Kennelly, 2010; Gulczyńska, 2019; Nayak, 2003a, 2003b).

As the activity progressed, the students identified relations, both positive and negative, as the central element giving shape to the QS. Although they referred to friendship bonds as a positive aspect of their experiences of place, violence was a recurrent element in their conceptualization of the neighborhood and their classification of its inhabitants. It was during one of these first discussions of the neighborhood that Paolo started talking about his own experiences of how he conceptualized the space and how he determined his sense of self in it. He put much weight on the violence of the space and its associated social norms of acceptance—violence here, at the edge of liminality, simply forming a part of one's experience of advanced marginality:

You're from the QS if you beat people up, and people beat you up. (Paolo, student, from fieldnotes, 2019)

Following this group discussion, the space's relational nature emerged as important in conversation, a nature determined by violence and the embodiment of the space itself. Violence and bordering practices in the QS overlapped in the way Balibar (2007) suggests, with children remaining confined to the neighborhood—materially, culturally, and physically. These discussions were reflected in the accounts of daily experience the children recounted during the interviews.

M: What do you mean? In what sense are they [the QS] something else?
F: Because—well—wait—nothing, we have our area, and they have theirs—we only want our territory, we don't want the other one—we only need this area. (Francesca, student, Interview No. 2, 2019)

Internal bordering (Balibar, 2004) is one of the dynamics researchers have identified as characterizing liminal spaces. The children's accounts of their experiences reflected this manifestation of social exclusion, with a strong sense of territorial fixation and identification, expressed through violence, relational identities, and a feeling of spatial belonging. Moreover, internal bordering becomes not only a material or sociocultural barrier that children in the QS experience, but also an embodied border—one which, when trespassed, could result in physical violence upon them. However, this is not only a mechanism that youth in the QS passively experience, but it actively shapes their self-perception through acts of identification with the space, and acts of violent resistance. Arguably, reflecting Gramsci's (1975) take the condition of the subaltern, the liminal child furthers the effects of the decisions taken by the hegemonic class, when in the absence of other forms of control over their own selves, they reinforce marginalization through acts of violent resistance.

F: We're against each other—not us—the boys. So the ones from here against the ones in Pallonetto [adjoining neighbourhood]—they fight—everyday.
M: Really? Why do they fight?
F: Because they shouldn't come to our area—for example if one of them comes here from the market, this is our area and we defend it. (Francesca, student, Interview No. 2, 2019)

Francesca's comment added a gendered layer to her perceptions of violence, describing girls as not being involved in inter-neighborhood youth gang violence, a predominantly male-led violence from which she indirectly suffered.

As he answered my questions during the interview, Antonio, a white boy aged 12, kept moving around the room with the joyful energy typical of children. He was the youngest child in the class. Here he narrates an account of his embodied bordering practices in the city:

M: Alright, tell me about the street where you live.
A: I live with my friends down there, they love me, they protect me all the time—.
M: What do they protect you from?
A: If someone beats me up, if someone hurts me—.…
M: And do you ever go to other neighborhoods?
A: I only go with my dad.

M: So never with your friends?
A: No, otherwise we'd get beaten up—.
M: Who would beat you up?
A: Those people—from Sanità.
M: And what happens if they come here?
A: Then we beat them up—.
M: Why would you do that?
A: Because they don't have to come to our territory—this is our neighborhood—do we go to other neighborhoods? No—.
M: But don't all these neighborhoods belong to Naples?
A: No—I mean—I never leave my neighborhood. (Antonio, student, Interview No. 3, 2019)

During the course of the workshop, he repeatedly showed pride in belonging to the QS, having his close friends around him, and being able to be "above the law," or perhaps "below" it. Despite identifying illegality as one of the neighborhood's issues, he admitted that engaging in those activities was what made him a true *Quartierano*,[2] a word he always said with a smile on his face. As Wacquant (2008) has argued, particular districts are recognized as urban abject spaces in which "…violence, vice and dereliction are the order of things" (p. 238), with social dynamics both external and internal to the space reproducing disadvantage and deprivation. Moreover, the proliferation of stigma related to place, Wacquant's (2008) territorial fixation, depends not only on vilifying discourses "from above," in journalistic, political, and bureaucratic fields, but also determines the ways in which the youth in liminal spaces develop their sense of self "from below" (p. 238), through acts of violent resistance, identification, and protest masculinity (Treadwell & Garland, 2011). This was something the children expressed through self-identifying as *scugnizzi*, and by building their place-based identities on elements such as violence, illegality, and deprivation.

The perception of territorial fixation and stigma, from both below and above, emerged in the interviews. In a thought experiment I designed for the interviews with the students, I asked them to imagine they were producing a radio program on the QS in which they had to tell people about what characterized the neighborhood. The children expressed concern about the ways those who came from "outside" misrecognized youth in the QS.

> … The boys, always, they scream at them, at the tourists, at the blacks—then the tourists don't understand and they don't know how to defend themselves.… They don't understand and they think we're evil. This is something that they don't have to see. This is a bad thing—.… (Francesca, student, Interview No. 2, 2019)

During a workshop session, one of the teachers highlighted this attitude of the children towards those they see as 'external' to the community. Given the ways in which the children in the QS are spectacularized as marginalized, culturally deprived, and

[2] Quartierano is the term used to identify someone living in the *Quartieri Spagnoli*, and carries a certain degree of stigma.

violent, she argued that whenever they encounter someone beyond the area's borders, they act in the ways in which the tourists expect them to (from fieldnotes). This can be read as a mechanism of defence, or resistance, to hegemonic ideas about themselves, the stigmatization that comes from not being part of a normative center, both in terms of space and conceptualizations of childhood. Even if it is an act of resistance, a way of defending themselves against external spectacularization, this attitude often ended up ensuring the conflation of children's identity and legitimacy with liminality. As Wacquant (2008) also notes, when it comes to social exclusion and deprivation, "perception contributes powerfully to fabricating reality" (p. 1), with a subculture of violence, social dissolution, and marginalization proliferating across liminal spaces.

How, then, is identity managed in the context of the sacrificial stranger? Always sitting at the front of the classroom, Diego kept projecting himself outside of the QS through his statements and imagery. In my interview with him, he explicitly expressed his concern about the stigmatization the children in the QS experience, referring to violence proliferating in the space, as well as to his awareness of the problematics of childhood in the city.

D: … I think that Naples, not that I don't like it—but I think that tourists should not come to visit it. It's a place that should not be visited.
M: How come?
D: Because I think that children with knives could hurt the tourists, with weapons, they could hurt their enemies, that is the tourists—.
M: So they should not come here—.
D: Yes. No, because if they came—they should be careful about children, if a child gets close to them, they should run away—or call someone—. (Diego, student, Interview No. 1, 2019)

In Diego's narration, there is an awareness of the condition of liminal childhood, a perception of being outside of the normative sameness that legitimizes the child as a source of innocence, tolerance, and potential (Hopkins & Sriprakash, 2015). However, the awareness of being stigmatized, and the associated struggles for recognition, do not come without attempts to resist this negative perception. As Diego observes, this is done by avoiding the activities that he perceives as defining liminal childhood: spending time on the streets, engaging in activities at the margins of legality, and violence.

D: … I'm never on the street, because I spend all—I spend all my days at home, I don't want to be on the street—I don't want to become a *scugnizzo*.
M: A *scugnizzo*?
D: I don't want to become like them—they drive around on mopeds, they swear—. (Diego, student, Interview No. 1, 2019)

One can attenuate an understanding of oneself as stigmatized by thrusting the stigma onto those occupying the same space as a consequence of processes of international migration (Wacquant, 2008). Migrants can become sacrificial strangers (Kearney & Taylor, 2005) both for the children in the QS and for those in other areas

of the city. In addition to the characteristics of sacrificial strangers presented by Kearney and Taylor (2005), the children of the QS expose ways in which they can assert their legitimacy through racial discrimination. This leads to liminal spaces becoming spaces of segmented pluralism, in other words, the hidden face of the multicultural dream, with racially marked communities from the so-called South occupying the already bordered and stigmatized spaces of the marginalized North, in turn generating subalternity, racial tensions, and violence.

Wacquant (2008) identified this as the *dissolution of place*, with those socially filtered place-based identities endangered by the migrant other's entry into one's own space. Throughout the interviews and the workshop activities, the children explicitly conveyed the ways they perceived their proximity with the racialized other, particularly in discussions about their understanding of the QS's community and spatial borders. This produced a complex dynamic: The children perceived themselves as *scugnizzi,* in other words aliens to the city's normative core, but their alienation was one that was historically and culturally legitimate when compared to that of the racialized immigrant, strategically used as sacrificial stranger in their identity management processes.

F: People of color—well that's definitely not our community, I hate them, I tell you the truth—I don't want to see them—they smell. They eat the food—I don't know, that thing they eat—then [I hate them] because they're ugly. I don't like them. We can't stand them—we hate them too much—.
M: Why? Because of their food?
F: No no, also because of their skin color, I think. (Francesca, student, Interview No. 2, 2019)

The dissolution of place through segmented pluralism (Cohen, 2019) within an already bordered space is something that the children resisted through self-categorization as racist, that, is the affirmation of negative perceptions of racial differences as constitutive of one's own identity, even when the children were not even sure on what basis this interracial tension developed—as something exemplified by Francesca's statement "also because of their skin color, *I think*" (emphasis added). Similarly, Antonio's storied account of his relations with the QS's immigrant community provided me with additional insight into this identity management strategy.

A: … We don't want black people here—because they are black. They smell of onions—I don't like black people—.
M: Just because their skin color is different?
A: And they smell—.
M: What if they didn't smell?
A: Mmm maybe better—but I despise black people. I am racist. (Antonio, student, Interview No. 3, 2019)

It is in these spaces that external factors and social forces play a major part in children's identity-management, limiting their agency even in acts of liminal resistance, as these end up furthering marginalization, territorial fixation, and cultural

deprivation. As the children narrate their stories, their self-categorization as *quartierani* and *scugnizzi*, as well as considering how they relate to external forces, might be the point at which valuable strategies for identifying educational interventions may emerge. Their understandings of liminal childhood, the incapacity to determine their own forms of positive agency and experiences outside of the sociocultural, material, and structural forces influencing their life-courses, are essential factors to consider when planning pedagogical interventions in liminal urban spaces.

Pedagogical Landscapes in the Quartieri Spagnoli*: Teachers' Perceived Roles*

How do teachers conceptualize their own roles as educators in the QS, and what are the ways in which they relate to children's stories and conceptualise pedagogy in a liminal space?

> They live in an environment that keeps giving them information, wrong answers—so it's like that's pushing against us. (Paola, teacher, Interview No. 8, 2019)

I address these thematically driven stories, paying particular attention to the teachers' perspectives on pedagogy, their own role as actors in the QS, and the difficulties they face.

M: Tell me a bit about the context the school is in—.

E: So—the QS are, let's say, an anomalous periphery—they are in the heart of the city but they encompass—I mean—a big portion of social issues.… We are not a standard urban periphery, there are some aspects that are typical of the periphery but also some aspects of great transformation—they coexist in this context in a bizarre way, there is no way of integrating these two realities, they manage to coexist—let's say there is no plan or lens to understand this contamination. (Elena, teacher, Interview No. 11, 2019)

The neighborhood's anomalies were central to the teachers' narratives. Elena was the first teacher I interviewed, one of the youngest in the school. Whilst she is from a different neighborhood, she works in the primary school in the QS and could narrate the power arrangements of this space. We began the interview by exploring the neighborhood's spatial characteristics. One of the elements Elena identified is the anomalous nature of the QS, with *Via Roma* street acting as a border, and the physical space of the narrow lanes, in combination with institutional abandonment, creating a space for the proliferation of particular social dynamics, in this case, criminality. Elena was explicit about the power dynamics of the space and the class and race structures that determined its borders. She also identified how affluence in the globalizing city shapes these borders, giving an account of the core and periphery, defining bordering practices (Balibar, 2004) that depended not only on material wealth but also on cultural and nonmaterial poverty. Moreover, Elena identified a sort of segmented reality, with different social groups and social forces "coexisting"

in QS, at the urban space's core, something that would disrupt normative notions of urban progress. Building on the notion of frontier and liminality, the ways in which Elena describes the QS are reflective of Balibar's (2007) idea of space as unequal, with groups of citizens with unequal rights coexisting in proximal urban realities.

Another teacher, Giulia, also identified this relational and liminal nature of place (Massey, 2005), describing the QS as follows:

> The QS have these narrow lanes where you get lost—so I call them a periphery within the city … you find Via Roma—the commercial street, with banks—and Corso Vittorio Emanuele… . In the middle there's the QS, which represent the social class which is—the lowest.… I think there has been an abandonment by institutions in this context.… (Giulia, teacher, Interview No. 10, 2019)

Describing the QS as a periphery within the city, an abnormal site finding its place in the metropolitan center, was a key reflection Giulia discussed. Mirroring Wacquant's (2008) description of advanced marginality, the persistence of a frontier zone, a liminal space in the urban core where migrants, deproletarized working classes, and criminality overlap, Giulia described the neighborhood in ways that provided a window for understanding the actual and symbolic violence shaping the young people's lives.

When asked about the neighborhoods' power dynamics, most teachers referred to the Camorra's[3] presence influencing everyday lives in the QS. Whereas other teachers made small references to organized crime throughout their narrations, Camilla, the only non-Neapolitan teacher I collaborated with, focused on this issue more thoroughly:

> Well—ehh—well obviously the perception of—of the Camorra … people spread the news that there is a feud at that moment so there's a curfew—or there's this thing they call 'stesa'—they ride around in mopeds and shoot—. (Camilla, teacher, Interview No. 12, 2019)

Similarly, Giulia linked this presence to the negative stigmatization of the neighborhood and the people working in it:

> … We are in the QS and the QS are a difficult neighborhood—a Camorra neighbourhood—and it's difficult to trust the neighborhood as a consequence—it's difficult to trust us [teachers]. (Giulia, teacher, Interview No. 10, 2019)

Building on Giulia's reflection, Anna, one of the first teachers to have joined the school, offered her thoughts on the relations between stigma, territorial fixation (Wacquant, 2008), and how the Camorra becomes a symbolic site of recognition and power even if its operatives reproduce and expand the degree of the children's marginality, alienation, and estrangement.

> … They have the fear of feeling inferior, … they think 'how can I be the same?' [as children from other neighborhoods]. This is why there's a problem with the Camorra, this is why the Camorra is attractive—there's a fine line, a wrong perception according to which it is not culture that makes you equal, so they think 'if I have money, I can be like them,' that's the whole point. (Anna, teacher, Interview No. 13, 2019)

[3] Camorra is the name given to organized crime in Naples.

As previously mentioned, the ways in which the subaltern attempt to resist the oppression and injustices the hegemonic classes place upon them often result in practices that further those injustices (Balibar, 2007; Elsayed, 2017; Gramsci, 1975). The only strategy that children in the QS perceived of levelling the inequalities and exclusion placed upon them was not education, but rather joining networks of criminality that would allow them to gain recognition and material prosperity. On the basis of their mapping of the social, cultural, and material forces in the QS, the teachers also constructed their identities as social and political actors in the school, occupying the gap left by a State that does not engage with the children of the neighborhood. They highlighted the ways in which the school was replacing the State as provider of services and support for the children, attempting to show them alternatives to illegal strategies of recognition and material prosperity, and often offering economic support for the families.

Among other common factors across the narratives presented by teachers is the negotiation between external forces affecting children's lives, children's sense of self, and the pedagogic attempts to come to terms with the tensions between these two aspects. During the interviews, a common thread emerged of place-based pedagogical strategies as interventions in children's lives, helping them navigate the social forces and experiences that determined their identities. This also came across throughout the pedagogical workshop, with the teachers trying to upend the children's assumptions about themselves, the neighborhood, and the school's role. This was particularly evident in one of the workshop sessions in which, while discussing the QS's issues, Diego turned to the teacher and started criticizing the school:

> I don't want to offend anyone but then there's these boys, those ones—the *scugnizzi*. I think the director of this school is wrong, they should not come to school—then of course I'm a *scugnizzo* too. (Diego, student, Interview No. 1, 2019)

After Diego expressed his thoughts about the school, Paola (teacher) stopped him, perceiving the tension rising in the classroom, problematizing the meaning of *scugnizzo* as a disadvantaged young person, and the school's role as an environment in which young people can find resources and opportunities. Moreover, she explained how succeeding in school and being from the QS need not be mutually exclusive. This exchange gave me an insight into the ways teachers explored place-based language, experiences, and identities through their pedagogical practices. Again, interpolation and ambivalence emerges about the space and its associated pedagogies. Yet teachers struggled to challenge those narratives of selfhood that further stigmatized young people, reflecting Willis's (1977/2017) findings in his seminal work.

> I think, our project, which is a project that—how can I say it—doesn't make them study things that are distant from them—we have studied things very close to us, we have worked on autobiographies, on a more introspective dimension.… I mean—"tell us about yourselves, question yourselves." (Paola, teacher, Interview No. 8, 2019)

Paola gave me an insight into the ways in which teachers aimed at developing pedagogic strategies to explore place-based issues, identities, and social dynamics. I believe this to be a central aspect of their pedagogy, engaging with the ways the subaltern children imagine themselves, and helping them shape that voice which is

denied to them, acknowledging the importance of their experiences as a pedagogical tool.

Returning to Sangiovanni's (2017) conceptualization of social injustice as an attack on someone's capacity to "develop and maintain an integral sense of self" (p. 76), I found in teachers a willingness to construct pedagogical activities and provide opportunities for children to develop integral selves, helping them to negotiate the social forces that affect their lives, and giving them an opportunity to experience an alternative. This was exemplified in a number of instances, one of the most striking being a story that Giulia (teacher) told me:

> … we give all children the chance to grow up, and expect something different for themselves … this would give us Neapolitans the chance to—I feel really bad about this—the chance of getting rid of this label, this label on the QS, as being one thing—mafia—that's what they say. (Giulia, teacher, Interview No. 10, 2019)

While exploring her pedagogical strategies and conceptualizations of liminal childhoods, Giulia gave me accounts of the conditions of advanced marginality and territorial fixation (Wacquant, 2008) experienced by the people in the QS, a sacrificial space identified as the source of society's ills. She contrasted this with the perceived effect of the school interactions, giving children "a chance to—grow up" and imagine different futures. This ideal of giving children a chance to develop their agency in determining their sense of self was also expressed by Anna, one of the first teachers to have joined the school:

> What did I do when I came here? I brought them a choice, you can choose which side you want to be on, you can choose.… This is this place's [school's] mission: open up this world to the outside, open up this world that is so closed. (Anna, teacher, Interview No. 13, 2019)

The school's perceived role is to attempt to limit the social, material, and cultural forces tying the children to a particular subculture, identity, and life course. Teachers do this by exposing them to different perspectives, spaces, and role models, while also attempting to not fall into the mistake of forcing normative conceptions of childhood and models to follow that could negatively affect them too. Another interesting example of this perception of pedagogy, as well as the tensions between external social forces and the development of the children's selves, came up during my interview with Paola: "This should be the role of the school, giving young people a chance to be tolerant towards others" (Paola, teacher, Interview No. 8, 2019).

Crucially, with this statement Paola does not attempt to impose a liberal model of tolerance, or a normative sameness in which the child is innocent and as a consequence tolerant. She states that the school's role is to give "a chance to be tolerant," shifting schooling's role away from transmitting certain values and towards preventing particular spatial, cultural, and material conditions from affecting the children's identities. Drawing on Sangiovanni's (2017) notion of sense-of-self, it becomes clearer how the school's perceived objective is to provide spaces, social relations, and pedagogies that allow children to develop their internal agencies. Moreover, the teachers' vision of the school is one in which pedagogy is in dialogue with the neighborhood's broader realities, taking into account the impossibility of creating an isolated school:

> We are here to give everyone the chance to come in, because this cannot be a happy island just for children—this is a place that is in conversation with the neighborhood—the front gate is open to communicate the fact that we are here.… (Giulia, teacher, Interview No.10, 2019)

The imagined role of education as a political act, engaging in a broader dialogue with the neighborhood, takes shape through the spatial act of opening the school building's gate to outsiders, with the school courtyard as a space of integration, cultural contamination, and the creation of a new "public" sphere in the hands of civil society, with teachers carrying the burden of putting in place an intervention where the State is absent. Therefore, the proliferation of liminal spaces, necessitated by the proliferation of private capital and segregated progress, leads to a mechanism that could be defined as the privatization of social solidarity, with individuals taking over the role of providing quasi-public services. Therefore, the context of the QS could be perceived, alongside other initiatives, as a forecasting site of a privatized future, in which civil society or private organizations take on notions of social inclusion, integration, and solidarity, leading to the contradictory process of the privatization of social justice.

Conclusions: Re-imagining Liminal Spaces, Pedagogies, and Subaltern Children

The QS represent the power of liminality to define lives in the new Global North: places of contamination, segmentation, and marginality; processes rendered invisible by and engendered through the privatization of the public space, securitization, and stigmatization. Opening up possibilities for the exploration of marginalized and silenced spaces in the global North is an opportunity to illustrate the ways in which normative conceptions of progress can lead to the disintegration of the social (Sennett, 2018), violent encounters between different subaltern groups (Mawani, 2009; Wacquant, 2008), and the proliferation of forms of resistance that reproduce sociocultural oppression (Balibar, 2007). There are three key insights that can be derived from this work:

First, the children have exposed the ways in which they embody liminality and see themselves through the spatial logics of urban injustice, with territorial fixation, multicultural proximity, and violence as driving forces in their conceptualizations of identity and belonging. Returning to Sangiovanni's (2017) concept of social justice, the children's lives and their claims to selfhood and legitimacy are significantly determined by their sociocultural and economic context and narratives about them. Sangiovanni (2017) argues that this production of abjection could be considered a form of social cruelty, that is "the unauthorised, harmful, and wrongful use of another's vulnerability to attack or obliterate their capacity to develop and maintain an integral sense of self" (p. 76). This was evidenced through the children's stories and responses during the interviews and workshops, in which the verbalization of

their identities, in attempts to resist and redefine their own conceptualizations of themselves as liminal children, was often shadowed by them reiterating the labels placed upon them by others. This points to the moral implications of capitalist forms of urban governance, driving more and more people into marginalized spaces. Striving towards more just forms of urban governance is key to hindering the exclusionary processes exposed by the children in this research project.

Second, in a space in which state institutions seem to be absent, teachers recounted ideal, sometimes imagined, pedagogies, that is the ways in which they attempted to provide children with strategies and spaces to resist those social forces that drive the construction of selfhood. These enactments are expressed in school spaces, with teachers taking on the burden of addressing the structural inequalities children face inhabiting a space that is seemingly invisible to the eyes of the State. This leaves me with questions regarding the political and pedagogical roles that civil society can play in spaces that are not only ignored by the State, but are often generated by particular dynamics of capitalist governance.

Finally, a key conclusion is that liminality will play a central role in increasing the negative consequences of macrolevel forces reshaping cities, with a crisis of modernity pushing more and more people into these spaces across the globe (Sassen, 2014). The ways in which we understand childhood and schooling in liminal spaces will necessarily involve more and more racialization and segregation, expanding lived ambiguity and the task of identity management, as well as tensions, territorial fixation, and violence in urban spaces. This will have a considerable impact on children's lives and schooling experiences, something that policymakers must necessarily take into account when designing educational interventions.

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Chapter 7
Fragmented Geographies of Education: Institutions, Policies, and the Neighborhood

Tim Freytag and Samuel Mössner

Opening up easier access to and participation in education is highly important as it enables and fosters social integration, qualification, and empowerment. Against this backdrop, educational opportunities and educational justice appear to be central and permanent concerns of social and educational policies. However, it has to be acknowledged that educational opportunities have never been equally distributed, whether geographically or between societies, social groups or individuals. In fact, educational opportunities depend not only on individual skills and conditions, but also on various kinds of circumstances. Consequently, it definitely matters where, and under which conditions, somebody lives and grows up. It is not just the education system, but also family background, the neighborhood, and other factors, that build the framework for educational opportunities. This complex set of elements, which can be addressed as multifold educational settings, have an important impact on the educational biographies and the subsequent pathways of people seeking to enter the labor market.

Educational settings, both in and out the school environment, not only affect one's educational opportunities, but may also result in structural disadvantages and barriers. Restricted educational opportunities make it harder to achieve higher qualifications, to find well-paid jobs, and to live in a comfortable and secure situation with a middle or high socioeconomic status. In this light, educational institutions and settings not only contribute to social integration and advancement, but also have the potential to reinforce social exclusion or discrimination. Following the seminal work of Bourdieu and Passeron (1977), it can be argued that educational institutions

T. Freytag (✉)
Institute of Environmental Social Sciences and Geography, University of Freiburg, Freiburg, Germany
e-mail: tim.freytag@geographie.uni-freiburg.de

S. Mössner
Institute of Geography, University of Münster, Münster, Germany
e-mail: moessner@uni-muenster.de

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tend to reproduce and legitimize social and cultural inequalities. However, opinions diverge concerning education's role for and within societies. All in all, we can note that this role is at least ambivalent, often unclear, and certainly highly contested in ongoing academic, political, and wider societal debates.

Our aim in this chapter is to explore educational inequalities that can be observed across sociodemographic and territorial categories. We will focus on the question of how and to what extent educational settings produce and reinforce educational inequalities. Further, we will take a look at political programs and initiatives aimed at improving educational opportunities and related settings at a local scale. This type of area-based intervention in educational landscapes has become increasingly important—often with education being framed according to the New Public Management paradigm and within the neoliberal logics of competition, rankings and best practices. In our study, we focus on the educational landscape in Freiburg, Germany, which has been formed by policies and initiatives operating at national, regional and local scales.

In the first part of this chapter, we sketch out the education system in Germany, which reveals major spatial disparities resulting from the decentralized organization of the education sector, in order to identify and discuss the emergence and reproduction of educational inequalities. We point out that demographic, economic, and ethnic or cultural characteristics of the students and their family background may intersect, and substantially enhance or restrict their educational opportunities. We argue that transfers—in particular, from primary to secondary, and from secondary to higher education or vocational training—are structured by educational barriers. Moreover, we underline the need to integrate social and educational policies more efficiently within the framework of an area-based approach to local intervention. Drawing upon the national program entitled "Lernen vor Ort" (local learning), which is intended to enhance networking and cooperation between educational actors and institutions at the local scale, we give an example of an innovative initiative that has the potential to combine educational and social policies. In the second part, we take a closer look at the educational landscape in Freiburg and explore the educational infrastructures and inequalities that exist there, against the backdrop of general patterns of education in Germany. We draw upon a series of biographical interviews conducted with adolescent students who are confronted with severe educational barriers, to show that they often face various intersecting disadvantages, related to both in-school and out-of-school settings, which are very difficult to overcome. Further, we critically assess how the "Lernen vor Ort" program was carried out and implemented in the initiative entitled "Lernen Erleben in Freiburg" (LEIF). We conclude with a discussion of the limited potential of "Lernen vor Ort" and the LEIF initiative to transform the educational landscape and to work against both educational inequalities and the prevailing fragmented geographies of education.

Geographies of Education in Germany

Education System

The education system in Germany is rather complex as a result of its decentralized structure, with each of the 16 federal states being in charge of education policies and planning. However, some overarching structures exist, which we will sketch out in this section (Fig. 7.1). For babies and young children, there are noncompulsory public and private childcare facilities, such as crèches, nursery schools, and day-care centers. In general, compulsory education starts at the age of six (though this may vary between the ages of five and seven, depending on the child's individual development) with primary school, which usually comprises grades 1–4 and in some cases also grades 5 and 6. The subsequent transfer to secondary-level education involves selection, as the students are split up between several types of institution. Grammar schools specialize in qualifying students for higher education (Gymnasium up to grade 13, or in a few cases grade 12). Lower and intermediate secondary schools put more emphasis on vocational training (Hauptschule and Realschule up to grade 9 or 10). Grades 5–6 serve as an orientation stage (Orientierungsstufe) to facilitate transfers between these different types of school, although only a small proportion of students actually change from one type of school to another during these 2 years. As transfers from lower to intermediate secondary school, or from intermediate secondary school to grammar school, are rather complicated, and do not occur very often, the Gesamtschule was created as an integrated comprehensive school that combines lower secondary, intermediate secondary, and grammar schools with the aim of facilitating transfers in both directions according to the students' abilities and achievements. In addition, there are specialized schools which are designed for students with learning difficulties or other special needs.

After completing lower or intermediate secondary school, students may start an apprenticeship program combined with vocational school (usually 3 years, but only 2 years for people who have completed grammar school), or they attend specially designed programs at vocational schools without an integrated apprenticeship. If they leave school without being adequately qualified to start an apprenticeship or a job, students enroll in the transition system (Übergangssystem), which is a set of programs that school leavers can attend in order to obtain such a qualification (Raffe, 2008). The transition system is particularly important for school leavers who are still subject to the rules for full-time compulsory schooling. This ends after 12 years of schooling, of which the last 3 years may be a vocational training. The rules may vary depending on the legislation of the German state concerned. The majority of adolescents who enter the transition system have either left school without an educational qualification, or they hold a qualification from a lower secondary school. This is formally acceptable but often not competitive enough, given the limited options for entering the labor market and the high percentage of school leavers and young adults with better qualifications. In the realm of higher education,

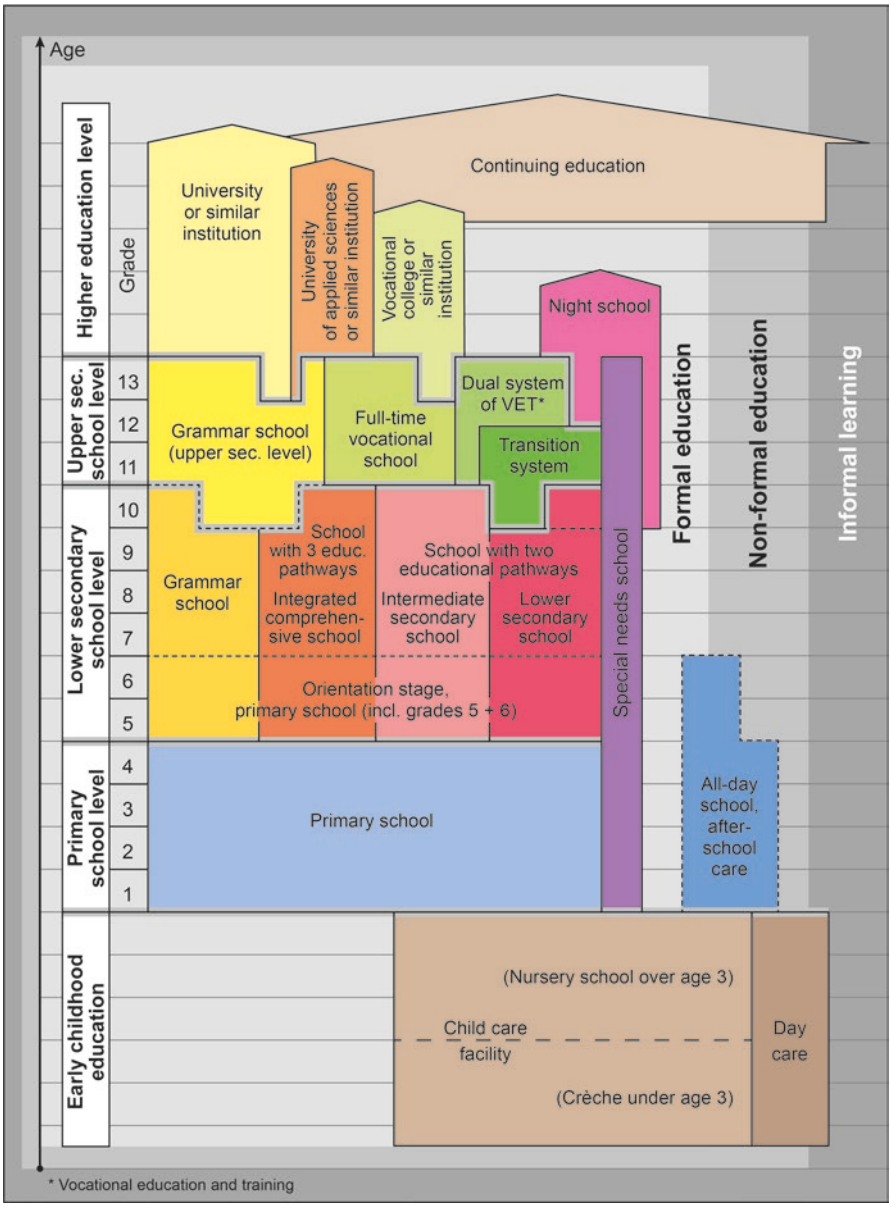

Fig. 7.1 Education system in Germany. Adapted from Maaz et al. (2020, p. XX). Copyright 2020 by wbv Publikation. Adapted with permission

universities, universities of applied sciences, vocational colleges, and similar institutions offer study programs leading to the award of a bachelor's or master's degree. Students can be admitted to such institutions if they hold the appropriate entrance qualification (Abitur) after having completed grade 12 or 13 at a grammar school or another specialized institution in secondary education. However, education is not limited to formal education provided by primary and secondary schools and institutions of higher education, but also includes nonformal education and informal learning.

Educational Inequalities

A set of educational inequalities is documented in educational statistics that give information about educational infrastructures and access to education, educational participation and success, transfer to superior educational institutions, and educational attainment. Educational inequalities are widely distributed across society and vary over time and space. However, the assessment and analysis of educational inequalities depends on the existence of suitable indicators and the availability and quality of appropriate data. Thus, it can be assumed that educational statistics reflect existing educational inequalities to some extent, but do not necessarily give the full picture.

In Fig. 7.2, we provide an overview of educational attainment in Germany. With regard to the completion of different types of secondary schools, all three age groups show a trend toward more women and men gaining qualifications from a grammar school or an intermediate secondary school, whereas the number of people completing lower secondary school is declining. This can be understood as a progressive inflation of educational qualifications, in the sense that more people hold superior qualifications than in previous generations (Meusburger, 1998). Moreover, there is a gender gap in respect of completing grammar school that has shifted and reversed within the past three decades. Consequently, in 2018 men were overrepresented in the age group of 60–65 years, whereas women were overrepresented in the age group of 30–35 years. Concerning the number of people with academic degrees, the reversal of the gender gap observed in the case of grammar schools is confirmed. Further, an increasing number of men do not hold an academic or vocational qualification.

The distribution of educational qualifications is characterized by inequalities not only across the categories of age and gender, but also with regard to students with an immigrant background. This is a German census category that applies to all individuals who do not have German citizenship by birth or who have at least one parent who does not have German citizenship by birth. These students are clearly underrepresented in the educational pathways leading to qualifications from grammar schools and institutions of higher education, as well as vocational schools. The same is true for students whose parents have a poor economic and educational background (Baumert & Schümer, 2002; Maaz et al., 2020). These trends suggest that

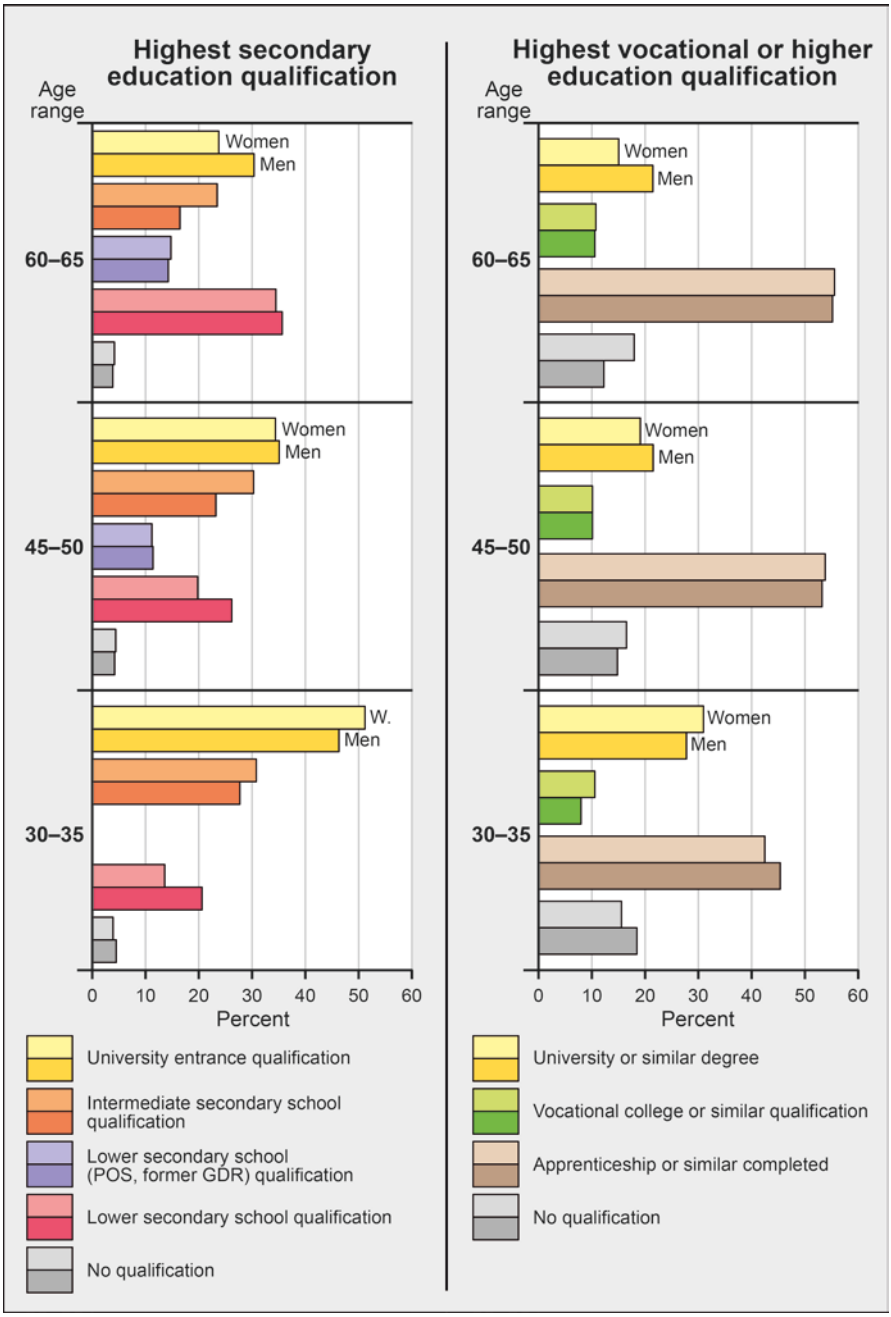

Fig. 7.2 Educational attainment of the population in 2018 by age groups and gender (in percent). Adapted from Maaz et al. (2020, p. 67). Copyright 2020 by wbv Publikation. Adapted with permission

there are structural barriers at work that constrain educational chances for students from specific backgrounds. Thus, education fosters social reproduction in the ways that Bourdieu and Passeron (1977) identified and explained in their studies conducted in France some 50 years ago. Social reproduction through education can be regarded as a general trend that has been prevalent in most countries and societies for many centuries, and which still persists in Germany and many other countries, as PISA and other international studies have shown (European Commission, 2019, pp. 24–34; van Zanten, 2005).

Educational inequalities are produced and reinforced by the principles of selection and exclusion that have shaped the education system in Germany. Although there are ongoing initiatives to work for flexibility and open up more alternatives in the different federal states (Länder), the German education system is still relatively rigid and contributes to aggravating the stratification that disadvantages students with an immigrant background or from families with limited socioeconomic and educational resources (OECD, 2020). An important element in the separation process consists in the strategies and practices of parents who want to send their children to a "better school" and find ways to circumvent the catchment areas for primary schools (Noreisch, 2007). In North Rhine-Westphalia, a state where free choice of primary school was established in 2008, Ramos Lobato and Groos (2019) have observed that social stratification is being reinforced by the system of free choice. As Ramos Lobato (2019) points out, the networks created among parents of children who attend preschool day-care facilities are crucial for practices relating to choice of primary school, which in turn determine children's educational opportunities and enhance social reproduction.

The most significant steps in the educational selection process are the moments of transition between different types of school, notably after completion of primary school (Becker & Reimer, 2010). Compared with international standards and examples, the German practice of separation after primary school, which is very early in a student's educational career, has important consequences for children's educational chances and professional perspectives (OECD, 2020). Significant life choices are made when the parents decide which school they will send their children to after completion of primary school at the age of 10–11 years. Although formally the decision depends on the student's educational attainment, the choice of school appears to be a matter of preference on the part of his or her parents, reflecting their educational aspirations and consequently reproducing social status and stratification.

Another important step in a person's educational career is the transfer from secondary school to a higher education institution or to an apprenticeship and vocational training. Despite the fact that at first glance the education system in Germany offers manifold career options, a significant number of students drop out of secondary education, or complete it without passing the necessary exams, and are therefore excluded from admission to apprenticeships. These adolescents can join a multitude of private and public institutions that offer additional educational support. The transition system involves a wide range of opportunities that do not necessarily qualify students for employment, but which are aimed at improving their chances of successfully enrolling in a vocational training course. The transition system is often

described as a transitional space between general education and vocational training (Schmidt, 2011), and is thus managed by a complex constellation of different public and private organization and institutions, with sometimes unclear responsibilities and prerogatives. Political awareness of the transitional system and thus of adolescents who are at risk of dropping out of the education system is relatively new. For the first time in 2006, the national education report's compilers mentioned this important and discrete part of the education system in Germany, even though the infrastructure, institutions and organizations had existed for decades. Formerly, political and institutional actors alike simply ignored students who dropped out of formal education.

In a spatial dimension, educational inequalities can be assessed at different scales. In Fig. 7.3, we show that there are considerable inequalities between Germany's federal states. This is a result of education being conceived as the responsibility of the 16 Länder, each of which has its own education system and sets its own priorities. Whereas one group of states sticks to an extended traditional system (i.e., predominant separation between grammar school, intermediate secondary school, and lower secondary school), other states adopt a system with two more or less extended educational pathways (i.e., a less rigid, but still existent, separation of students in secondary education). Consequently, there are important differences at the state level in terms of the types of schools providing secondary education. The provision of lower or intermediate secondary schools is limited to those states with an extended traditional system. Here, the state of Bavaria stands out with a very high share of lower secondary schools (over 40%). Today, schools with two or three educational pathways are the most important type in the other states. Grammar schools exist in all 16 states and are particularly prevalent in the city-states of Hamburg and Berlin.

Education inequalities also exist between rural and urban spaces, and at a smaller scale within cities, urban districts, and neighborhoods. Researchers into geographies of education who draw upon data from educational statistics (Butler & Hamnett, 2007; Meusburger, 1998) have uncovered spatial disparities with regard to educational infrastructures, access to education, and educational attainment, taking into account political and economic restructuring processes (Hanson Thiem, 2009; Holloway & Jöns, 2012). It can be assumed that educational inequalities are not exclusively produced at school, but also in the out-of-school environment, meaning family, friends, and the neighborhood (Baur, 2012). How to react to educational inequalities is one of the major challenges for social and educational policies aimed at establishing equal living conditions all over Germany, as aspired to in the basic constitutional law (Grundgesetz für die Bundesrepublik Deutschland [Basic Law of the Federal Republic of Germany], 2020, Art. 72 II GG).

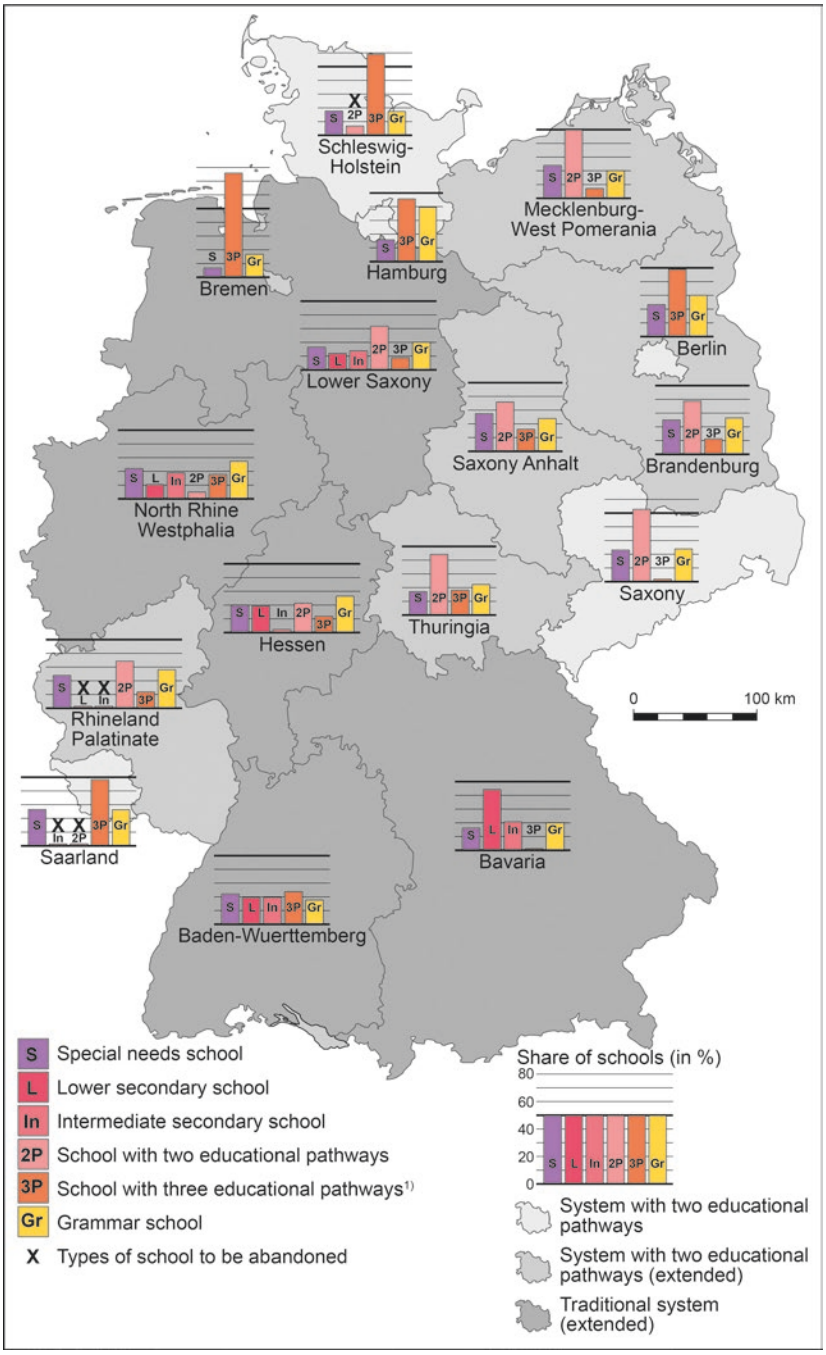

Fig. 7.3 Secondary schools in 2018–19 by types of school and states (in percent). Adapted from Maaz et al. (2020, p. 109). Copyright 2020 by wbv Publikation. Adapted with permission

Educational and Social Policies That Operate Separately

The expansion of the education sector in the 1970s with the establishment of a large number of new schools, colleges, and universities all over the country considerably improved the educational infrastructure and facilitated access to education for wider parts of the population—in particular, for people living outside the larger cities in rural or peripheral areas. This was an important step towards the establishment of equal living conditions and educational opportunities in (Western) Germany. However, throughout the following decades, education policies have contributed to the perpetuation and consolidation of the German education system, rather than to stimulating progressive reforms, although the education sector undoubtedly plays a crucial role in recent urban social policies: Education is one of the most important prerequisites for social mobility and equality in the knowledge society. Moreover, schools are important locations in which significant changes are stimulated, and schools have privileged access to a wider society, with students and their parents acting as multipliers. These aspects make the education system and in particular schools an important resource for local social development programs. Yet, the social initiatives and programs that have been launched in recent decades too often stop at the school gates.

At first sight, it seems paradoxical that social initiatives and programs are not systematically integrated into educational institutions, as the education system in Germany is mainly based on public schools. Public schools potentially play an important and privileged role in fostering and supporting social integration measures (Schreiber, Stein, & Pütz, 2016), in particular when it comes to the teaching of 'social scripts' and 'language as part of cultural integration' (Esser, 2001). Experts share a broad consensus concerning the importance of the acquisition of German language skills for the successful integration of immigrants and their children into society. And yet, daily practice at most schools belies this. Why, for example, is German as a subject taught in classes where children with German as a second language sit together with native speakers, despite the fact that, unlike the rest of the class, these students need special help with language acquisition? In many cases, teachers of German lack special skills and do not get further training in order to adequately respond to this challenge. It is clear that this double task—teaching German for native speakers and giving support to students who do not speak German well—can easily be too much for the teachers. It seems as if political discussions and decisions in the realm of social policies and integration do not include one of the most important elements: education and schools. And, even worse, schools and educational institutions suffer from cuts in government spending with severe impacts on equality and social justice. Consequently, the responsibility for a good education for their children appears to rest on the parents, and on the financial and other resources that they are able and willing to mobilize.

Despite its manifold connections to other policy fields—social policies, integration, inclusion, welfare, and work—the education sector has remained in a state of political and institutional isolation for many years, and has more or less continued

to contribute to the production and reproduction of societal stratification by practices of selection and exclusion. The rigid educational pathways determine the students' life chances, beginning at a very early age, and have consequences for societal structures for years to come. Education and the school system are important pillars of Germany's conservative welfare system (Esping-Andersen, 1990), with its corporatist-statist character aimed at the conservation of status in society and across generations, and fostering equality rather than equity. Unsurprisingly, people with a working-class background are underrepresented in higher education. In 2016, 52% of students at public universities had an academic family background (Middendorff et al., 2017). With social and educational policies operating apart from each other, it seems to be very difficult, if not impossible, to break the vicious circle of self-reinforcing dynamics in the interplay between social and educational reproduction. In other words, the education system primarily serves the interests of the upper and middle classes.

Towards Integrated Approaches—Social Policies That Take the Education System into Account

The education system and its various institutions continue to be important arenas where the consequences of political decisions made in other social areas are witnessed and lived. It can be observed that schools and other educational institutions tend to give only limited and privileged access to individuals and communities, which makes them a potential target and key priority for social policies and urban planning. In the urban context, however, most of the various programs and interventions that deal with the great social challenges in the early twenty-first century—immigration and integration, social exclusion, poverty and welfare—are still too often disconnected from schools and education.

Yet, there is something to be learned from the development of urban policies over the last 30 years, not only in Germany but in many other countries as well. With the roll-back of public welfare, the manifold deregulations and privatizations in urban contexts (regarding, for instance, the housing market and welfare provision) leading to precarious living conditions and social exclusion have increased. This became dramatically evident in France, for example, when the peripheries of French cities were burning in protest against the government's systematic ignorance of the situation in large-scale housing areas and the housing estates of the 1960s and 1970s. Unlike other areas in the cities, these were particularly exposed to the negative consequences of urban neoliberalization (Castel, 2009). New planning methods, models, and approaches were urgently needed. As a consequence, during the 1990s, policymakers promoted social urban policies aimed at reducing social exclusion and poverty. Although similar approaches had existed before, these new integrated urban policies encompassed a wide range of approaches—material interventions in urban spaces, as well as social measures that included the empowerment of citizens

and participatory approaches. These policies' most revolutionary aspect was the fact that they started to bring the neighborhood level to the forefront of political intervention (Astleithner & Hamedinger, 2003; Smith, Lepine, & Taylor, 2007). Although planning policies had previously predominantly followed a sectoral rationale, actors now implemented them in a certain area and sought to integrate a larger group of actors from various sectors.

The turn from sectoral to spatial urban policies and toward area-based approaches has its beginnings in the context of urban policies at the EU level (Silver, 1994). These were soon followed by a series of national programs intended to integrate a wide range of administrative sectors, including new actors and governance principles, and to open up opportunities for an innovative format of communicative planning that integrated civil society into the planning process. Since then, many European cities have integrated such development programs (Donzelot, 2007; Parkinson, 1998; Walther & Günther, 2007). The area-based approach has made it possible to consider schools and their representatives as important actors in the neighborhoods. However, it has proved difficult to integrate schools as partners into the new programs due to different rationales, time constraints, and bureaucratic obstacles.

In 2009, the "Lernen vor Ort" (local learning) initiative was launched by the Federal Ministry of Education and Research (BMBF) jointly with the Bertelsmann Foundation and other foundations in Germany. Its purpose was to support local municipalities by providing a suitable framework for a more coherent management of the fragmented education sector. At first it seemed as if policymakers had finally identified and addressed the missing link between social and urban policies with their focus on the neighborhood, on the one hand, and education policies, on the other hand. The program was part of the new agenda to enhance educational attainment and included local monitoring of existing (public and private) actors and institutions. Policymakers explicitly tried to bring together all local resources in order to better understand the education system's selective and exclusionary practices and mechanisms. By doing so, they applied a territorial approach that seemed similar to previous experiences in the context of new spatial urban policies. They clearly stated that they were targeting cities and regions whose residents were confronted with educational possibilities and failures. Consequently, the new program's premise was that educational decisions were made on an individual level but framed in the particular context of the educational landscape's local and regional configuration. The initiative therefore provided funding to municipalities in order to monitor and develop a more transparent and coherent educational landscape.

A particular focus of the "Lernen vor Ort" initiative was on the management of life-long learning, and therefore specifically on the transition between different educational levels. The aim was to better understand why some transitions "successfully" led to the next level of education, whereas others failed, and—in the worst case—students dropped out of the system. The urgent need to implement political measures was evident from the high numbers of students in the transition system (see section on *Educational Inequalities* in this chapter). In the context of local integration and social support, the transition system plays a crucial role. In 2008, the

national education report stated that on average 50% of German adolescents in the transition system leave it after only 3 months, having either successfully applied for a job or started a vocational training. By comparison, those with an immigrant background, and thus a higher need for integration, leave the system after an average of 17 months (Klieme et al., 2008). Furthermore, 60% of all adolescents who are currently seeking support in order to gain access to the German job market are people without German citizenship or whose parents came to Germany from another country (Klieme et al., 2008, p. 11). This structural imbalance not only underlines the important role the transition system plays for various social urban policies, but also indicates that differences between successful and unsuccessful educational biographies are steadily increasing as a result of ongoing social fragmentation. Accordingly, national policymakers have tried to present a platform on which life-long learning can be better managed by using a local approach that integrates and supports all other social welfare, integration, and support initiatives.

The "Lernen vor Ort" program provides financial means to help establish better local management of the educational infrastructure, quantitative and qualitative monitoring of the various measures, better information and consultation, and better insights into transitions from one educational level to another, and in particular into the challenges and obstacles that determine the chances for successful participation in the educational system (Brümmer et al., 2016). Given the long tradition of selection and separation in the German education system, shaped by transitions from one level to another, the new focus of "Lernen vor Ort" was quite extraordinary and innovative. In 2014, after 5 years of funding, the program officially stopped as a national policy. Subsequently, its ideas were pursued—often on a voluntary basis—by various actors, including the public administration, foundations, and voluntary organizations.

Empirical Explorations and Observations in Freiburg

Against the backdrop of the overarching trends sketched out in the previous section, we will now focus on the educational infrastructure and educational participation in Freiburg. Firstly, we give an overview of the local educational landscape; secondly, we point out a set of problems and challenges related to education from the perspective of students in the transition system; thirdly, we analyze the process of institutionalizing "Lernen Erleben in Freiburg" (LEIF), which is a local initiative that was supported by the national "Lernen vor Ort" program.

Educational Institutions and Educational Participation in Freiburg

Freiburg is an old university town that serves as a regional center for transport, commerce, and public administration. The city is located in Southwestern Germany in the federal state of Baden-Württemberg, and has more than 226,000 inhabitants. During the past two decades, Freiburg has experienced a considerable population growth (22%) as a result of increasing numbers of German and non-German in-migrants (mainly students, work migrants, and refugees aged between 18 and 25), and a slight increase in the birth rate (Amt für Bürgerservice und Informationsmanagement der Stadt Freiburg im Breisgau, 2019, pp. 2–12).

Freiburg comprises various public and private day-care centers for children, nursery schools, and vocational schools, as well as several universities and other higher education institutions. In this section, however, we focus on primary and secondary education (without vocational training). In the school year 2017–18, Freiburg was home to 62 public schools (with 18,778 students), and 33 private schools (with 5970 students), meaning that 75.9% of students were enrolled in public schools (Amt für Bürgerservice und Informationsmanagement der Stadt Freiburg im Breisgau, 2019, pp. 176–178). In 2018–19, 55.6% of students leaving primary school transferred to grammar schools, 31.1% transferred to intermediate secondary schools, and 23.2% to other schools (Amt für Bürgerservice und Informationsmanagement der Stadt Freiburg im Breisgau, 2019, p. 178). The share

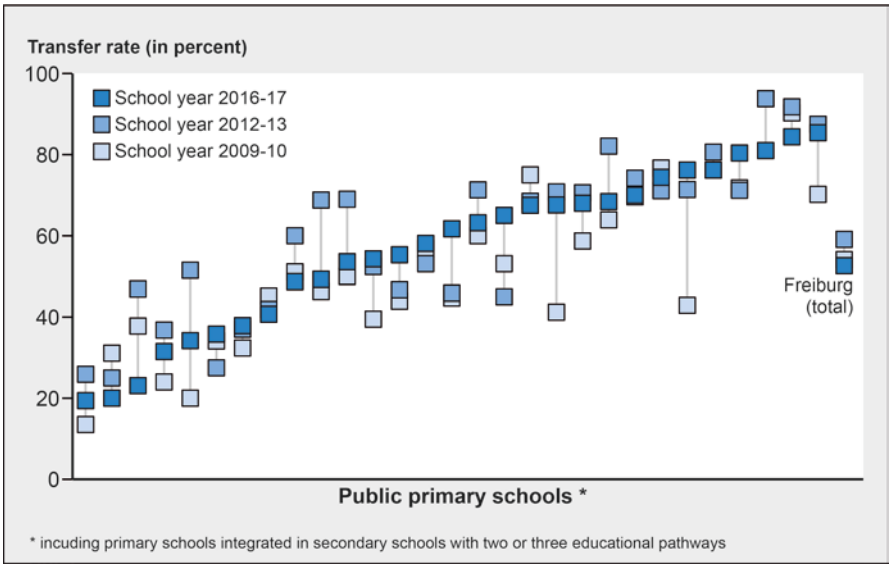

Fig. 7.4 Transfer rates from public primary schools to grammar school in Freiburg in 2009, 2012 and 2016 (Data: Stadt Freiburg, 2017, Tab. C1-10A). Source: Design by authors

of students who transfer to grammar school in Freiburg is relatively high compared with the overall figures for Germany.

On the level of individual primary schools, there are tremendous inequalities with regard to the range of transfer rates to grammar school. In Fig. 7.4, we show that transfer rates ranged from less than 20% to over 80% in the school year 2016–17. Moreover, there are considerable variations at the level of individual schools in the data for 2009–10, 2012–13, and 2016–17. Given a total of fewer than 1000 students per year who transfer from roughly 30 primary schools to one of the grammar schools in Freiburg, the variations from one school year to the next are small in absolute numbers—in particular in the smaller schools. However, Freiburg's total transfer rate has remained constant at around 50%. It is striking that the City of Freiburg usually does not name individual schools in the official statistics it publishes, but only provides either anonymized or aggregated data. Without more

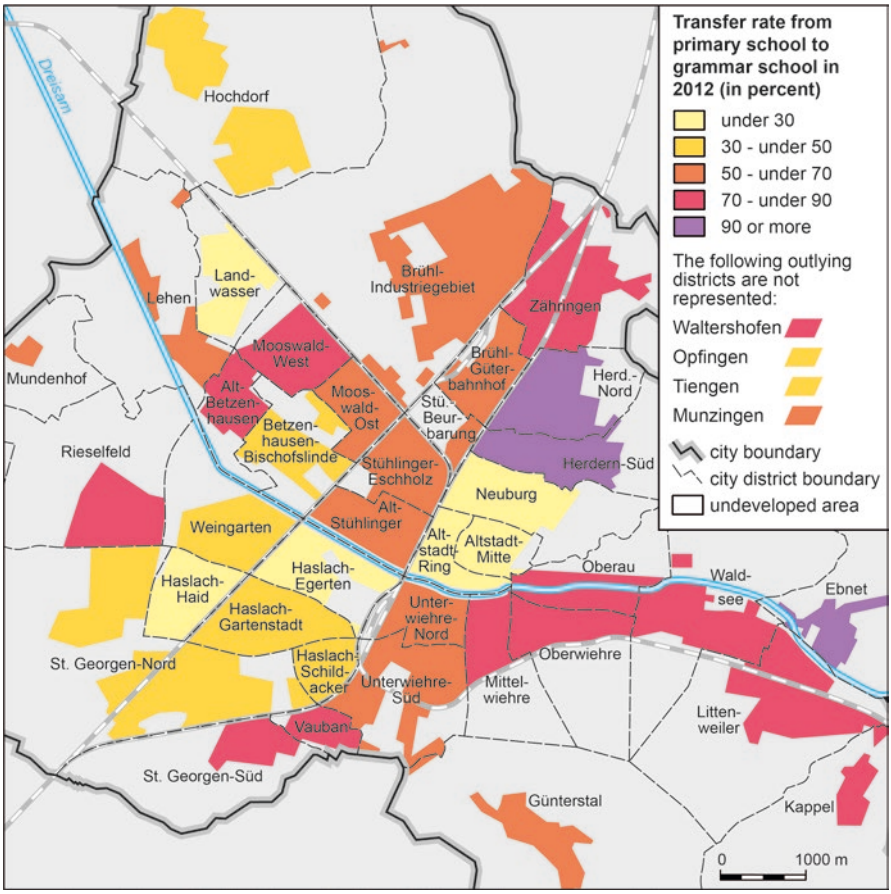

Fig. 7.5 Transfer rate from public primary school to grammar school in 2012 (Data: Stadt Freiburg, 2013, Tab. C1-4A). Source: Design by authors

detailed data, it is difficult to conduct a geographical analysis, to evaluate individual schools, and to work out suitable measures for a particular school. In contrast to the situation in the U.S. and in many other countries, access to detailed educational data is restricted in Germany, and even anonymized data for individual schools or students is difficult to obtain. Obviously, it is a political decision not to publish more detailed data, as this might affect the image of individual schools and parents' choice of school for their children.

It was an exception that the City of Freiburg published the data on transfer rates from primary school to grammar school at the scale of urban planning districts, which we have represented in Fig. 7.5. Similar data is not publicly available for more recent years. From the map one sees that great inequalities exist between the urban planning districts. The primary schools located in Ebnet, Herdern-Nord, and Herdern-Süd have a transfer rate of over 90%, whereas the rate is lower than 30% in Altstadt-Mitte, Altstadt-Ring, Haslach-Egerten, Haslach-Haid, Neuburg, and Landwasser. The transfer rates evidently correspond to the districts' socioeconomic profiles, that is, the highest rates are found in the urban planning districts with the most affluent residents. Moreover, the data confirms that on average more girls go on to grammar school than boys, and that the rate is higher among German students than among students without German citizenship. In 2007, 35% of non-German students transferred from primary school to lower secondary school, 16% to intermediate secondary school, and only 7% to grammar school (Stadt Freiburg im Breisgau, 2008, p. 48). Although the share of non-German students who transfer to and graduate from grammar school has slightly increased during the past few years, students without German citizenship are still widely overrepresented among dropouts in lower secondary schools as well as in Freiburg's transition system.

Voices from Students in the Transition System: Intersection of Problems at School and Out of School

After policymakers launched the "Lernen vor Ort" program in Freiburg in 2010, we conducted qualitative interviews with a group of young people who were participating in the measures the transition system offered. In the 21 in-depth interviews, we followed a biographical approach in which we stimulated the interviewees to talk about their educational life up to the point where they accessed the transition system. The interviews became an integral part of the new monitoring the City of Freiburg was implementing as part of "Lernen vor Ort". It was the first time that qualitative data was gathered, and a biographical approach was applied to better understand—from an institutional perspective—why these people had not yet successfully completed their education. We interpreted the interviews following a qualitative content analysis, and constructed interview codes around indicators such as obstacles, networks, support, perceived failures, family background, geographical identification, and language knowledge. The results reveal not only individual

aspects, but also structural obstacles and institutional failures, thus underlining the importance of interventions at the local scale. Asked about these self-perceived obstacles and their reasons for not completing school, the interviewees mentioned multiple difficulties in various fields. At an individual level, these young people had experienced all kinds of bullying, fights, verbal abuse, and discrimination.

> Many classmates were not friendly. It was no fun. That's why I was not able to concentrate. I was distracted … For instance, they made fun of me because of the country I came from. I come from Russia. So, I am (politically) a resettler. But not everybody understood this. They were too young and, if I may say this, too stupid, as well. (Student, 2010)

The political agreement between Germany and many Eastern European countries allowed resettlement and German citizenship for people who were able to prove they had German ancestors. In the late 1980s and early 1990s, civil unrest and the problematic situation of many people in Russia spurred this type of migration to Germany. The unequal treatment of immigrants with German ancestors and other immigrants often resulted in tension between the two groups. At the same time, because the resettlers were politically considered to be German citizens, they were excluded from social services such as language classes, even though their knowledge of German was often insufficient. In the schools, political quarrels and decisions have a direct impact. Thus, students' language skills often depend on government regulations and policies. The hierarchical school system cannot adequately respond to this challenge, as traditionally a lack of language skills at a certain age has been linked to poor intellectual capacities rather than a foreign background. Consequently, the students concerned were provided with "easier" and lower-level education in lower secondary schools. Many students we interviewed said that the school system failed to adequately address their difficulties with speaking and writing in German. A lack of language skills leads to slower learning and understanding, but in school it is the curriculum, and not the teachers, who regulate the speed of learning. The German school system's hierarchical structure is thus a major weakness because it does not provide for additional support in learning the German language:

> I am in Germany for six years, now. I was immediately sent to lower secondary school. It was difficult to learn the German language, because there was no special class where I could have learned it. And I was particularly shy then. I could not open up myself, because I did not speak the language. (Student, 2010)

Asked about help with learning the language, one student answered:

> There was only a little bit of German lessons. They have taken me out of class from time to time and taught me a bit of grammar. I heard in other schools there is a special class for foreigners. But my parents did not know about it. So, they sent me right to lower secondary school. (Student, 2010)

Only a few respondents said they had the necessary support:

> I was lucky to have a teacher who understood my potential. She helped me, she understood that the results (in terms of grades) were not due to me being stupid, but the fact that I didn't follow up, because I did not speak their language. If she had not supported me over the time when I had language difficulties, some time I would have stopped completely. (Student, 2010)

Even at the grammar school level, students with poor German language skills are often overlooked and put in regular classes. For teachers, it is almost impossible to help these students while teaching the others in the same classroom at the same time. They would need appropriate teaching resources and specialized training. As a consequence, many students without an adequate knowledge of German are given something to keep them busy, rather than help with understanding the lessons.

Disruptions in personal biographies also play a major role in preventing people from completing school. This applies not only to experiences of international migration, but also to Germans who can look back on turbulent and geographically mobile biographies within Germany. In these complicated and sometimes dramatic cases, teachers play a crucial role. On the one hand, a teacher has to act as a social mediator and contact person for students with personal problems, whereas on the other hand he or she must transmit knowledge and skills and foster educational competition. The German school system is primarily oriented towards the latter, and any additional efforts in the realm of social care and welfare depend on the teacher's individual ethics and initiative.

> I was at primary school when my parents divorced. And as a result, I could not learn anymore and so I had to repeat the first year. Then I continued until the fourth year and had a teacher's recommendation for transfer to intermediate secondary school. And my stepfather was beating me. Me and my sister. And this was reported to the police. But then I did not learn anymore and I started to hurt myself. And when teachers saw this, they said—well, they mentioned it, but said it in another way: There's no place for me at this school. (Student, 2010)

All kinds of tensions and problems in class create difficult learning environments. Some students spoke about daily chaos at school and a detrimental learning environment.

> That was nothing for me [laughing]. The situation was chaotic. Many students never showed up in class. Some were smoking something in the schoolyard. Others were drunk. It was incredible. Teachers were stressed all the time. On some days, there were two students out of 16 in class. (Student, 2010).

This kind of problematic situation is sometimes a fertile ground for violence. Some students mentioned that others often hit and punched them due to their ethnic or national background—whether German or non-German. Social support was given only in rare and individual cases, often involving parents or supportive people from outside the school. A student who often came to school late negotiated a special agreement with her teacher that helped to discipline and motivate her. If she arrived late, the teacher would immediately call her mother, something which the student was anxious to avoid. Such successful examples seem to be relatively rare and only work well with additional backup outside the school, thus overcoming teachers' territorial and social limits.

In the interviews conducted with students in the transition system, it comes out very clearly that difficulties at school are often aggravated by intersecting barriers and handicaps, such as limited German language skills and lack of special support, personal or family problems, violence and (racist) discrimination. The reasons for

the students' difficulties at school can be located partly in school and partly outside school. Similarly, potential support in overcoming these difficulties can be found both in school and in the out-of-school environment. Such support structures include friends and family members, social networks, and individual teachers with a personal commitment to helping students with particular difficulties. In the interviews, some students reported that they could draw upon support structures after school that were only barely connected to the school or even completely ignored by their teachers. There is also a lack of cooperation between politico-administrative institutions and schools. Thus, interviewees spoke about different nonconnected centers that are engaged in getting people into work and helping them overcome bureaucratic obstacles. From the perspective of the students in the transition system, there is no obvious connection between educational and social policies, and there is clearly a need to integrate and better coordinate the relevant actors and structures in order to provide effective support. The program "Lernen erleben in Freiburg" (LEIF) was designed to address this issue.

Implementing the "Lernen Erleben in Freiburg" (LEIF) Project

Through the national "Lernen vor Ort" program, the City of Freiburg was given funds to conduct the local project known as "Lernen erleben in Freiburg" (LEIF) from 2009 to 2014. The initiatives, activities, and achievements of LEIF are documented in local education reports and a set of complementary documents published by the City of Freiburg (Amt für Bürgerservice und Informationsmanagement der Stadt Freiburg im Breisgau, 2019; Stadt Freiburg im Breisgau, 2008, 2010, 2013, 2016, 2017). These sources enable one to trace how the project evolved over time, and to what extent it transformed the local educational landscape.

Prior to the start of the LEIF project, the Freiburg educational region (Bildungsregion Freiburg) was formally set up in 2006–08 as a network of 65 public and private schools in and around Freiburg. This network proved successful in attracting public (local, regional, and federal) funds and private financial support to conduct LEIF and other projects with a focus on schooling and education. With its first edition published in 2008, the Freiburg education report was a milestone, and it served as an important resource for educational monitoring, quality improvement, and preparing the subsequent applications for funding. In the preface of the first Freiburg education report (Stadt Freiburg im Breisgau, 2008), the authors explain that this type of educational monitoring (with reports to be published every 2 years) should provide a comprehensive source of data and information for planning activities to improve the quality of local schools. The education report's purpose is to guarantee transparency, and to provide data for comparing the present situation with previous years and with other locations. Accordingly, the report is meant to inform public and political debates and to enable evidence-based political decisions and interventions in the educational landscape of Freiburg.

Funded within the framework of "Lernen vor Ort," LEIF sought to create better connections between the educational landscape and the students, together with their parents, taking into account the local setting and conditions in the various neighborhoods. During the first years of LEIF, a key priority was to focus on the difficulties of non-German students, and to develop strategies and instruments to give them efficient support and to better respond to their particular needs. This initiative was reinforced by the creation of the "Migration and Education" network (Netzwerk "Migration und Bildung") in September 2010 to help overcome the difficulties of non-German students as documented in the first Freiburg education report (Stadt Freiburg im Breisgau, 2008). Consequently, LEIF actors initiated and coordinated a social area analysis with a focus on migration and education to be started in 2011 (Stadt Freiburg im Breisgau, 2010, pp. 13–14). LEIF actors were also strongly concerned with supporting the transfer from primary school to suitable secondary education institutions. Here, they put particular emphasis on providing better information about the Freiburg educational landscape and the options for secondary education. This was the main aim when establishing the Freiburger Lupe (meaning "Freiburg magnifying glass"). This started as a leaflet but was later transformed into an Internet platform providing comprehensive and easily accessible information about educational choices in Freiburg.

From the following editions of the Freiburg education report, one learns that the priorities set for the LEIF initiatives shifted over time. In the beginning, the focus was on non-German students and the transfer from primary to secondary school. At the same time, LEIF was engaged in enhancing network activities between schools, and initiated a self-evaluation of schools (Selbstevaluation in Schulen; SEIS) using a tool provided by the Bertelsmann Foundation. The Freiburg education report of 2010 showed that the transfer rate from primary to intermediate secondary school or grammar school had risen among students from immigrant or poor families. Hence, LEIF set new priorities and put the transition system on the agenda, with the aim of supporting adolescents who dropped out of school before achieving any formal educational qualification, and who faced severe difficulties in finding an apprenticeship or a job (Stadt Freiburg im Breisgau, 2010, p. 107). In the third Freiburg education report (Stadt Freiburg im Breisgau, 2013), the authors set inclusion as a new priority. LEIF's rapidly shifting agenda reflects both changes that are highlighted in the national education reports and the fact that initiatives are usually organized as projects to be accomplished within a limited time frame. However, it is striking that the Freiburg education reports do not provide data at the level of individual schools, although their actors' mission is to work for more transparency in the local educational landscape. All in all, the series of Freiburg education reports serves both as evidence that LEIF has been very successful in its ongoing and past initiatives, and as a means of revealing new challenges to be addressed in the future.

LEIF's funding period was limited to 5 years, ending in 2014. Consequently, the competencies of the Regional Education Bureau (Regionales Bildungsbüro) and the LEIF initiative were combined, and permanently integrated in the institutional framework of the Stabsstelle Freiburger Bildungsmanagement in Autumn 2014 (Stadt Freiburg im Breisgau, 2017, pp. 4–5). LEIF's institutional integration into the

education management structures of the City of Freiburg corresponds to the overall aim of the "Lernen vor Ort" program. In this light, "Lernen vor Ort" and LEIF can be seen as the great success story of a mission that has been fully accomplished. However, it is clear that the funded institutions and their representatives are not really in a position to critically assess the quality and impact of their own work. For this reason, in the following section, we suggest adopting a broader perspective, and taking a more critical stance toward LEIF's achievements and the transformation of educational landscapes in the "Lernen vor Ort" program.

Limitations of the "Lernen vor Ort" Program and Its Implementation in Freiburg

From the case of the Freiburg educational landscape, one gleans that ongoing monitoring based on educational statistics and reports helps to identify shortcomings and challenges in the education system, and to react with target-oriented measures and initiatives. However, the potential of an area-based approach for interventions to enhance educational opportunities and educational justice is not fully played out in the LEIF project. Because the role of local educational settings is stressed in both the Freiburg education reports and the series of interviews presented above (in the section on *Voices from Students in the Transition System*), it is hard to understand why there are not more initiatives and information on the microscale of individual schools and neighborhoods. For example, the Freiburger Lupe internet platform provides information about the educational opportunities in the city, with the aim of enhancing the educational participation and success of students, especially those from poor or immigrant families. However, the Freiburger Lupe and the Freiburg education report do not display relevant data or information at the level of individual schools. Not revealing the data for individual schools is problematic, as it makes it more difficult not only for the students and their parents to make well-informed educational choices that are not based on hearsay about particular schools' reputations, but also for stakeholders and decision-makers to develop target-oriented intervention measures in response to the specific needs of an individual school. And the counter argument that it might be necessary to preserve an individual school's anonymity to protect its reputation is not really convincing, as a reputation based on rumors is not better than a reputation based on data. It is a paradox if, on the one hand, local stakeholders and decision-makers require educational monitoring for the sake of transparency, whereas, on the other hand, they are allowed no access to the more detailed data that would be needed for well-informed interventions and the allocation of additional resources to support individual institutions.

Further, the national "Lernen vor Ort" program and its implementation in the "Lernen erleben in Freiburg" (LEIF) project and related local initiatives, such as the preparation of the Freiburg educational reports, reflect a general shift toward perception of the education sector as being increasingly exposed to competition and

neoliberal instruments of intervention and transformation. Thus, educational institutions are expected to be subject to ongoing monitoring systems and quality improvement based on benchmarks and best practices. Although local stakeholders and decision-makers are involved in this type of educational governance, there tends to be a powerful top-down logic that works as an inherent driving force in the transformation of the educational landscape. This top-down logic is represented by the idea of a national program to be implemented in a local context. Thus, the local transformation process in education is embedded in overarching structures and discourses. This pattern is reflected in LEIF's changing priorities, which match the key topics in national education reports. Within a few years, the focus of national education reports shifted from immigrants (Avenarius et al., 2006; Maaz et al., 2016) to transfers after secondary level education (Klieme et al., 2008) and inclusion in education (Hasselhorn et al., 2014). The authors of the series of Freiburg education reports took up and addressed these key topics. Consequently, LEIF and the Freiburg educational reports do not highlight the specificities of the Freiburg case, but rather reflect an awareness of overarching national trends, and contribute to letting these trends trickle down to the local context.

Conclusions

Fragmented geographies of education on different territorial scales prevail in Germany, as do educational inequalities across demographic, economic, and sociocultural categories. As a result, educational opportunities depend to a considerable extent on family background and home environment, or, more broadly speaking, on educational settings that include both the out-of-school environment and the situation at school. Educational inequalities are closely related to, and often mutually reinforced by, socioeconomic disparities, which result in social reproduction. Not only students from poor families, but also students from immigrant families, are confronted with structural barriers in the German education system. Consequently, there is a need to better integrate educational and social policies, and to adopt an area-based approach for interventions with the aim of breaking the cycle of social and educational reproduction and paving the way for educational justice. This was more or less the starting point for the national "Lernen vor Ort" program that supported the work of "Lernen Erleben in Freiburg" (LEIF) and similar initiatives in other German cities, created in order to transform the local educational landscapes.

With the example of the "Lernen vor Ort" program and its implementation in Freiburg, one can underline both the potential of an area-based approach and the limitations of projects and initiatives set up to enhance educational opportunities. The LEIF initiative started a series of local education reports that are an important source of data for detecting shortcomings and inequalities in Freiburg, although data is not disclosed at the level of individual schools. Although LEIF initiated measures to improve educational opportunities, the guiding idea was not to create new educational structures, but to enhance communication and cooperation between

educational institutions, and to provide students and their families with information about educational opportunities in Freiburg. An excellent example to illustrate this approach is the Freiburger Lupe, an internet platform with detailed information about the local educational landscape. In this case, it is up to the students and their parents to decide whether they want to use this educational resource. The problem is that this tool for empowerment in education does not necessarily reach those students who are most at risk, and sooner or later the Freiburger Lupe may widen the gap between students who benefit from this resource and those who do not get this kind of support. Finally, the actors of the LEIF initiative and the "Lernen vor Ort" program are confronted with the dilemma that enhancing educational opportunities does not mean reducing the potential for selection and exclusion that is inherent in the education system, especially when it comes to access or transfer to educational institutions. From this perspective, it is likely that the LEIF initiative and its permanent integration into the institutional framework of the Stabsstelle Freiburger Bildungsmanagement will contribute to stabilizing the fragmented geographies of education rather than reducing educational inequalities.

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Chapter 8
When School Comes to Community: Considering the Socioethnic Environment in Educational Reform for Gypsy Populations in a French City

David Giband

Relationships between deprived neighborhoods and school are complex and diverse (Garner & Raudenbush, 1991; Rickinson et al., 2004). These relationships are particularly problematic for Gypsy/Roma children whose school connection is filtered through the community in a time of growing sedentarization and severe impoverishment. For years, academic attention has focused on the urban context of Gypsy/Roma groups in deprived neighborhoods and the problematic schooling of Gypsy pupils in southern France (Liégeois, 1997; O'Nions, 2010). Urban settlement leads to the loss of traditional resources, to a strong dependence on social assistance, and to the sociospatial marginalization of a community considered "the inside foreigners" (Tarrius, 1997, p.15). Gypsy/Roma families reject compulsory schooling because they fear a loss of identity, lack examples of school success, and experience school violence (symbolic and non-symbolic) and entry into the world of "*paios*" (non-Gypsy person[1]) as stressful. Drawing on a decade of research in the Gypsy neighborhoods of Perpignan (France),[2] I here explore the dynamics of an educational

[1] All the translations are made by the author.

[2] Investigations rely on both quantitative and qualitative data. First qualitative investigations were conducted by the author under a research program ("La citoyenneté urbaine", French ministry of urban planning and ecology, under the supervision of Professor Agnès Deboulet) with more than 30 open and semi-structured interviews with educators, families, local activists and city officials (2007–2010). These first investigations were supplemented annually by further interviews, with a total of nine additional semi-structured interviews and six informal interviews (with teachers, parents and social workers). Quantitative data come from the examination of archives for the city department of education for priority urban areas, and for La Miranda Elementary school (archives from 2005 to 2016). Conducting interviews in a Gypsy neighborhood was not possible for a "French white" academic without the help of social workers and local activists in the city of Perpignan. Among them, the author wishes to thank Stéphane Henry (head of the city department

D. Giband (✉)
Department of Geography and Planning, University of Perpignan, Perpignan, France
e-mail: giband@univ-perp.fr

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reform aimed at transforming individual and collective attitudes towards school among Gypsy/Roma families living in urban spaces of advanced social marginality (Wacquant, 2006). In Perpignan, Gypsy/Roma people are highly marginalized, living in a deprived urban environment (violence, unemployment, poor housing conditions, female-headed households, problematic night life) and following their cultural and customary rules and values. These play a crucial role in weak school performance. In 2005, city riots (mainly based in a central Gypsy/Roma neighborhood) caused municipal, community, and educational stakeholders to act. Policymakers implemented a national experimental policy in Perpignan from 2007 to 2015, in which they treated education as the cornerstone of necessary change. This public policy opened schools to their social and ethnic environment, as socioenvironmental settings were utilized as a performative tool for school achievement and success.

I follow two aims in this paper. Firstly, I seek to understand the complex matrix structuring relationships between school and the sociocultural environment of a marginalized group through a territorial approach. Territory, "*territoire*," is a concept French social geographers use to understand relationships between societies and their environments (Di Méo & Buléon, 2005). I focus on the use of territory from a social-geography perspective (Séchet & Veschambre, 2006), thus asking whether understanding the concept of territory as "a complex system whose characteristics and dynamics are based on the interactions" between actors and their spatially socioenvironmental settings provides an operational approach for understanding school/space/society interactions (Barreteau et al., 2016, p. 2). Secondly, I question the experiment of using inclusive cultural schools initiated for Gypsy/Roma populations in Europe in order to promote critical citizenship and to link schools to their territories, so that they become agents of social transformation. This experiment raises many questions. In which ways does the social and ethnic environment act as a lever for school attainment? Which kinds of social, (inter)cultural, and spatial interaction have been developed? What are the consequences for Gypsy pupils in respect of inherited cultural norms, educational frames of reference, and school achievement and success? Is this model replicable for other minority groups in a country where education is still designed on the basis of equity and republican national values?

I will first examine in which ways territory is a relevant concept in the understanding of dynamics between school issues and advanced marginalized socioenvironmental settings. I will subsequently examine contemporary urban educational issues for non-traveler Gypsy groups in Europe and in France. And, in light of the experiment initiated in a Gypsy neighborhood in Perpignan, I will discuss in which ways inclusive educational experiments, which open schools to their ethnic and cultural environment, are a performative tool for Gypsy/Roma educational achievement.

of education for priority urban areas) for his valuable help. He opened doors to Gypsy families and gave us free access to the archives.

Understanding the Role of Socioenvironmental Settings: A Territorial Approach

French geographers use the concept of territory, the object of numerous scientific discussions and debates (Debarbieux, 2009; Di Méo, 1998; Fall, 2007), to study relations between individuals, groups, and their environment, and this concept can serve to elucidate the role of socioenvironmental settings in education (Debarbieux, 2009; Di Méo, 1998; Fall, 2007).

For a Territorial Approach

As Barreteau et al. (2016) have shown, the concept of territory has gained in popularity among French social scientists in the past three decades and is mostly used by social geographers. In social geography, it means a social and a lived space, including its political and ideological dimensions (Di Méo & Buléon, 2005). Referring to Lefebvre (1974), social geographers understand territory in terms of the dialectics of social space. It refers to the idea of a social space which, through processes of identity and belonging, is socially appropriated and represented, carries ideologies and norms (social, cultural, religious, etc.), and is politically controlled. "Territory is socially produced, conflictual, and a medium for social representations" (Barreteau et al., 2016, p. 2). It also refers to "a holistic approach to account for the complexity of social phenomenon in their spatial dimensions. It describes how individuals and groups act, think, behave and implement strategies in a given controlled space" (Barreteau et al., 2016, p. 3). Its definition includes both material (physical environment) and immaterial dimensions (social representations and practices of a given space, images, imaginaries, ideas, etc.), which "are transforming space into territory, making it socially and culturally invested" (Barreteau et al., 2016, p. 4). It can be understood as a system connecting a physical space to a social game implemented by diverse actors (Ormaux, 2008), with a symbolic dimension generating collective identity and social belonging.

Exploring Relations Between Education and Territory

Relations between territory and education can be formalized under two main aspects. First, territory has to be understood as a context—one that impacts education via territorial effects (Champollion, 2015). As a context, territory functions as a socioenvironmental setting in which education develops, is structured, normed and regulated, and interacts with other social dimensions. This educational territorial context is shaped by both material elements (nature of the physical space, density, landscape, conditions of access to educational amenities) and social elements

(poverty, wealth, perception of education as central or peripheral for a local society). Territory affects all educational and school parameters: school choice, educational trajectory, school achievement, education and vocational guidance, and so forth. For instance, the conductors of a study of school achievement in mountainous regions have revealed how specific geographical locations constrain the nature of teaching (difficult access to cultural or educational resources) and determine teaching practices (focused on relations with nature) and the nature of teaching professionality (Moracchini, 1992). Second, territory can be considered as an educational stakeholder in itself (Charlot, 1994). Some researchers underline the role of the local milieu as a provider of educational resources for teachers, parents, families, and educators. Feu and Soler (2002) declare that territory is a "new educational stakeholder," supplying formal and informal educational resources (via the presence of landscapes, cultural amenities, natural resources, etc.) and framing a relational space in which people involved in education can interact (educators, families, community or religious groups, etc.). As a stakeholder, territory not only explains specific educative situations (inequalities, school failures, etc.), but can be an (im) material support for mobilizations and actions in education. The territorial part of education refers to the symbolic dimensions in which education is spatially enshrined. These dimensions—nurtured in the spheres of the individual, family, community, and other collectives—are part of the making of territorial imaginaries of school. They are embedded in cultural and affective references that define the nature of educational territories for individuals and groups, depicting them as territories of school failure, school success, and so forth.

A territorial approach allows researchers to go beyond traditional analysis by comprising contextual factors influencing schooling that do not belong to sociological and institutional factors. Territory is an explanatory variable that researchers of education continue to underuse and neglect (Champollion & Legardez, 2010). Utilizers can reveal the hidden sociospatial face of education that acts inside the educational process through its symbolic, affective identity, and strategic dimensions. By situating education within a specific territorial environment, they make visible and comprehensive the systematic interactions connecting individuals and their spatial practices, territorial imaginaries, educational representations, and expectations in respect of the physical space in which education occurs.

School, Family Spaces, and Territorialities

Researchers cannot understand spatial relationships connecting individuals and groups to education without referring to territorialities. Besides its legal nature, territoriality creates a strong sense of belonging and a mode of human behavior inside a spatial entity. It reflects collective and individual practices and an affective and emotional relationship to a spatial entity (place, neighborhoods, region, city, …). Territorialities are diverse. Territorialities of teachers and parents are important elements in the dynamics of education. Social scientists have analyzed the

territorialized part of teacher identity (Rothenburger, 2014), underlining the significance of professional representations regarding the school's sociospatial environment. It influences both their strategy of professional mobility and their pedagogical practices. In their practices, many teachers consider not only school performance and social composition, but also the territorial environment as a whole: neighborhood characteristics, ethnicity, and the symbolic dimension of the territory in which a school is located (wealthy, poor, ethnic neighborhood). The territoriality of parents is also an important factor. Multiple and diverse, parents' territoriality is rooted in a social environment in which parental relations to time, space, and social organization interfere with the nature of schooling and school achievement. Involvement in parent-teachers' associations is highly territorialized through complex interactions within the educational local system.

Education and Territorial Ethnicity

In many contexts, ethnicity appears as an important territorial dimension that needs to be explored, especially in deprived urban contexts where ethnicity plays a significant role between families and school. French sociologist Françoise Lorcerie (2009) proposed the concept of territorial ethnicity to understand the social and psychosocial processes shaping the connections between space and education in French priority education areas.

> Territorial ethnicity refers to the formation of a social configuration taking place into a space where social factors (concentration of impoverished people, lack of jobs, social depreciation of the place for many reasons) are combined with intersubjective factors of ethnic visibility. (Lorcerie, 2009, p. 65)

Thus defined, researchers use territorial ethnicity to question the nature of social groups' backgrounds and their impacts on the local educational process. The term involves three main dynamics: (i) segregation (materialized in spaces of urban marginality and schools of social and ethnic relegation); (ii) the assignment of alterity to the minority population (families, pupils, residents) by the majority population; (iii) people's self-identification as a minority population, which allows individuals, families, and groups involved in education to elaborate "identity formulas" enabling them to act, contest, or organize themselves in the local educational space. This generates a double movement. First, school is troubled by its socioethnic environment. External stakeholders such as the school district, press, or teachers' union systematically give territorial ethnic and social attributes to schools, thus impacting their internal and external reputation. Second, school produces ethnicized representations that impact, on different scales, education's spatial organization. Internal and external dynamics of territorial ethnicity foster 'push-and-pull' logics (Lorcerie, 2009). Following pull logics, families seek the best school for their children according to its reputation and the quality of the teaching environment. And according to push logics, a large number of pupils with a visible (immigration or minority)

background inside a school or a school district will tend to keep majority families away. These socioethnic categorizations of specific territories and their schools determine a school schema according to logics of alterity and otherness. "This school schema naturalizes the difficulties of learning by allocating them to what pupils, families and neighbourhoods are" (Lorcerie, 2009, p. 69). Territorial ethnicity thus fuels a complex interdependence game between the school and its surrounding socioenvironmental settings.

Non-Traveler Gypsy Communities and the Educational Issue: A Matter of Territory?

Both the authors of scientific literature and international institutions (such as UNESCO, European Council) issuing official reports well document the relations between Gypsy/Roma groups and education. They all report highly problematic relationships between families and compulsory education: low enrollment, weak attendance, limited education levels (literacy), poor expectations, fears of schooling, distrust of the education system, concentration of Gypsy/Roma pupils in specific schools and/or classrooms, recurrent drop-outs, and an early leaving age (especially among girls).

Contemporary Educational Issues for Non-Traveler Gypsy Groups in Deprived Urban Settlements

The European Council reports that about 50% of Gypsy/Roma are non-travelers, of whom a significant part has settled in urban locations. Urban settlements foster a complex relationship between former traveling communities and the school institution. As Rosário et al. (2017) have recently said in their study of Spanish Gypsies' urban locations: "[L]ow schooling, high non-attendance and school drop-out are critical phenomena among Gypsy populations in Europe" (p. 561). Urban settlements lead to growing impoverishment and enclosure inside deprived and blighted neighborhoods. Gypsy identity and social representations are linked to urban marginality and social exclusion, including at school. Enclosed in spaces of relegation, these groups face segregation policies and a longstanding cycle of social deprivation that transforms socioenvironmental settings into singular territories, with specific cultural, social, and moral dynamics and discriminatory institutional policies. All of these factors impact school and the relationships between the Gypsy groups and the school institution.

Most non-traveler Gypsy/Roma families in Europe develop a utilitarian view of school, reduced to basic notions of reading, writing, and calculating. Many scholars have noted that school does not fulfill the needs of Gypsy/Roma families. They still

view school as an institution of the dominant society (García Pastor, 2009), as involving a process of depersonalization and as a place of violence (symbolic and institutional) against pupils. As a space of contact with the rest of society, school is also a place where these groups face racism, and where "mutual prejudices" contribute to separating them from the rest of society (García Pastor, 2009). For these groups, the distance separating families from school can be measured by the families' attachment to traditional values, their insistence on belonging to the group rather than the individual promotion offered by school.

> At school, the individual is enhanced for his academic performance. It is a form of individual promotion. For Tziganes and travelers, the child, the adult only exist as part of the group, by the place he stands in the group and the function devolved. (Liégeois, 1985, p. 160)

School is understood as a place where the Gypsies/Roma lose their identity, whereas the closed space of their community guarantees affective, material, and symbolic security for the whole group (Faure, 2004). In many European countries, they live in spaces of relegation with poor employment opportunities, deteriorating socioeconomic conditions, and few public amenities and infrastructures. These conditions of life directly impact schooling and school achievement: limited access to education, school dedicated to Gypsy/Roma pupils with limited standards, patchy attendance, dropping out, no social mixing, poor marks, and so on. In the European Union (EU), Roma/Gypsy children constitute the most vulnerable group in terms of educational issues. About 50% of Roma/Gypsy pupils are daily absentees according to EU reports. Many interdependent factors explain this situation: a weak added value given to schooling by families, parents' own traumatic school experience, poor parental expectations, importance of poverty, and social deprivation. School authorities and teachers still consider Gypsy pupils to be disruptive elements. As a consequence, these pupils are often enrolled in "ghetto schools" or in specific training programs with limited access to regular teaching.

Perpignan: A Major European Concentration of Gypsy/Roma Populations

Like in the rest of the EU, a large proportion of French traveling communities has settled permanently.[3] French citizens since the seventeenth century, they are estimated at between 300,000 and 400,000 people. They encompass five main subgroups that are also to be found in the European Union: Gypsies, Tziganes, Manouches, Romas, and Yeniches. Half of France's non-traveler population lives in the country's south and belongs to the Gypsy subgroup. In this article, I choose to

[3] According to a report of the French Senate (2011), non-travelers represent about a third of the Gypsy/Roma population in France.

use the term *Gypsy* to designate the populations I am describing[4]—first, because this group's members consider as such. They view the word *Roma* as a stigmatization strictly attached to nomadic groups from Eastern European countries (Romania and Bulgaria). Second, *Gypsy* refers to a set of cultural, linguistic, and geographic origins of former groups of travelers whose traditional area of travel covers the southern and eastern parts of Spain, and southern France.

The city of Perpignan is an interesting case study. With more than 10,000 people in the urban area (see Fig. 8.1), Gypsies in Perpignan constitute the most important and longstanding Gypsy community settled in France. They are mainly located in the central neighborhood of Saint-Jacques (with a population between 5000 and 6000), in two peripheral social housing complexes (2000) and in some small surrounding villages (see Fig. 8.1). Until World War II, this Catalan-speaking group was mostly semi-nomad. The group used to travel from Barcelona to Perpignan, subdivided into myriad families and clans on both sides of the French/Spanish

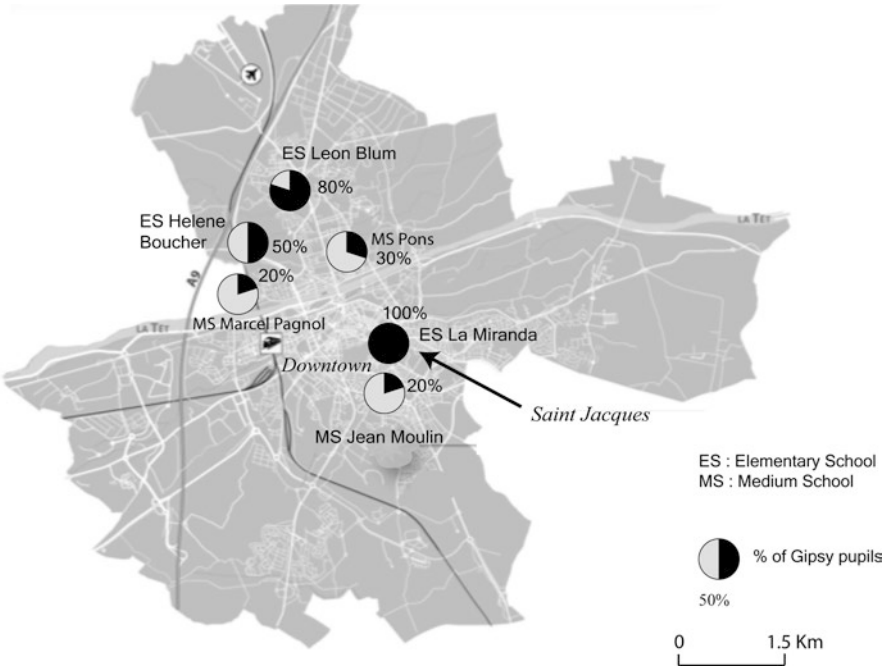

Fig. 8.1 Location of Gypsy pupils in Perpignan (2015). Source: Design by author

[4] Many scholars regard the term "Gypsy" as racist, carrying negative connotations, whereas they use "travelers" to cover a range of nomadic and seminomadic groups. However, in France "Roma" is used to refer to traveling groups that arrived from eastern Europe in the 1990s (mainly from Romania and Bulgaria). The term "Gypsy" can also be understood here as "Gypsy non-travelers."

border. In 1942, the Nazi troops's invasion and the the Vichy regime's adoption of racist legislation led them to settle in urban locations in order to avoid deportation to concentration camps. They mainly settled in a central neighborhood of Perpignan: Saint-Jacques, a former Jewish neighborhood where they found available housing. They progressively lost their traditional jobs and skills and by the 1960s had become massively dependent on social assistance. Segregated and marginalized, this group has become the majority in Saint-Jacques, as the rest of the population has moved out to more comfortable dwellings elsewhere in the city and in new suburban locations. By the 1980s, Saint-Jacques had taken the shape of a mostly Gypsy neighborhood, populated by a poor and marginalized population, characterized by the massive presence of slums,[5] high density occupation, a specific night life, and violence.[6] As a space of advanced urban marginality, Saint-Jacques hosts those whom Loic Wacquant has depicted as "urban outcasts," accumulating social problems and ethnic stigmatization. In 2015, 2016, and 2017, the French National Bureau of Statistics classified Saint-Jacques as the poorest neighborhood in France. The socioeconomic indicators underline this longstanding urban marginalization: 74% unemployment, an annual median income of €2200, literacy of 75%, and a short life expectancy for men (61 years).

The "Gypsy Territory," Space of Educational Withdrawal? The Case of Saint-Jacques

As a highly deprived neighborhood, Saint-Jacques is a "Gypsy territory" with symbolic, affective, political, but also social and ethnic dimensions that affect local educational issues in different ways. There are four main dynamics: place effects ("*effets de lieu*," Bourdieu, 1993), an unconscious view of school, tensions between the enclosed space of the community and the transactional space of school, and the co-building of a space of educational withdrawal.

An Unconscious View of School, the Child King, and Place Effects

Socioenvironmental settings are here structured by three interrelated factors: place effects, the importance given to the child king, and an unconscious view of school. First, place effects play a crucial role. I understand place effects as the set of constraints affecting educational and learning spaces (Bourdieu, 1993). Bourdieu

[5] The city of Perpignan reports 4400 slums in this neighborhood, about two thirds of the housing stock.

[6] This neighborhood hosts a big drugs market.

underlined the need to take into account the spatial impacts of social groups. He argued that the position of groups, as dominant or dominated, is consolidated by place effects determined by the quality of space structures, dynamics, and social representations (Sélimanovski, 2009). Unhealthy housing, high density dwellings, run down streets and public spaces, lack of public and commercial facilities, and impoverishment have many consequences for education. With a high unemployment rate, dependency on social assistance, and a dominant street life, the child's life is unstructured and subject to many demands that are incompatible with school life and standards. The permanent presence of children in the streets, far from adult supervision, is a major barrier to compulsory schooling (see Fig. 8.2).

> With my brother we go to bed by 3 or 4 AM, so we're too tired to go to school in the morning and my mom and dad want us to sleep … We know it's not good for children to go to bed so late. But we can't wake up in the morning.[7]

Slum-like living conditions in a deprived urban space is part of the community destructuring process. This process is characterized by the weakened power of the clan chiefs (the "Tios"), replaced by the increasing influence of gangs of teenagers and drug dealers, and "the loss of the oral culture which used to transmit an educational minimum."[8] The street as a public space where children are under adult supervision no longer acts as a customary and informal space of learning through the diffusion of an oral culture. Placed under the auspices of unstructured and uncontrolled groups of young boys and men, street life today replaces the traditional collective supervision of children by adults.

> School absenteeism comes from that too: unhealthy houses, dads coming home late, the rhythm of life, so the kid follows that. In the community, it's less structured than before, the

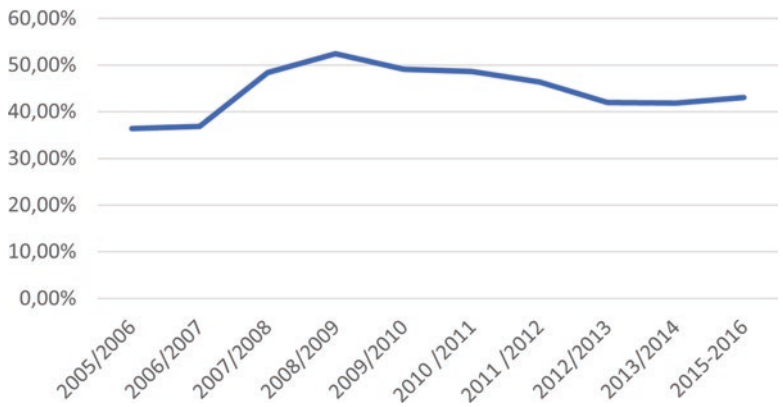

Fig. 8.2 Absenteeism, La Miranda Primary School (2005–2016). Source: Data provide by The Perpignan Department of Education. Source: Design by author

[7] Interview with N and M, 10 and 8 years old, March 19, 2017.

[8] Interview with a clan chief, March 20, 2017.

> old people have less authority. This lack of respect, it's mainly because of drugs that come here. Here, we can't do anything, today they deal in the Puig square (central square in the Gypsy neighborhood) and no one says a word.[9]

> Saint-Jacques it's a muddled society. You spend your day muddling with others: parents, friends, neighbors, your wife, people in the street for a cigarette, for repairing your house, for a parking place, for a smoke of pot, for family allowances… so who cares for the Paios' school?[10]

The concentration and accumulation of social and economic problems fosters place effects that city social workers refer to as "the *favela* effect." They depict a mix of unfavorable spatial conditions and a specific kind of street life. This comparison with Brazilian *favelas* underlines place effects that arise from the presence of serious physical, cognitive, and symbolic barriers that have an impact on people's relationship with school.

Second, in this constrained sociospatial context, families develop individualist and consumerist behaviors that produce inter-familial rivalries over child consumerism. Families that face multiple fears seek reassurance by spending more on children (gifts, toys, clothes). Family education is thus structured from the child-king perspective, with few limits, including school performance and parental supervision. Many mothers and teachers interviewed report that school attendance depends on the child's willingness or on overprotective attitudes (e.g., no school when it rains or is cold or windy).

Third, an unconscious view of school structures the Gypsies' relationships to school, by which I mean the set of inherited cognitive structures specific to school experiences that act through immersion in a socioenvironmental setting (Bourdieu, 2000, p. 2). The lack of school success stories in the group, the transmission of fears regarding school and academic teaching (failure, rejection, prejudices), a traumatic experience in school suffered by older generations, and the absence of educational role models all seriously limit school attendance (see Fig. 8.2). Fears are a powerful vector in this unconscious view of school. For this group, the school institution dehumanizes Gypsy pupils, nurturing a socioaffective dimension that is passed on from one generation to the next through the diffusion of collective myths ("teachers beat pupils," "they [teachers and educators] don't feed pupils and don't let kids drink when they are thirsty"[11]). Families consider the parental home (enlarged to include the street) to be a more secure environment for children than school, opposing the safe space of the streets of Saint-Jacques, which are controlled and only crowded by the community, to the insecurity of school—a space of symbolic violence.

[9] Woman, 50 years old, interview in an administrative report (Carrère, 2014, p. 23).

[10] Interview with Claude, man, 43 years old, March 20, 2017.

[11] Quoted in observation books, Ecole de la Miranda, Archives of the Perpignan department of education.

Saint-Jacques, Space of Educational Withdrawal

Saint-Jacques can be depicted as a space of educational withdrawal, an expression I use to describe a co-building process that began in the 1960s. This process follows mutual strategies and agreements uniting municipal authorities (in charge of primary schools), state education officers (in charge of teachers' management, curriculum design and application), and community leaders (called "*Tios*"[12]).

On the one hand, educational withdrawal refers to a social and cultural process, well documented in the academic literature, explaining the traditional reluctance of Gypsies (travelers and non-travelers) towards school (Missaoui et al., 2002). These groups fear that school's normalizing role will produce a loss of identity. In France, school is designed according to a national and unique educational model. Following a republican and egalitarian policy, the same future is sought for each pupil, regardless of his or her socioeconomic environment. On the other hand, the term refers to the attitude of local authorities whose priority is usually to isolate Gypsy pupils from the rest of the school population, and who limit public investment in schools hosting Gypsy pupils. Gypsy pupils are seen as disruptive, with severe learning difficulties and a repellent effect on other groups. According to these mutual and implicit agreements, regulation of the neighborhood catchment area follows its own specific standards. Non-Gypsy families have benefited from special rules allowing them to avoid the two primary schools in this catchment area. Unlike other city catchment areas, where exceptions to the rules are strictly limited to three criteria, in this catchment area seven criteria make it easier for non-Gypsy families to avoid these schools. As a consequence, the two primary schools have become ethnicized with a very high proportion of Gypsy pupils (see Table 8.1). But paradoxically, the more these schools turn into Gypsy schools, the more Gypsy families consider school as a foreign institution. Many families describe these Gypsy schools as places of social relegation, as second-class schools popularly referred to as "*cabanette*" (little prison), which partly explains the low level of attendance (see Fig. 8.2).

State education officers and municipal authorities have never been inclined to control school attendance and to enforce the law in respect of compulsory schooling. They have adapted national education policies and standards to fit this specific space. They have implemented a territorialized public policy in light of territorial representations (a population unsuited to education, an enclosed and cultural defensive space, deviant cultural and educational attitudes rooted in a Gypsy ghetto logic). This territorialized public policy has led to acceptance of the Gypsy neighborhood as a distinct society entrenched in a specific place with limited educational expectations. Educational actors tacitly accept school absenteeism and regard massive drop-out rates as natural. This results in low-intensity educational policies whose implementers are mainly concerned with maintaining "social peace" and the status quo. This official position is in line with the attitude of the community, which is reluctant to accept compulsory education. These tacit and informal agreements

[12] Literally "uncles", here to be understood as chiefs of large family clans.

Table 8.1 Irregular school attendance of Gypsy pupils and ethnic composition of schools (2015)

Primary schools	**Irregular school attendance***	**% of gypsy pupils**
La Miranda	54%	100% gypsy
Léon Blum	42%	80% gypsy
Hélène Boucher	35%	50% gypsy
(Data: Department of Education, City of Perpignan, 2015)		
Secondary schools	**Irregular school attendance***	**% of gypsy pupils**
Jean Moulin	80%	Presence of "gypsy classes"
JS pons	64,1%	30%
Marcel Pagnol	46.7%	20%
(Data: Préfecture des Pyrénées Orientales, 2015)		
(* Pupils attending school less than 40% of regular school time)		
	Morning	**Afternoon**
School attendance (2008)	20.5%	36.5%
School attendance (2015)	34%	61%

Note. Source: Data: Department of Education, City of Perpignan, 2015. Design by author

are embedded in political patronage and are part of both institutional and community norms.

These multiple factors create a space of mutual educational withdrawal, both in formal and informal teaching spaces, assuring social peace, maintaining the group's cultural norms, and making the group doubly segregated (in urban and educational terms).

Dialectic Relations Between the Enclosed Community Space and the Transactional Space of School

The relationships of Gypsy families to school in Perpignan are structured by a set of tensions between the enclosed space of the community—physically and culturally embedded in this physical environment—and the school's transactional space. The community's enclosed space is one of the main drivers of the continuation of conservative norms, facilitating the imitation and reproduction of transgenerational life courses. It leads to a tacit recognition of the primacy of traditional oral and informal education over compulsory school education, justified by a long tradition of resistance against the world of the "*paios*" (non-Gypsy people). But the disappearance of the oral culture and of its spatial diffusion through informal learning spaces (streets, churches, community meetings, …) seriously impacts this traditional relation to education. It has been replaced by daily censorship exerted by groups of peers ("*la companya*"), made up of groups of boys and young men located at street corners, against those who attend school regularly and are regarded as "deviant." The regular presence of visible and noisy groups in these narrow streets creates an

urban space characterized by promiscuity and density, which facilitates the continued existence of a so-called community regulation of compulsory education.

> Sometimes, my daughter goes to the middle school outside Saint-Jacques with her friends (non-Gypsy). "Where is she going to with the *paias*? Where is she going? Why do you let her go and do this?". You always have to struggle, because people said to her that she is a *paia* because she goes to school and even that she has different ideas.[13]

> This boy was the first in ten years to attend high school in the community. When coming to high school he discovered his homosexuality. Now people in the street say: "Don't go to high school otherwise you'll become gay!"[14]

On the other hand, this conservative character is also subject to dynamics of transformation. Tensions arise between attachment to customary values considered as untouchable norms specific to the community, the "basis of a strong distinction from the world of '*paios*' and constitutive of what makes the profession of Gypsy,"[15] and the growing influence of French society. This influence brings new norms and values that diversely affect and destabilize the community and its relations to education and school: individualism, self-promotion, freedom of moral standards, consumption, and so forth. It also contributes to the diffusion of feelings of worthlessness in a community with a long history of segregation, poverty, and fearing having to meet official educational requirements and expectations. Behind these tensions, two frames of educational reference are at stake. The first is a specific frame of educational reference, positioning the child as an individual for whom school is expected to provide basic and utilitarian education needs (reading, writing, counting). The second is a mainstream frame of educational reference that is expected to provide more than learning these skills: individual social achievement. The urban settlement of Gypsies has led to school taking on an unprecedented role for this group, with alternating repulsion and fascination.

In this changing environment, school functions as a transactional space, especially for mothers who become involved in social interactions and make new contacts that allow them to distance themselves from the rest of the group. These interactions and transactions depend on the school's openness. Until the 2005 riots, schools' openness towards Gypsy families was quite limited, and dialogues with teachers were often based on mutual misunderstandings and conflicts.

[13] Woman, 32 years old, interview in an administrative report (Carrère, 2014, p. 23).

[14] Interview with S. Henry, social worker, head of the educational services for Gypsy pupils, City of Perpignan, September 6, 2017.

[15] Ibid.

Ethnic and Territorial Setting: A Tool for Educational Achievement?

Changes occurred in the wake of the 2005 riots when community activists, social workers, and city officials decided to place school and educational issues at the center of restructuring the neighborhood.

A Subversive Experiment: Saint-Jacques as an "Educator Quarter"

In 2007, policymakers implemented a unique experimental process in Saint-Jacques with the support of national and local authorities, making educational issues the cornerstone of a wider expected change in the neighborhood. The project leaders aimed to build a new school hosting a unique educational project in France. They intended to reduce school absenteeism and to improve the relationships between Gypsy families and the school institution. Based on the Spanish experience with inclusive schooling of Gypsy pupils, the experimental educational policy in Saint-Jacques has been described by one of its promoters as a "subversive experiment,"[16] aimed at turning Saint-Jacques into a fully-fledged educational stakeholder, officially recognized as an "educator quarter" (*quartier éducateur*). This experiment is based on the adaptation of learning and school rhythms to the specificities of the group and its socioeconomic environment. The new school (La Miranda School) has replaced the two former public schools, and is designed as a Gypsy school, hosting only pupils from the Gypsy community. The project leaders are seeking to open the school to its surrounding ethnic and social environment according to a specific curriculum and with school rhythms adapted to the community way of life. The curriculum includes lessons in Catalan, and fundamental subjects (French, mathematics) are taught in the afternoon (due to massive absenteeism in the morning) whereas the morning class focuses on welcoming activities. The school has hired adult intermediaries and educational assistants from the community, and the building hosts eight social workers, a health care program, a women's center, and a community job center. Mothers of first-grade children have access to the classrooms all day long. A bridging class has been added in order to prepare pupils for middle school, and the educational curriculum has been co-designed with social workers and community members. A walking school bus was set up ("*pédibus de la Miranda*") to collect the pupils from their homes. National and local authorities designed this educational project as the cornerstone of an urban renewal program financed by the French state (*Programme de renouvellement urbain*). The program leaders are aiming to deeply transform this deprived part of the city center with additional incentives such as

[16] Head of the municipal department of education, interview, March 20, 2017.

housing rehabilitation and renovation of public space (400 houses to be rehabilitated or demolished, 200 million euros invested).

This innovative approach to the optimization of a socioenvironmental setting has been implemented according to three principles. First, the restructuring of the catchment area has led to a reorganization of the school system in the neighborhood: The two former primary schools have been closed, the catchment area and the neighborhood are strictly homogeneous, and a large educational center has been built hosting a kindergarten, a primary school, pre-school programs, and social services. Second, a highly profiled teaching staff (volunteer teachers with a specific professional background) has been set up. Third, the school project is widely open to the neighborhood and the Gypsy community. Teacher's involved in the Miranda school project suggest that "Gypsyness" ("*gitanité*"), the social and cultural practices of Gypsy families in local spaces (referred to as "Gypsy professionality"[17]), should encourage them to think of their profession outside the school and academic perimeters. They consider the surrounding environment as a territorial context that they can use as a pedagogical support, and clearly understand Gypsy territorial ethnicity as a component of the school's external resources. The project thus serves a dual purpose: The school has to open itself to the neighborhood by spreading out into the surrounding environment and it must open its doors to the family and the community. Families, mainly mothers, are allowed to stay in the classroom with their children, both in order to limit absenteeism and to familiarize them with educational issues.

After 10 Years: Contrasted and Contested Results

Obviously, the La Miranda experiment has supported the emancipation of women, mainly young mothers, and allowed an initial mobilization of fathers. The community's perception of schooling has partially changed. Fathers are no longer laughed at by their peers when they take their children to school. But these changes are still fragile and unstable. Men interested in education are still marginalized in the community, and subject to peer pressure to conform with tradition. Many community-based educators and adults working as intermediaries and educational assistants find themselves in a difficult position between institutional requirements and community norms. Conservative community norms expressed by informal street groups such as *"la companya"* and relayed by male adults inside clans and families distort the nature of the experiment, drawing the picture of an attempt to remove women from men's control. These informal groups, located at strategic points such as street corners, with their daily street activities, spread rumors and challenge Gypsy educators, causing some of them to leave, and urging parents to conform with tradition. Fathers are an easy target for such groups, because they are accused of having no control over their wives. These changes reveal contradictions in the community

[17] "Professionnalité gitane".

regarding education. I have observed a large range of attitudes and parental strategies. First, those who maintain strict conservative traditions and collective education norms are hostile to compulsory schooling. These families are highly reluctant to enroll their children in school, and consider school and formal instruction as useless for their "Gypsy professionality." Most still believe that a Gypsy "just needs to read, write, and count in order to get a driver's license."[18] A second group of families, despite some reluctance and a real attachment to tradition, considers school enrollment as useful and as a source of social advancement and development for the whole family.

But school attendance is still inconsistent (Fig. 8.2 and Table 8.1) and subject to daily fluctuation depending on the family's nightlife, parental motivations, and overprotective cultural norms (no school when it is rainy or cold). The continuously deteriorating economic and social conditions create a climate that local people describe as "*société de l'embrouille*" (muddled society), in which everyone has to struggle. And there is a third group, made of the youngest families for whom education is the key to a better life, even if it involves leaving the community and the neighborhood. I observed that some families, the ones with higher educational expectations, develop specific school strategies. They enroll their children at La Miranda for the first to the third grades (in order to acculturate them to the school system) and then move them to more socially diverse schools outside the neighborhood. For these families (which are a minority), scared by the lack of perspectives, sending their children to schools outside the neighborhood anticipates a gradual exit from Saint-Jacques and the community.

In June 2017, 80 of the 200 school children enrolled at La Miranda were considered steady absentees, 20 already had or were about to enroll in another school outside the neighborhood, and 100 attended school on a regular basis.

A Problematic "Gypsy Professionality" Disrupts the Analysis of Gypsy Educational Expectations

Parents and teachers alike argue that one of the main challenges facing promoters of the Miranda experiment lies in the school's adaptation to the "Gypsy professionality." For teachers, this means the ability to understand and integrate community logics and the socioenvironmental settings into their professional practices. It involves an open attitude to parents' requests, such as the presence of mothers inside the classroom, a capacity to work with community intermediaries in the teacher-parent relationship (education assistants belonging to the community, grandparents, uncles and aunts, members of the family clan, etc.).

The notion of "Gypsy professionality" occupies a central position in this dialectic relationship between school and the Gypsy community. Gypsies traditionally use

[18] Interview with a clan chief, September 12, 2017.

and diffuse this term to depict their cultural specificities and their attachment to them. The group considers it to be one of the reasons behind their reluctance to accept compulsory schooling. Actors use it to refer to a specific way of life, a strong attachment to traditional norms and values in which the individual exists only through the collective life of the community. In the mid-2000s, when analyzing the educational problems and issues of Gypsies in Perpignan, a group of social workers trivialized the notion of "Gypsy professionality." They diffused and promoted a specific vision of this "Gypsy professionality" that observers consider as a folklorized vision of a complex reality. It spreads the idea that Gypsy families need differential treatment in education due to their specific cultural norms. This vision of Gypsy families' educational expectations under the auspices of a folklorized Gypsy professionality rapidly became problematic. It tends to lock the group in a position defined by stereotype social and spatial imaginaries, with negative impacts on school achievement.

The La Miranda experiment has not changed the nature of the problem. School attainment and enrollment are still weak, and the educational level remains very poor. Yet a majority of families have begun to accept schooling and learning. Of course, relationships to learning and schooling show great variability between families, depending on the time of the year, the nature and quality of the relationship forged between stakeholders, and their ability to deal with the resources and the limits of the community. They also depends on the quality of the socioenvironmental setting (community representations of school, tensions between schools, families and other community actors, the balance between stakeholders in providing pedagogical support, the quality of dwellings), and on the nature of the institutional context (financial and political support for the school from local authorities, external and continuous evaluation of pedagogical support, nature of the teaching staff, quality of teacher training).

One of the biggest problems is the lack of social mixing. If the absence of social mixing was a strategic choice at the beginning of the experiment (helping Gypsy pupils to learn at their own pace without external pressures and outside views, facilitating relationships between school, community and families), it turns into a disadvantage when students enroll in secondary schools. The gap between the experimental school and traditional middle schools, with a socially mixed school system and different educational standards and academic expectations, explains the high level of absenteeism in the sixth grade (45% to 80%, see Table 8.1).

Many observers consider non-traveler Gypsies to now be trapped by policies of affirmative action, based on an "essentialist interpretation" of Gypsy educational issues. This tends to reduce the Gypsy community to a homogeneous and territorialized group. As I have mentioned, however, some families have adopted different school strategies, including going to schools outside the neighborhood. Policymakers have shaped the Miranda school model on the basis of special regulations, and the project has produced a lack of social mixing, although this is known to have produced positive effects in many other cases.

After 10 years, La Miranda school has once again become a "foreign institution" (Liégeois, 1997), a source of conflicts and residual violence, where school

Table 8.2 5th-grade Gypsy pupils' levels of achievement, La Miranda Primary School (2006–2012)

	2006	2012
% of 5th-grade pupils not able to understand an easy text	36	28.5
% of 5th-grade pupils not able to reach the 2nd-grade level of achievement	77	62
% of 5th-grade pupils not able to reach the 4th-grade level of achievement	86	52.4

Note. Source: Data: Department of Education, City of Perpignan, 2015. Design by author

drop-outs and non-attendance reach high levels (see Table 8.1). The poor academic results and weak school achievement (see Table 8.2) drive many families to consider school as useless in a local economy where Gypsies are unwelcome in any case. Assessing the La Miranda project as a failure, national education officers withdrew the project in 2015, transforming La Miranda School into a regular primary school that hosts only Gypsy pupils and that local Gypsies and *paios* alike consider a ghetto school.

Conclusion

Obviously, the institutional use of a social and ethnic environment is a complex lever for school attainment, impacting both the Gypsy community and the school in many ways. After decades of mutual ignorance and educational withdrawal, educational policymakers in Perpignan have abandoned the national and republican objectives of equity and social mixing to introduce more inclusive practices and ethno-oriented solutions. In the Miranda School experiment, the inclusion of the ethnic, cultural, and spatial environment has tended to maximize what Champollion (2015) calls territorial educational effects, and has speeded up changes. It has reinforced different trajectories between families. On the one hand, a small group (the most aware families), able to develop educational strategies, uses the La Miranda experiment to acculturate their children to school and to pave the way for their move to schools outside the community environment. On the other hand, a majority of families is still dependent on the cultural norms of the group and trapped by a complex and deprived environment. In all families, however, even those children who perform well at primary school tend to fail in middle and high schools. Similar conclusions have been reached regarding policies of educational inclusion in Spain. In Perpignan, as in Spain, the specificities of the Gypsy environment in the implementation of school reform seriously limit the capacity of families and pupils to access secondary education successfully.

This kind of experiment seems to be based on different professional groups (social workers, teachers) externally appraising the needs and opportunities of this ethnic minority by valuating a so-called Gypsy professionality that essentializes the group and its educational expectations. However, unexpected changes such as

women's emancipation have eased educational concerns in young families, and thrown into question the group view of education. If this subversive experiment did not meet its objectives in terms of educational attainment and acceptance of compulsory schooling, some progress has been made in women's emancipation, and more broadly in the way families now consider educational issues.

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Chapter 9
Bringing the Local Back In: How Schools Work Differently in Different Neighborhood Contexts

Julia Nast

Researchers seeking to explain the reproduction of educational inequality have not afforded local neighborhood settings a central role in the debate. Prominent theorists, such as those utilizing a Bourdieusian approach to educational inequality, analyze how homogenous social classes enter into a homogenous educational system in which the cultural capital of the dominant classes is advantaged (Bourdieu & Passeron, 1970/1990). Although extremely helpful for understanding educational inequality, this perspective leaves little room to consider processes within *specific* schools (McDonough, 1997, p. 107) in different *local settings* and how this might add an additional layer to the reproduction of inequality.

If researchers take local conditions into account, they often do so through a theoretical framework of social composition. Following the Coleman report (Coleman et al., 1966), scholars have focused on whether different social (and other) compositions in classrooms and schools impact school performance. The central question becomes whether students generally perform better in schools with high socioecomic status or whether there is a separate effect beyond individual characteristics, meaning that segregation widens the achievement gap between high- and low-social-status groups (van Ewijk & Sleegers, 2009, p. 135). Results vary from no effects to strong peer-group effects (see e.g., Evans, Oates, & Schwab, 1992; Jencks & Mayer, 1990). In any case, in this perspective local settings are reduced to producing specific social compositions in schools. Most researchers theorizing how these social compositions become meaningful focus on how children negatively impact each other through socialization or "contagion" of "bad" behavior (Thrupp, Lauder, & Robinson, 2002, p. 484). Although the roles of teachers and parents have become more important in the debate, many scholars continue to focus on peer-group processes (Kahlenberg, 2003, p. 67; Opdenakker, van Damme, de Fraine, van Landeghem, & Onghena, 2002, pp. 399–402, 423; Thrupp, 1999, p. 36).

J. Nast (✉)
Phineo, Berlin, Germany
e-mail: julia.nast@phineo.org

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This focus on peer-group effects does more than risk blaming the victim—it also veils a crucial dimension of educational inequality, namely whether the quality of provision of public organizations such as schools may vary by neighborhood. As early as the 1960s, researchers demonstrated that educational organizations are not distributed equally over the city but that neighborhood choice impacts students' access to school types (see e.g., Freytag & Jahnke, 2015, pp. 57, 111; Geipel, 1965; Meusburger, 1998, pp. 291–292; also Sykes & Musterd, 2011, p. 1309). Moreover, scholars have highlighted the competition for access to "good" schools and how it shapes the city by intensifying sociospatial segregation (see e.g., Noreisch, 2007; Warrington, 2005; van Zanten, 2005). Education is of increasing importance for middle-class parents' decisions of where to live (Butler & Hamnett, 2011a, b). Affluent parents buy into areas that provide the "highest-performing" schools, thereby pushing housing prices significantly higher in neighborhoods with popular schools (Cheshire & Sheppard, 2004; Gibbons & Machin, 2006).[1] Although the respective researchers already point to the interconnectedness of local settings and education, they have somewhat stayed "outside the school gates" by focusing on access to schools in different neighborhoods rather than on what happens *inside schools* in different local settings (for an exception, see Lupton, 2004, 2005). So far, scholars have thus not sufficiently analyzed whether schools work differently in different socioeconomic neighborhood settings.

In this chapter, I address this gap (see also Nast, 2020). Based on ethnographic data and in-depth interviews with teachers and parents at two primary schools in Berlin, Germany, I argue that local neighborhood settings and educational provision interact. Combining a Bourdieusian approach with new-institutional organizational theory, I understand organizations as fields. Based on this, I empirically analyze how local neighborhood settings become important as *social, symbolic, and administrative units* and structure these fields—and thus organizational practices.

A Theoretical Approach: Organizations as Fields

Conceptualizing the interplay between organizations and local settings requires an understanding of organizations as open systems that do not simply operate according to internal rules, logics, and demands. Rather, following new-institutional theory, I understand organizations as significantly impacted by institutional pressures external to themselves. Although institutions and organizations are often used interchangeably in everyday speech, proponents of a new-institutional approach define institutions as broader cultural, legal, and political contexts, such as laws, curricula, or professional standards (DiMaggio & Powell, 1991; Frumkin & Galaskiewicz, 2004, p. 283). These become institutionalized as they shape the modes of cognition,

[1] Others have shown that, historically, middle-class families are not the only ones to have moved for the 'right' school; schools have also established themselves in areas that help them to maintain and reinforce a prestigious position within the "field" of schools (Gamsu, 2016).

taken-for-granted scripts, rules, or schemas of actors within the organization. Neo-institutionalists have thus mostly focused on how processes of institutionalization result in uniform organizational reactions. DiMaggio and Powell (1983) describe this similarity as institutional isomorphism, of which they distinguish three forms: coercive, mimetic, and normative. The first, *coercive isomorphism*, results from political influence and the pressures of legitimacy and cultural expectations, which collectively push organizations in certain directions—towards affirmative actions or processes of state-led standardized reporting mechanisms, for example. *Mimetic isomorphism* stems from processes in which organizations "copy" solutions to organizational problems from other organizations. Finally, *normative isomorphism* is associated with professionalization. Professionals are involved in networks and study at training institutions such as universities, where they absorb common normative rules about professional behaviour. These then diffuse through professional networks and ultimately make organizations very similar (DiMaggio & Powell, 1983, pp. 150–154). For new-institutionalists, schools in different neighborhoods thus work similarily due to similar institutional pressures which are—in this perspective—much more important than local settings (see e.g., Arum, 2000).

Yet, similar institutional pressures might have different effects in *different neighborhoods.* To develop a more context-sensitive approach to how institutional pressures, local settings, and organizations interact, I combine the new-institutional approach with the Bourdieusian field concept. The idea of *organizations-as-fields* (Emirbayer & Johnson, 2008) becomes crucial here. Following Bourdieu, a field is a network of objective relations between different positions, objectively defined by the distribution and forms of capitals (Müller, 2002, p. 167). Such fields are hierarchically structured with dominant and subordinate positions, based on the volume of resources agents possess in relation to the other actors in the field (Naidoo, 2004, p. 458)—or in the organization. Within these fields of social positions, "struggles or manoeuvres take place over resources, stakes, and access" (Bourdieu, 1980/1990; cited in Everett, 2002, p. 60). Moreover, organizations-as-fields are also positioned in relation to other organizations in so-called organizational fields. Schools do not work in isolation from other schools and must position themselves in relation to each other, by competing for students and possibly also funding. Organizational fields are thus fields of objective social power relations in which position-taking and struggles over resources take place (Bourdieu, 1972/1977; Bourdieu & Wacquant, 1996). Taking these objective power relations into account reveals that the effect of institutional pressures may differ depending on the objective power positions within an organization as well as its relation to other organizations. Organizations can thus be best understood as specific field-constellations, in which institutionalized pressures, the objective power structures within the organization, as well as its position within a field of organizations interact. In the remainder of this chapter, I build on these positions to ask if and to what extent field-constellations of schools vary by neighborhood setting.

Methods

I draw on ethnographic observations and interview data from two organizational case studies in two neighborhoods in Berlin, Germany (see also Nast, 2020). I compare two schools that are similar in size, have multi-grade classrooms, and according systems of teaching, as well as (optional) after-school supervision, but that vary in regard to their *local context*: One is located in a deprived, "super-diverse" (Vertovec, 2007) neighborhood and the other in an affluent, mostly white, neighborhood. I focus on primary schools, as—in contrast to high schools—they mostly draw children from their immediate local environments.

The primary school in the deprived, "super-diverse" (Vertovec, 2007) neighborhood is located in Cross-Square,[2] one of Berlin's inner-city neighborhoods. As can be seen through data from the Senate Department for Urban Development and the Environment in Berlin, Cross-Square has a much higher than average level of unemployment as well as numbers of individuals younger than 15 receiving additional state financial support, an indicator of child poverty (Häussermann, Werwatz, Glock, Dohnke, & Hausmann, 2011, p. 9). These metrics are also reflected in Cross-Square's primary school: Over 90% of pupils qualify for free school supplies and approximately 90% do not speak German as their first language. Many of the more highly educated parents purposely avoid this school, by moving away or by manipulating the catchment system. The school in the privileged neighborhood is located in Roseville, a typical white middle-class neighborhood with a suburban feel. According to data from the Senate Department for Urban Development and the Environment, Roseville is one of Berlin's privileged neighborhoods: Unemployment is much lower than average, many families in the neighborhood own single-family homes, and additional public support for children younger than 15 is lower than the Berlin average (Häussermann et al., 2011, p. 9). Only 2% of children in the Roseville school qualify for free school supplies and 7% do not speak German as their first language. Most of these children come from highly educated families and only a few are early learners of German.

To gather rich data, I conducted five to six months of (participant) observation in each school, averaging three days per week to complete approximately 870 h of fieldwork from July 2012 to June 2013. I also conducted semi-structured interviews with parents and teachers from within the organization as well as with a smaller sample from other schools (52 interviews in total). Interviews lasted between 20 and 100 minutes. When interviewing teachers, I covered their work biography, the school's clientele, day-to-day work, their relations with parents, changes to working conditions, as well as their professional identity. With parents, I focused on their children's academic trajectory, their experiences in school, and how they define their role in their children's education.

[2] I have anonymzed both neighborhoods and schools throughout this chapter.

How Neighborhoods Shape Organizations-as-Fields

How do local settings structure organizations? In the following, I will show based on the empirical material how neighborhoods become important as context-specific conditions interact with institutional pressures to produce *localized fields.* Neighborhoods structure this interrelation between institutional pressures, as well as the objective power relations within as well as between organizations. Three aspects are of importance here: First, neighborhoods become relevant as *social units* by structuring the social composition of children and parents. Second, neighborhood settings come with *symbolic meanings* that position schools in a citywide field of education. Finally, local settings function as *administrative units* that structure the *institutional embeddedness* of schools—depending on the local context, schools face different regulations, programs, and funding schemes. I will further develop each of these aspects in the following.

Neighborhoods as Social Units: Power Positions and Institutional Pressures

As I have shown above, researchers of social composition have argued that a crucial difference between schools in privileged and deprived neighborhoods lies in their social clientele. Although researchers have shown that social (and ethnic) segregation within schools is often higher than within a given neighborhood (see Fincke & Lange, 2012 for Berlin; see Johnston, Burgess, Wilson, & Harris, 2006 for the UK), there is a clear relationship between a neighborhood's social composition and that of its schools. However, scholars have paid little attention to how this structures *schools-as-fields*. Rather, they have conceptualized the effects of social compositions mainly by focusing on the behavior and learning attitudes of *children*. Others have highlighted that family-school relations differ depending on the school's social composition (Lareau, 1987; McNamara Horvat, Weininger, & Lareau, 2003; Vincent, 1996). Scholars have shown that parents' cultural capital impacts parental involvement and its perception (Crozier, 2000; Lareau, 1987, p. 81). The same is true for parents' social capital: McNamara Horvat et al. (2003, pp. 320, 327, 331) highlight how the resources available through parental networks vary by social class. Overall, middle-class parents tend to hold schools and teachers accountable more often; working-class parents are more likely to trust the professionals (Crozier, 2000). Although these accounts provide important insights of how involvement varies by class, researchers often focus on how this advantages *individual* children vis-à-vis the school. In the follwing, however, I will focus on how different social compositions more generally produce very different *structural* contexts, in which educational professionals work.

Powerful parents, powerful teachers?

Depending on the neighborhood, parents often possess different forms of capital which shape their objective positions within schools-as-field. As I described above, Bourdieu argues (1997/2000, p. 183) that a field is characterized by a network of *objective relations* that are defined by the resources that actors possess in relation to each other. The positions of teachers and parents thus cannot be understood *per se* but differ between neighborhoods. These different social positions have important consequences for the kinds of institutional pressures that parents are able to "activate."

Roseville: Institutional pressures in a field of powerful parents

In Roseville, structurally, parents are powerful actors. Most parents bring high amounts of cultural, economic, and social capital (Bourdieu, 1986) to the school-as-field. Their power position, however, operates in subtle ways. If asked, parents in Roseville describe their relationship to teachers as very positive. Interactions are friendly and parents are often very supportive of the school. That said, parents also underline that they have clear expectations "that things in school will be 100% […]" (Parent interview 15).

Parents constantly implement these expectations in the field by reminding teachers of their demands—with different levels of intensity. If parents are concerned by the grading process, the cancellation of classes, or a particular teaching style, they often react by being more present at the school, thereby signaling that they are observant of what is going on. Parents might sit in on lessons, ask about the rates of sick leave or critically comment on cancelled lessons during PTA meetings. Brigitte, an energetic public prosecutor, explains:

> I guess it's pretty exhausting for teachers here <laughs>, because, yes, everybody […] supports the school […] but I think very often, even with trivial things, parents always comment on it, or look into it further and inquire […] parents have very high expectations of […] what the school has to provide. (Parent interview 17)

However, if these interventions do not bring about the desired result, parents can also escalate the situation, as the following anecdote reveals:

> C. Scherk, the vice-principal, and I are making our way to the principal's office. Two women are waiting outside the office. […] They would like to discuss the grading procedure in German. Many of the children had disappointing results and the parents found the grading process somewhat suspect. C. Scherk smiles, but explains that they would have to discuss this another time. We enter the office and behind the closed door, she explains that she does not want these mothers to look at the school's grading rules. Once they get hold of it, they will complain about every single test. A few days later, however, C. Scherk tells me that "the parents" have now officially complained to the local authority. They were unhappy with how the school dealt with their questions and P. Deuft, the school principal, was advised to make the grading more transparent. (Author's field notes, Roseville primary school, January 11, 2013)

Parents can thus ensure that their own expectations are taken into account by "activating" external institutional regulations. In signaling to the local school authority, they introduce a form of coercive isomorphism (DiMaggio & Powell, 1983, pp. 150–151) that would not have been present otherwise. This highlights the need to conceptualize the role of institutional pressures together with local context. In Roseville, parents know how to "play" the game and can make use of their position to pressure the school. Actors' ability to involve themselves in such "struggles or manoeuvres […] over resources, stakes, and access" (Bourdieu, 1980/1990; cited in Everett, 2002, p. 60) depends heavily on their position within the field. Parents are themselves quite aware that specific resources are needed to deal with the school, as Heike, a middle-class stay-at-home mother, emphasizes:

> I think we have to make sure to push our requests in a way that it's heard by the school […] it's helpful to find parents, personalities, who know how to gain recognition […] off the top of my head, I'm thinking of lawyers <laughs>. (Parent interview 16)

However, parents' powerful position in the school goes beyond the actual control of specific situations (such as when parents are unhappy with teachers), as Lareau and others have put forward (Lareau, 1987; McNamara Horvat et al., 2003). Parents do not exclusively intervene when something "goes wrong"—although they do so as well. Their presence means more than that: In a subtler way, parental beliefs of what schools are expected to provide can be understood as an institutional pressure. In Roseville, parents constantly implement their expectations in their daily practices and are in a sufficiently powerful position to pressure the school to comply with their wishes. This does not mean that parents in Roseville always "get their way," but they do shape the school-as-field by constantly reminding teachers, the principal, and other educational professionals that, in theory, they could organize and thus position themselves in opposition to the school. This creates much more subtle forms of control, which go beyond the idea of middle-class parents "ridding" schools of "bad" teachers (see e.g., Kahlenberg, 2003, p. 62). Rather, parents structure the field by making sure that they are implicitly present in teachers' assumptions and daily understandings of their work, as this teacher explains:

> You can always count on the parents […] BUT you also have to reckon with them, that means, if you have to write a letter to the parents, you'd better think twice how you formulate it […] you need to make sure to fulfil all the educational standards. (Teacher interview 19)

Cross-Square: Institutional Pressures in a Field of Powerful Teachers

The situation in Cross-Square is profoundly different: Parents are less successful in shaping the school-as-field. Due to their social position within the field, their ability to successfully involve themselves in controlling the school and to implement their expectations is limited. They thus have to find other ways of assuring their child's wellbeing in school.

Parents thus often highlight their own role in their children's education rather than demand that the school performs differently. As several parents in Cross-Square explain—if your family "is all right" and is "working hard," the school does not really matter. Moreover, in an attempt to work against "the very bad reputation of our Cross-Square" (Parent interview 2), many parents highlight that the school is actually better than often assumed. Seeing the school as bad is understood as a confirmation of the ethnic and social stereotype held by (middle-class) people from outside of Cross-Square. Constructing the school as "good" becomes an important way of challenging this stereotype. Skeggs (2004) has argued that working-class women are well aware of the judgments of "the dominant" and use respectability to establish symbolic value (see also McNay, 2004). To do so, it is important *not to complain* about the school; respectability is attained through the individualizing narrative of "it is all about your family" instead of by giving voice to problems and questions of quality. To discuss structural problems is sometimes even understood as an insult:

> The [PTA] meeting takes place in the assembly hall […] 25 people have shown up, filling some, but not all of the rows of chairs that are facing the teachers' table. The discussion goes on in Turkish. […] After the presentation, two mothers explain what happened. A grandmother had said that the school was "bad" and a "ghetto school" and that she was really unhappy to send her grandchildren there. Other parents reacted very angrily, offended, and shocked. One of the mothers explains: "It's disgusting, how can she say such a thing about our neighborhood and our school?" (Author's field notes, Cross-Square primary school, November 1, 2012)

This hesitation to raise problems can make it hard for parents to find support for their concerns. Moreover, teachers often support an individualizing view, pushing parents to "take responsibility." As Zehra, a working-class mother with a migrant background, who works as a doctor's assistant, recounts: "The teacher explained that it depends on the parents, that we need to work with the school and support the school and that everyone can then make it!" (Author's field notes, Cross-Square primary school, November 1, 2012). Although the image of "this is a bad school" is challenged here (at least verbally) (Skeggs, 1997), this comes at the price of individualizing the structural inequalities as well as the school's responsibility.

Following this pattern, many parents invest heavily in displaying how "supportive" they are of the school, and in presenting themselves as "good" families—something that might be best understood as a form of "moral capital" (Valverde, 1994) that becomes especially salient when economic and dominant forms of cultural capital are less accessible. Parents will state their satisfaction with the school in front of the teachers: "We are lucky [that our child is in her class]" (Author's field notes, Cross-Square primary school, August 27, 2012). A prominent location for "good parenting" is the PTA meeting. As A. Hellwig, an experienced teacher, explains with a laugh: "The point of the PTA? Allowing parents to show that they're interested" (Author's field notes, Cross-Square primary school, August 28, 2012). This clearly demonstrates the difference between the two schools: Although Roseville teachers are often slightly afraid of PTA meetings, because they must justify their teaching practices, in Cross-Square, the PTA meeting is the place where

parents have to prove that they are indeed "good" parents. In Cross-Square, parents often have no alternative to complying with the school's expectations—rather than the other way around.

The fact that some parents highlight their own role in the educational process does not mean that the parents are never unhappy with the school, or do not voice that the school is treating them or their children poorly. Yet even very unhappy parents are often unsuccessful in pushing for change. Due to the parents' less dominant forms of cultural, social, and economic capital and their resultant position in the field, teachers in Cross-Square deal with parental demands very differently than in Roseville. Evin, a working-class mother who had moved from Cross-Square to Roseville a year earlier, explains the difference:

> We are sitting in a classroom and Evin tells me how in the old school in Cross-Square, a lot of parents actually complained about the school as well. Eventually, however, they realized that even if they scheduled appointments with the teachers or complained to the principal "nothing changed." After a while, Evin says, this became "so frustrating that they stopped trying to get involved." She shakes her head slightly while she remembers. In the new school, by contrast, parents always seem to know what to do, they have powerful networks and "if they are unhappy, they make sure that things will change […] and it will work." (Parent interview 24, author's field notes)

Parents' social positions not only often leave them without leverage against the school, but they also have a hard time finding other people to support them. As I laid out above, Roseville parents often rely on the local school authority as the next level in the hierarchy; they also contact external experts (see also McNamara Horvat et al., 2003, p. 334; Lareau, 1987). In contrast, parents in Cross-Square ask other professionals *in the school* for help, which is often less effective. Even if teachers also question the competencies of a specific colleague, struggling teachers are at the same time seen with sympathy and personal relations make it hard to intervene on the children's behalf.

This dynamic creates very different structural conditions for teachers in Cross-Square than in Roseville. Although individual teachers in Cross-Square obviously differ, they have a general tendenc to view parental concerns as neither "threatening" nor "urgent". In Cross-Square, teachers do not fear parents as powerful actors in the school-as-field and they are thus less often part of their everyday deliberations. As a teacher explains:

> The advantage of working at our school is the parents […] not like at a school in Roseville, […] [where] Mr PhD and Ms Professor bring in their diamonds, and you, as a teacher […] have to justify and explain yourself constantly. (Author's field notes, Cross-Square primary school, August 16, 2012)

Expectations of what a school *should* provide are thus less powerful in Cross-Square. Again, this highlights the importance of the interplay between local context and institutional pressures for understanding how both structure schools-as-fields differently.

Social inequality, institutional pressures, and the question of the meritocratic myth

The social composition, however, not only shapes the field by introducing different objective power positions; social inequality also impacts schools by shaping the opportunities available for the realization of broader cultural expectations of what schools should achieve in order to be legitimate, as well as for measuring up to teachers' own expectations.

Cross-Square: Institutional conflicts within the field

In Cross-Square, latent antagonism in the field of education become manifest. The school-as-field is characterized by a social inequality that cannot be solved at school but continues to interfere with its institutionalized aims. The meritocratic promises inherent to teachers' profession—what new-instutionalists term normative pressures (e.g., DiMaggio & Powell, 1983, pp. 152–153)—and to the educational field as a whole, namely that everybody has the same opportunities in school, are challenged here. In a deprived neighborhood like Cross-Square, this institutionalized expectation constantly meets a reality that does not fit.

Cross-Square children often enter school with very few school-relevant skills and little preparation, while living under difficult structural conditions. Teachers work with students whose families struggle, often due to the low-level of state support for welfare recipients, to provide for their children, to invest in new clothes, or to find a space where children can study at home. Children often lack basic materials, such as scissors or pens, to fully participate in the lessons. Teachers regularly compensate for this by buying such supplies for at least some of the children in their class. In other instances, parents struggle with addiction or psychological issues linked to poverty, and accordingly have a difficult time supporting their children. Expectations, such as studying for school at home, often seem simply unrealistic within the given conditions.

As a result, children frequently do not progress as expected. Teachers regularly speak of "despairing" of their students' learning process: "It's exasperating […] I did all these diagnostic tests in math […] but they even struggle with counting, they just don't know how to do it" (Author's field notes, Cross-Square primary school, November 6, 2012). As B. Speicher, a teacher who now works in Roseville, recalls while reflecting on her time in a neighborhood like Cross-Square: "If I wanted to see the futility of my work, I just had to ask after a lesson—come here and tell me what you've learnt! And often, they really had no clue at all" (Teacher interview 21).

Many teachers explain that most of their students are "behind," "weak," or "very slow learners" (Author's field notes, Cross-Square primary school, August 22, 2012). This becomes especially pressing when the teachers consider what students should be learning, at least in theory:

> [T]here is the core curriculum that we HAVE to cover and the students go on to secondary school and, well, there are certain things that will be expected of them […] but, well, it is difficult, it is not doable, to be honest! (Teacher interview 6)

Although most teachers are aware that many of these problems are due to the structural inequality under which the children grow up, they still feel helpless in their attempts to productively address them. The field is thus characterized by a mismatch between the institutionalized expectation that every child be provided with the same opportunities—and that schools can compensate for social inequality—and the teachers' day-to-day experiences. With the social composition of the neighborhood comes a constant challenge of if schools can actually help to overcome structural inequality and function as *legitimate* organizations. As new-institutionalists have argued, organizations adapt to institutionalized pressures in order to "be acknowledged as legitimate and reputable" (DiMaggio & Powell, 1983, p. 153). In Cross-Square, the field is thus not only structured by weaker parental control, but it is also harder to meet general expectations of what schools should achieve.

Roseville: Avoiding conflicts within the field

In Roseville, the situation is clearly different. The school-as-field is localized through privilege rather than through inequality. Accordingly, there are fewer obvious internal contradictions within the educational field. Children are already equipped with many of the competencies they are expected to acquire in school. For teachers, the task that they set for themselves as professionals is much easier to achieve. Although not without its frustrations, there is considerably less exhaustion than in Cross-Square.

As in Cross-Square, Roseville teachers are well aware that their students' social background is an important factor in shaping their work. Professionals describe the students and their families as coming from the "educated classes" and "the upper crust" (Teacher interview 20). Teachers clearly see the advantage of these structural conditions for their classroom instruction: "Children have surroundings that make it easy for them, they get a lot of support from home […] and well, yes, I would say when it comes to the students, teaching here is really easy" (Teacher interview 26).

Moreover, although often unaware of it, teachers also rely on the support system that children receive at home. The school is thus structurally much more likely to fulfil the institutionalized expectations of what a school should achieve—partly because of the "invisible" work that is done by the parents, but rarely discussed in school. The prevalence of traditional gender arrangements, especially of stay-at-home mothers, plays an important role here. Parents regularly help their kids study: "Well, I'm pretty sure that […] most parents, independent of what they say, help their children with homework,[…]" (Parent interview 21). Parents become especially involved if a child is in danger of falling behind. Harald, a middle-class father

who works in a bank, proudly explains how his family has tackled his son's difficulty adapting to the first grade:

> In math, we really made up for his difficult start, and now, we can say that he really caught up with the group […] and, well, he's not there yet in German, but thanks to the support here at home, he will catch up. (Parent interview 14)

Parents have different reasons for helping their child at home, from assuring success to spending time together and learning more about their child's school experiences. Whichever the reasons, parents crucially shape schools-as-fields by helping the school to succeed. These often informal (AlSayyad, 2004, p. 10; Roy, 2011, p. 233) practices are important as they help to fulfil the institutionalized meritocratic myth by veiling the additional effort parents engage in and thus obscuring the limits of what can actually be achieved *only* in school, especially in comparison to Cross-Square. Some teachers are aware of these limits and struggle with how to deal with them:

> It is complicated for me as a teacher [in terms of the grading], because I can see […] if parents helped; but if parents help, it also helps the children to learn, and I can't forbid it. Also, I can't punish children for having supportive parents. (Author's field notes, Roseville primary school, May 15, 2013)

Others comment ironically on the "fake" character of their experienced success: "We have children, they pass through here, you can be dumb as a teacher and the children will still learn" (Teacher interview 26); "you don't need training to teach here" (Teacher interview 23); "you can hardly prevent these children from learning" (Teacher interview 21). Nevertheless, it is easier for Roseville teachers to ignore these limitations than for Cross-Square educators to bear the sense of failure they experience.

Interestingly, the conflict within Roseville's educational field is somewhat the opposite of that in Cross-Square: The quasi-automatic ability of students to learn also poses a challenge to the meritocratic assumptions of teachers; however, this conflict is much easier to hide than in Cross-Square. Thus, in Roseville, the social composition that comes with the neighborhood as social unit not only implements greater parental control, but also makes it easier for the school to succeed as a legitimate organization (DiMaggio & Powell, 1983; Meyer & Rowan, 1977) that is seemingly able to fulfil the institutionalized expectation of advancing the education of all children.

A Neighborhood's Symbolic Meaning as Institutional Pressure

Neighborhoods also shape schools-as-fields through their *symbolic* meanings. The dominant understanding of what a neighborhood symbolizes is significant for its position in the spatial stratification of a city (Blokland, 2009; Logan & Molotch, 1987). Although researchers have mostly discussed a neighborhood's reputation in regard to parents' schooling choices (Ball & Vincent, 1998), I argue that these

images are also relevant for how schools-as-fields get structured and are thus of relevance for the professionals working in such local organizations. As such, neighborhoods' symbolic meanings can be understood as institutional pressures that structure local organizations.

Both Bourdieu (1987) and Butler (e.g., Butler, 1997/2001) have highlighted the importance of such forms of symbolic power. Following Bourdieu, the term symbolic violence describes the experience of being categorized according to the symbols that the dominant class understands as legitimate, while having "little choice about whether to accept or reject" these categorizations (Bourdieu, 1987, p. 812). In contrast Butler, in the post-structural tradition, sees domination as part of *every* categorization, as it forces the individual to perform to categories; she acknowledges that hierarchies in the social positions from which people speak can have different impacts (Villa, 2011, p. 59). Following these insights, it is important to highlight how the symbolic hierarchy of the spaces in which teachers work differ completely depending on the neighborhood. These symbolic meanings are invariably contested (Massey, 1994) and conflicting readings of a neighborhood can coexist (Blokland, 2009). Nevertheless, most teachers related to a dominant symbolic meaning of privilege in Roseville and deprivation in Cross-Square. As such, teachers themselves engage in symbolic work and institutionalize their neighborhoods' meanings by implementing or challenging those in their practices.

Cross-Square: A neighborhood's meaning as symbolic violence

The Cross-Square school is positioned in a neighborhood that can be described, akin to other neighborhoods with similar structural conditions and symbolic (institutionalized) meanings, as "profoundly stigmatized, poverty-stricken, and ethnically marked" (Paulle, 2013, p. x). In the German public discourse, deprived neighborhoods are often described as a *sozialer Brennpunkt,* a "social hotspot" with high poverty, crime, and conflict. Many teachers use this neighborhood categorization—rather than the school—to explain their daily experiences. Most Cross-Square teachers have experienced some form of symbolic violence as various (often powerful) actors, such as the local school authority, middle-class parents, or other organizations, constantly label them and their school as undesirable, in reference to their location in a *sozialem Brennpunkt*. Several teachers told stories of how acquaintances reacted when they learnt where they worked. Notably, the neighborhood acted as one of the most important signifiers. A. Hellwig, an experienced teacher, describes:

> If I'm on holiday, and I travel and you meet new people and if I tell them I work as a teacher, that is very respected, it is a respected profession, but if I then say primary school and Berlin, well, then people are already like "uhhh" and if I then go on and tell them I work in Cross-Square, then everybody goes like "oh, poor you …"—and that makes me very angry, and I always try to explain […] but no one sees what great work we do here and how great our kids are. (Author's field notes, Cross-Square primary school, June 13, 2012)

Often, teachers feel that they are labeled negatively independent of what they actually do, and describe their powerlessness against the symbolic meaning of their workplace. Thus, they often see no escape from the stigma of being part of a primary school in a "bad" neighborhood—as E. Holstein, the principal, explains: "As a school, well, sometimes I guess we just have a label and it is really hard to work against that" (Author's field notes, Cross-Square primary school, August 21, 2013).

Moreover, teachers also experience the school's devaluation in interactions with other members of the educational field. Often, secondary schools signal their preference not to have students coming from Cross-Square. When the school organized an informational evening at which secondary schools could present themselves, the visiting principals generally highlighted that they were looking for "high-achieving" students—implying that such students were not to be found at Cross-Square. E. Holstein, the principal, explained that the Gymnasium initially did not want to show up at all—"they are paralyzed by their own arrogance" (Author's field notes, Cross-Square primary school, November 27, 2012).

Moreover, middle-class parents signal Cross-Square primary school's undesirability to teachers, especially during enrolment periods:

> A. Hellwig tells me about a mother […] with an academic background [who] called up the school, as she was unsure if she really wanted to send her son there. […] A. Hellwig invited her to come to her classroom [to observe the lesson], as she is convinced of the school's work […] This mother, then, did come by, but never got back to A. Hellwig: "In the end, you know, realistically, she won't send her child here. You know sometimes that makes me so sad, this attitude, it is the image of Cross-Square!" (Author's field notes, Cross-Square primary school, August 30, 2012)

The mother, at least in A. Hellwig's retelling, is not rejecting the school per se, but rather Cross-Square as a neighborhood and the assumed conditions that it entails. Thus, the school's actual work seems unable to change the general perception linked to the neighborhood.

Teachers have different ways of dealing with these images. The interplay of enacting, recreating, and challenging institutionalized pressures is part of the process of institutionalization: Some acknowledge that they themselves would not want to send their children to Cross-Square. Others argue that schools in Cross-Square are in general "no good" and that it is maybe even wrong to keep talented students at the school. Some are straightforward, linking the neighborhood to unsuccessful school trajectories, as F. Hoff explains:

> I have to say, with those students, for whom I see a chance, even a small one, I make sure to send them OUTSIDE of this borough, outside of Cross-Square, to Mosthaus [a more middle-class neighbourhood] at least […] they have a different clientele there […] and even if our students don't make it there, if they leave school after 10th grade, but are coming from there, it's different! (Author's field notes, Cross-Square primary school, December 7, 2012)

Others argue that the external judgments are mistaken and that the school is actually better than assumed—or at least that for them a school in a neighborhood like Roseville would be "too boring" and "not challenging enough" (Teacher interview 11; Teacher interview 10). Although teachers do experience forms of symbolic violence and devaluation, they also engage in practices of accruing value for

themselves. Structurally, they nevertheless face symbolic devaluation as part of their daily duties.

Roseville: A neighborhood's meaning as symbolic valorization

These symbolic processes are similar in Roseville, yet at the opposite end of the field. Here, the school is positioned in a neighborhood that is characterized by relatively high social status. The school's position at the top of the educational and geographical field is signaled to teachers and the symbolic meaning that comes with it shapes the school-as-field as a form of institutional pressure. In contrast to Cross-Square, the school is constantly termed a desirable organization. Similar to Cross-Square, however, that perception is not necessarily connected to the school's lived reality. Rather, Roseville's positive symbolic meaning *as a neighborhood* engenders the quasi-automatic assumption that a school in this location provides high-quality teaching.

This positive perception also becomes apparent in how teachers describe their work: Many point out that they are "VERY lucky" (Teacher interview 18), often directly comparing themselves to neighborhoods like Cross-Square. One teacher, B. Speicher, describes her own journey through the educational field as finally being "on the bright side for once" in Roseville (Teacher interview 21). Being on the bright side, however, is not so much linked to the *specific* school, but to the assumptions that are linked to Roseville as a *neighborhood*.

Roseville's high symbolic status also becomes apparent in the school's relation to other members of the educational field. Teachers have a clear understanding of their position in an exclusive network of schools in Roseville—and children often move on to "other schools with very good reputations in this neighborhood" (Teacher interview 26). Teachers also express the high status of Roseville's primary school in how they talk about other schools—including those located in neighborhoods like Cross-Square. Working in Roseville is seen as a completely different and preferable experience: "None of our teachers would voluntarily work in Cross-Square" (Author's field notes, Roseville primary school, May 16, 2013).

Parents also signal Roseville's desirability to the teachers—especially during enrolment periods when demand usually exceeds the number of spaces available. Once the enrolment acceptance letters are sent out, the phone regularly rings with parents inquiring if their children "made it" (Author's field notes, Roseville primary school, January 16, 2013). Stories abound of parents who desperately want to send their children to Roseville's primary school, write letters to the principal, and promise to be very engaged in school matters. Parents also make use of informal strategies to assure access. P. Deuft explains:

> Parents often try to make deals so that we will accept their child, they bring their child's CV, or they say they have a holiday home at the Baltic Sea where they would be happy to welcome children from the school if we would accept their child—basically they ask: "What can we do to get our child enrolled here?" (Author's field notes, Roseville primary school, January 11, 2013)

As school enrolment in Berlin is still mostly organized by catchment area and the city educational authority decides the granting of exceptions, these strategies are only partially successful—and, according to official documents, not an option to begin with. Nevertheless, demands voiced by the parents shape the field by producing symbolic structures that signal a constant valorization of the school.

This is very much linked to the *neighborhood* of Roseville, which acts as a kind of guarantor for a good school. Parents often describe how they explicitly moved to Roseville because of its (excluding) "educational field":

> We moved here, among other things, because we knew that schools are better in this neighborhood. It was not especially Roseville's primary school, but more generally, schools as such are better here. [Why?] Well, on the one hand, because it's a well-off neighborhood and schools in such contexts often have better facilities and equipment, and, well, at least in my case, the other reason is the fact that there are no so-called problem kids in these privileged neighborhoods or at least not as many as in other neighborhoods. (Parent interview 19)

Finally, teachers in Roseville are also aware of these symbolic structures and generally share them. Still, as in Cross-Square, some teachers at Roseville primary school also challenge their school's dominant image—namely the superiority of their organization. Some teachers voice concerns about the pressure that children are under or wonder if parents might be too involved in children's academic trajectories. Despite such occasional doubts, the neighborhood's positive symbolic meaning shapes the school-as-field through strong symbolic valorization, and questions of the legitimacy of teachers' work are far less challenging in Roseville than in Cross-Square.

Neighborhoods as Administrative Units: Projects and Institutional Embeddedness

Finally, besides the social and symbolic processes connected to the neighborhood, neighbourhoods also becomes important as *administrative unit*.

This is closely linked to changes in institutional regulations and in the allocation of public resources that have taken place in recent years. Some have captured these changes as a new form of urban life under capitalist and neoliberal regimes (Amin & Thrift, 1996; Harvey, 2005; Wacquant, 2008), others have put forward less radical interpretations. Either way, these dynamics also become visible in Germany's educational field. In response to various reforms, such as the implementation of "all-day schools" and continually tight state budgets, schools are increasingly perceived as being in need of partnerships with non-school actors, such as NGOs, public organizations, and private charities that offer projects, support, or counseling for children and families (Baumheier & Warsewa, 2009, p. 20). Scholars have understood these changes as a new form of educational governance (Freytag, Jahnke, & Kramer, 2015, p. 67; see also Duveneck, 2016). Although the landscape of institutional

regulations has thus changed to some extent for all schools, these processes still vary by neighborhood.

Cross-Square: Additional workload, institutional pressures, and types of cooperation

Funding cuts hit somewhat harder in Cross-Square than in Roseville, despite the additional, compensatory funding that the Senate allocates to schools in socioeconomic contexts such as Cross-Square. Teachers describe how a lack of time makes it harder for them to meet the needs of their students, especially as students' range of abilities is often vast.

On top of this, current institutional changes put the school under increasing pressure to open itself up to external partners, such as NGOs, foundations, and public institutions. This comes with an additional workload that at times seems unmanageable. The school is working on a wide range of topics by engaging in cooperation and projects, such as child protection, nutrition, multilingualism, integration, conflict resolution, family counseling, homework tutoring, and the improvement of parent-school relations. As schools in contexts like Cross-Square are often seen as unsuccessful, the pressure to be "active" can be especially strong. New-institutionalists have argued that this need to assure legitimacy can push organizations to employ measurements even if they do not seem to be of direct help for their daily work (Meyer & Rowan, 1977). Although teachers are indeed sometimes critical of projects and partly see them as "keeping them" from their principal duties, the school as an organization must yield to the pressure in order to signal that it is doing "all it can" to come to terms with the problems often linked to it.

Moreover, external actors continually ask the school to participate in programs and projects. NGOs, public and private agencies, and foundations regularly offer to cooperate with the school, due to its position at the bottom of the educational and geographical field, where many organizations expect to find their target groups. As E. Holstein, the head of the school, explains: "You know, the school is the main platform for all kinds of actors and organizations, because, well, as we have compulsory school attendance, we have most contact with parents and children!" (Teacher interview 27)

Cross-Square's local authority also pushes the school to develop partnerships with kindergarten and secondary schools in the local area, as well as with the child-welfare agency. To assure, for example, a smooth transition from kindergarten to primary school, schools are asked to liaise with local kindergartens. The Cross-Square school works with six different kindergartens, invests in its relationships with secondary schools, and also cooperates with the child-welfare agency. A teacher is assigned as contact person for all issues linked to the agency and regularly meets with a caseworker.

In addition, certain policy programs that are meant to address inequality require additional tasks that are not present in neighborhoods like Roseville. The "Bildungs- und Teilhabepaket" ("Education and Participation Package") entitles children

whose families are on welfare to additional allowances for costs such as school trips, school lunch, learning materials, and additional learning support. In Cross-Square, families regularly take advantage of this 'package,' but it requires the school to complete a lot of administrative work. Another example is the program "Districts with Special Development Needs—The Socially Integrative City," instituted to target deprived neighborhoods in Berlin. Neighborhood councils were implemented that often explicitly work to facilitate networking between the various actors who work on education in the neighborhood and also fund small projects within the schools. These push-factors and the additional funding are only present in deprived neighborhoods and thus vary locally.

As a result, the number of projects and partnerships in Cross-Square is very high. The principal at a school in a similar neighborhood summarizes the situation as follows: "If I were to meet and sit down with everyone who somehow works in the school here, if I were to sit down with all of them once a week, I would be doing nothing but sitting in meetings" (Teacher interview 6).

Yet not only the *quantity* of partnerships but also the *types of cooperation* increase the workload. The school is often involved in projects that are only temporarily funded. Even if projects are successful, permanent funding is rarely available and the school must regularly apply for fresh funding. Moreover, funding streams rarely provide for funds to organize, apply for, and audit such projects. Hildegard, a politically engaged mother and lawyer, explains:

> The teachers can't complete all these tasks, I think it takes so much energy and time, you need to write a proposal here, an application there, and tons of additional meetings […] and then, on top, you also have to network with kindergartens and secondary schools, to share experiences, but they don't get additional hours or compensatory time-off for any of this […] they have to do all of this on top [of their teaching], and we haven't even started to talk about preparing lessons! (Parent interview 12)

This often creates a dilemma: Additional funds would be useful but the workload that the application and auditing process entails creates a situation wherein it is almost irrational to apply, as E. Holstein explains:

> We stopped applying for money from the neighborhood council because, you know, the application process is so complicated, it requires so much time and energy, we can't do it anymore, it's just not possible and it's unfortunate and sad because, you know, there is money, but you can't take it because it's just too much work to do it! (Teacher interview 27)

Furthermore, projects in Cross-Square also shape the school-as-field by focusing on *specific issues*. The institutional pressures that push the school towards cooperation do not do so randomly. Projects often address a perceived deficiency in what families can provide for their children "in a neighborhood like this." Parents are often part of the target group. As I showed above, the school's partnerships cover topics such as child protection, nutrition, conflict resolution, support and counseling for children and families, homework tutoring, and after-school activities. In addition to such projects, the school also has a social worker who is responsible for helping out if conflicts arise with families, and the school cooperates closely with the child welfare agency. In total, the children's social context provides the focus for most

additional projects and support structures for these topics are implemented inside the organization. Although this focus does match some of the school's, parents', and children's needs, the emphasis on the children's social context creates a specific kind of expertise, focus of attention, and taken-for-granted assumptions in Cross-Square (that differ in Roseville) and thus specifically localize the field by shaping the teachers' practices. The importance of these localizing processes becomes especially apparent when compared to the situation in Roseville.

Roseville: Different workload, different institutional pressures, and the role of parents

Teachers in Roseville also face institutional changes, such as funding cuts, but these have less of an impact than in Cross-Square. Experienced teachers tell stories of how they used to have "more time," "less pressure," and how things used to be "more relaxed" (Teacher interview 16). However, teachers also point out that, in comparison to contexts like Cross-Square, these changes are less problematic in Roseville.

Yet funding cuts are not the only thing to hit Cross-Square harder. Institutional pressures to open the school up to external partners are also less visible in Roseville. Due to their social composition, schools in privileged neighborhoods often face less pressure to appear legitimate. It is easier for them to produce good results and to be seen as organizations that satisfactorily fulfil their duties. Even if problems do exist, they are less often addressed through projects. To use the issue of parental participation: Although Roseville teachers often talk about the challenges of working with highly educated parents, there are usually no projects in place to help them negotiate their relationships with middle- or upper-class parents—as this group is traditionally not defined as "problematic" (for a similar argument, see Gomolla, 2009, p. 31).

Similar tendencies are reflected in the school's partnerships with the child welfare agency, secondary schools, and kindergartens. Here, too, the local authorities exert less pressure to cooperate with other organizations, as they often see social problems in Roseville families as off-limits. Although the school also has both a kindergarten commissioner, in charge of representing the school to local kindergartens, and a child-welfare contact person, these posts are considerably less visible in daily routines than in Cross-Square. G. Heinz, a teacher, explains: "I'm the contact person for the child welfare agency […] you know, it's a job that I took on at some point, but I never really acted in this role." (Teacher interview 17). Again, this highlights how the effect of similar institutional pressures can play out differently depending on the local context in which it is implemented. Moreover, certain types of organizations—such as the neighborhood council—simply do not exist in privileged neighborhoods, and thus also do not push for partnerships. Similarly, charities that work with deprived families do not usually look for their target group in Roseville.

Moreover, not only the scope of projects diverges from that in Cross-Square, but also the *kind* of partnerships. If the Roseville school is involved in projects, teachers

rarely have to apply for funding or to administer the eventual grant. School partnerships often come in the form of sponsorship: "We've just won over this bank […] [to sponsor our school's homework diary for the children], a supermarket is donating limes for the summer party, yes […] and yesterday, another bank sponsored the prize for the football competition." (Teacher interview 23). In addition, if external partners offer activities for the children, these are usually programs paid for by the parents, and the school thus has less responsibility for its coordination.

When asked whether partnerships and projects form a large part of their duties, Principal Deuft and Vice-Principal Scherk explain: "No, we meet with all of them once a year and then it works just fine!" (Teacher interview 23). In general then, Roseville primary school's professionals experience partnerships and projects as less time-consuming and less linked to additional work than do those of Cross-Square.

These differences, however, are not only a consequence of the different institutional pressures under which the Roseville school operates. Even when faced with similar institutional demands, the Roseville school can provide different organizational "answers" than the Cross-Square school. Its location in Roseville comes with a parental clientele that can provide resources in an uncomplicated fashion, thereby accelerating processes of informal privatization. Parents bring their economic, social, and cultural capital (Bourdieu, 1986) to the school and thus provide alternatives that allow the institution to forgo other forms of cooperation. As Peter, a physician, explains:

> They had two professional dancers and they did this in the third and in the second grade […] and, well, I guess this would not be possible in Cross-Square or similar neighborhoods because it would be unclear how to finance it, and here, we paid for it, the parents paid. (Parent interview 19)

This also releases teachers from the bureaucracy that comes with programs such as the earlier-mentioned "Bildungs- und Teilhabepaket" ("Education and Participation Package"). Instead, teachers can rely on parents' economic capital to cover similar costs. Moreover, the Roseville school receives the support of its friends' association.[3] The principal, P. Deuft, explains:

> 80% of the parents are members […] that's a lot, and they give money and donate; alumni also donate sometimes and, well, ideas don't fail because of a lack of money here, instead, it's sometimes challenging to actually spend all the money. (Teacher interview 23)

This form of fundraising is much simpler, avoids time-intensive applications, and can be used more flexibly—which is quite different from projects that are financed by the neighborhood council in Cross-Square. Although the Cross-Square school also has a friends' association, membership numbers are lower and fees start at €1 per month—incoming donations are "very low," as Helena, one of the few middle-class mothers in Cross-Square, explains (Parent interview 10). The

[3] Charities generally made up of parents and sometimes teachers, with aims such as: raising additional funds for their child's school, providing facilities and equipment, improving the lives and experiences of children attending the school, and fostering good relationships between parents and staff.

additional funds that the friends' association is able to bring in are mostly public funding, thus repeating the logic of publicly funded projects seen earlier.

In Roseville, parents also invest more than their economic capital (Bourdieu, 1986): They contribute their cultural capital, skills, and competencies by offering after-school activities such as a football club or by supporting class instruction. Moreover, parents often assist in the school's daily functioning, as the following anecdote reveals:

> It's the afternoon and I enter the principal's office […] A man in his 30s sits in front of her computer. […] P. Deuft explains that this is a father […] who works for an IT company. He created mailing lists for each class and maintains the school's website in his free time. (Author's field notes, Roseville primary school, January 16, 2013)

It is exactly this kind of additional support that the school in Cross-Square needs to organize externally through partnerships. The principal of Cross-Square's primary school, for example, had to find someone to reorganize the school's computer lab through an outside project. As she explains: "It's complicated and time consuming, and it requires energy and patience" (Author's field notes, Cross-Square primary school, June 19, 2012). In Roseville, the school can often access this kind of support much more directly through parents. Here, parents also use their social capital to support the school. When the school had trouble with their cleaning company, these problems "disappeared." C. Scherk, the vice-principal, explains that a mother had asked her husband, a lawyer, to look at the contract: "He checked what they actually had to clean" (Author's field notes, Roseville primary school, January 30, 2013).

Finally, Roseville's school-as-field is also shaped by the content of the school's partnerships and the kind of projects that are seen as adequate for a school in a privileged neighborhood. Here, the focus is not on child-protection issues, social problems, and additional support for families as in Cross-Square. Rather, children's individual talents and individualistic conditions are at the forefront. Projects often focus on giving students the opportunity to further develop their interests, rather than on providing them with any enrichment at all. Moreover, the *presentation* of children's achievements plays an important role. For example, the theatre, football, and basketball clubs regularly participate in Berlin-wide competitions. Beyond the question of developing talents, issues of concern focus on highly gifted, or highly sensitive children, attention deficit hyperactivity disorder (ADHD), or dyslexia and dyscalculia. When P. Deuft, the principal, talks about expanding partnerships, she focuses on giftedness rather than on intensifying partnerships with the child welfare agency: "In the area of giftedness, we could cooperate much more […] I just went to a meeting on this with the local government […] and we don't focus enough on highly gifted children and they need support as well!" (Author's field notes, Roseville primary school, March 14, 2013).

Roseville also has a teacher who explicitly focuses on supporting children with dyslexia—rather than employing a social worker, who supports families, as in Cross-Square. Berlin's school law (Grundschulverordnung (GsVO), 2005, §16) dictates that all schools must have teachers dedicated to helping dyslexic students; in

practice, this never came up in Cross-Square, highlighting how similar institutional pressures are "activated" differently depending on the local context. It is in these areas that competences and additional knowledge are developed in the Roseville school. This has important consequences as it localizes the school-as-field by fostering a specific focus of attention, taken-for-granted assumptions, and interpretations that differ from the understandings in Cross-Square and thus can add to local inequalities.

The Role of Local Settings for Educational Inequality

In summary, then, neighborhoods localize schools-as-fields by introducing first, as social units, different social compositions, and with it *different objective power positions* within schools as well as different *institutional conflicts* over their legitimacy as organizations; second, as symbolic units, by infusing different *symbolic meanings* and hierarchies that entail various forms of symbolic violence or valorization; and finally, third, as administrative units, by structuring the *institutional pressures* of projects and partnerships that penetrate school-as-fields. Although I have separated these different factors for analytical purposes, they obviously can overlap, interact with, and reinforce each other. Together, they produce diverging field-constellations in different neighborhood contexts as institutional pressures and the objective power relations within and between organizations interact.

Teachers and other educational professionals are thus confronted with very differently localized schools-as-fields. Why is this important? Following Bourdieu, one can argue that different field constellations will also result in diverging daily understandings and taken-for-granted assumptions as well as practices of the actors involved in the field (e.g., Bourdieu, 1997/2000, p. 11). Localized schools-as-fields might thus result in diverging *organizational practices* in different neighborhoods. As I have shown in other writing (Nast, 2020), this becomes apparent in how Roseville and Cross-Square teachers more or less easily accept that their students will experience problems in school and address them with diverging levels of urgency; in the quality of teaching, the degree to which standards are fulfilled and the ways, in which teachers treat children; and in how school problems are framed and which kinds of solutions teachers see as adequate, ranging from contacting the child welfare agency, to calling the police, or sending children to therapy. These diverging organizational practices can differently affect children's chances of getting through school successfully—and can thus add to the already unequal conditions for children growing up in different neighborhood contexts.

To understand educational inequality, it is thus important to take local settings into account. This goes beyond the role of neighborhoods in sorting students into schools and shaping social compositions. As I have shown, if one understands schools as localized fields it becomes apparent how local contexts shape organizational practices in more complex ways. This insight not only helps one to better understand the complex processes that bring about educational inequality

theoretically, but also to highlight how institutional changes in today's cities might play out differently in different contexts and thus might add to new patterns of neighborhood inequality in the field of education and beyond.

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Chapter 10
Setting Aside Settings: On the Contradictory Dynamics of "Flat Earth," "Ordinalization," and "Cold Spot" Education Governing Projects

Susan L. Robertson

Place Matters

Place matters, and for schools located in the neighborhoods of towns and cities, place not only holds meanings for individuals, but also shapes their experiences of school and education trajectories (Massey, 1994). Individuals variously describe schools as "rough," "good," or "posh"—all social attributes that link school places to the social worlds they create. They draw on memories of days past, or teachers who scared, challenged, or looked out for them, to justify their success or lack of it. Yet experiences of school are mediated by structural and social differences. This is because places themselves are shaped by unequal patterns of resource distribution, and particularly so when the possessors of capital and class make strategic use of geographical variation and inequality to secure their own interests. The topographies of place and space are also organized in such a way that they exude politics (Massey, 1994). And this matters for schools. Good schools in expensive neighborhoods are not just an expression of class power; they are spaces where classes advance strategies and negotiate borders so as to secure particular kinds of educational experiences and futures (Ball, 2002).

The relationship between place and the state is also important, for the state has a territorial view of space and its boundaries (Elden, 2013). Its "citizens"—those who claim rights and protections in exchange for ceding some sovereignty to the state—are in turn subjects of the state and the objects of governing. And governing is a political and dynamic process for the state, as it advances ideological projects, seeks legitimacy to rule, and engages in the ongoing management of crisis tendencies in capitalist development (Harvey, 2006).

Schools are important here, for it is through education that the state produces workers and future citizens, fostering their loyalty to the state and society through

S. L. Robertson (✉)
Centre for Science and Policy, University of Cambridge, Cambridge, UK
e-mail: slr69@cam.ac.uk

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imagined communities of the nation (Anderson, 1983). Here the state must manage tensions arising from contradictions in the "social contract"—between the rights of the universal subject and the production of structural differences (Dale & Robertson, 2009). The ideological work of the state—through concepts and strategies such as meritocracy, social mobility, school choice, responsibility, and entrepreneurialism—are just some of the ways the state, ideologically and materially, manages the governing of education, including its contradictions.

In this chapter, I aim to explore these structures, strategies, and relations through an analysis of the spatial nature of socioeconomic differences between schools in England, UK. I do so in the context of significant movement (or rescaling) of education governance activity upward to organizations like the OECD, and at a moment of visible and growing social inequalities within countries like England. In the Foreword to the Social Mobility Commission's *State of the Nation 2017 Report*, Commission Chairman, Alan Milburn, observed of the UK:

> The chances of someone from a disadvantaged background getting on in life are closely linked to where they grow up and choose to make a life for themselves. It has been commonplace in recent years to think of this geographical divide in terms of a north/south divide. The Social Mobility Index paints a more complex picture than that. There is a stark social mobility postcode lottery in our country today. (Social Mobility Commission, 2017a, p. IV)

The devolution to regions (especially Scotland and Wales), the promotion of education markets and choice, the shift from government to governance, the rise of transnational education governance especially through the OECD, the loss of governing powers for many of England's 324 local education authorities, and cuts in funding to social welfare sectors since the 2008 financial crisis have generated new governing challenges alongside spatial inequalities for schools and learners.

A new lexicon has emerged to describe structural inequalities in England. Places with good schools, vibrant labor markets, and positive health indicators are called "hot spots" (Social Mobility Commission, 2017a, 2017b). "Cold spots" are the opposite: a mix of low student attainment scores, weak labor markets, inadequate housing and poor health indicators. New kinds of geographic inequalities now also cut across old ones as the nature of school composition changes. These, in turn, translate into different education trajectories, even amongst the disadvantaged. For example, 50% of disadvantaged students who reside in a well-heeled borough of London (in this case Kensington and Chelsea) are likely to make it to university, whilst only 10% of disadvantaged students in former industrial towns, like Barnsley, find their way to university (Social Mobility Commission, 2017a, 2017b, p. IV).

The consequences are politically important in that such divides not only produce new kinds of disadvantage, but also reproduce old forms of social and political power. As Dorling (2014, p. 2) argues:

> It is geography that reveals just how divided we have become as a society in this country. There are places from which it appears almost impossible to succeed educationally and others where it seems very hard to fail. On any given day, a fifth of children in Britain qualify for free school meals. Just one in 100 of those children get to go to either Oxford or Cambridge University. Four private schools and one highly selective state sixth-form

> college send more children to Oxbridge than do 2,000 other secondary schools. The most prestigious 100 schools secure 30% of all Oxbridge places. And 84 of them are private schools.

If settings matter for schools, how is it that these characteristics of places and the dynamics that shape them are rendered barely visible in the state's accounts of, and interventions in, education in England? And in the face of deepening structural inequalities, how do the state and its shadow sovereigns legitimately govern sectors like education, where education inequalities amplify existing social and economic inequalities? What political work do national league tables of schools' performance and international rankings of student attainment do so as to generate alternative narratives of what accounts for differences? And how is social justice through education parsed so as to manage these legitimation deficits?

In this chapter I argue that a particular politics of state spatial power is at play, and that the national state and shadow sovereigns manage questions of authority and legitimacy through the use of ideologies (e.g., school effectiveness, social mobility), devices (such as rankings and league tables), and explanations of cause (such as aspiration gaps), with which one can rearticulate the problem of difference, not as structurally caused, but as a failure of individual effort, expectations, and aspirations.

Seeing like a State, Spatiality, and Regimes of Sight

It was James C. Scott (1998) who coined the term "seeing like a state." Scott's contribution was to argue that the power to see and make visible particular kinds of entities in the landscape was key to modern statecraft. For the state, this means bringing into view subjects using simplifying devices, such as standardization and rationalizing. Visible subjects are then made *legible* and the object of governing. However, these simplifications are like "abridged maps": They do not represent actual activity in settings but, rather, those activities that interest the official observer (Scott, 1998, p. 3). In the case of the state, the subject is likely to be a potential taxpayer, a defender of the state's territory, or an enforcer of the state's rules (see also Bartl, Papilloud, & Terracher-Lipinski, 2019, p. 15). I can add here those it deems its "citizens" with rights, such as to education, which in turn shapes the state-citizen social contract (Dale & Robertson, 2009; Sassen, 2006). It follows that seeing like a state means flattening the topography of absolute space, and specificities of place, as it engages in territorial governing. Schools are variously "dots" on a map; a numbered "entry" in a ledger; or lumped into a category as an archetypal kind (e.g., in England, an academy school, independent school, grant maintained school, or free school).

The state's authority to govern is dependent on securing legitimacy from its citizens. However, as Ferguson and Gupta (2002) also argue, a cultural politics of authority is also at work. "States are not simply functional bureaucratic apparatuses, but powerful sites of symbolic and cultural reproduction, which are themselves always culturally represented and understood in particular ways" (Ferguson &

Gupta, 2002, p. 981). They ask: "…How is it that people come to experience the state as an entity that has certain spatial characteristics and properties?" Ferguson and Gupta (2002) argue that the modern western state is imagined and materialized through discourses of verticality and encompassment.

Verticality comprises the pervasive idea of the state as "above" civil society, community and family, and of state planning and action being inherently top-down. Community, by way of contrast, is below, closer to "the ground" and authentic. Encompassment constitutes the ever-widening circles—from the local, to the nation, and system of nation states—through which those below are contained. Taken together, the image of vertical encompassment enables the state to sit above an "on-the-ground society," and in so doing project a powerful image of itself as superior, politically and cognitively, and thus effective and authoritative. This kind of spatial imaginary naturalizes state power in relation to those it governs, and its legitimacy is secured through verticality—as, simply, the way things are.

Researchers can utilize the idea of vertical encompassment to gain insights into how international organizations—such as shadow sovereigns—secure degrees of legitimacy for governing sectors over which they have no constitutional authority or hard regulatory power. Indeed, education is constitutionally a national and subnational responsibility. Yet over the past 20 years, the Organization for Economic Co-operation and Development, in particular, has dramatically increased the range of programs aimed at coordinating national education systems. Initiatives like PISA have also been extended to include many non-OECD countries. PISA, which was launched in 2000, is a large-scale assessment tool used every 3 years to rank countries' performances on mathematics, science, and literacy. More recently, the OECD has added a global competence framework to PISA. In 2008, it launched a parallel assessment of teachers—the Teaching and Learning International Survey (TALIS). TALIS operates on a 5-year reporting cycle. Both PISA and TALIS are aimed at improving learning and teaching in those countries they cover.

In monitoring a country's education system or systems, the OECD argues that it was ceded authority to act as an inter-governmental think-tank (Woodward, 2009). By this, the OECD means it has been given powers to act on behalf of the various national governments who authorize, resource, and legitimate its projects and programs. In so doing, it has the capacity to frame and shape national and sub-national education systems. Whilst this is true for OECD member countries where education is nationally governed, in many OECD countries it is not the national state who holds constitutional responsibility for education, but rather subnational states who are not represented (e.g., Germany, Chile, Australia, Canada, and the United States of America). The OECD's PISA also enrolls many more countries than those who are OECD members. How does it legitimate itself in these cases?

The OECD provides itself with a degree of legitimacy through vertical encompassment, as it can reference the authority the member country has bestowed on it. However, it needs more than this in education, especially when it governs non-member countries, and because its mission as a think-tank is to promote economic cooperation and the development of capitalist markets. Other forms of power and authority make up for this lack of regulatory power and the limits of vertical

encompassment: the use of data and statistics, and the OECD's claim to objective expertise (Tröhler, 2014).

Data on populations, and the use of statistics, are well known to states via their census and statistics departments and are an important governing tool of societies and particular populations. The state has an interest in the reliable enumeration of people and things, as it needs to manage those in its territory (and those it wanted to manage out) for the purposes of taxation, security, military service, health, human development, and so on. And as Jasanoff (2017, p. 1) notes: "[I]f you can count something, you can also account for it." Data can be used to point to, and make visible, particular objects/subjects in the landscape. The accumulation of data points, however, must be given a meaning—"as standing for a classifiable, coherent phenomenon in the world" (Jasanoff 2017, p. 2). This information "…must then be actionable, that is, it must show something actual, and something that begs to be investigated, explained or solved" (ibid). Quantities of data, and processes of quantification, tend to flatten reality and nuance in an effort to make things comparable—an issue I return to.

Claims to expertise can be legitimated in different ways. I have found Jasanoff's (2017, p. 3) work on regimes of sight particularly useful here to think about questions of legitimation. A regime of sight has its own politics, standpoints, political claims, legitimating discourses, and set of practices. For example, think-tanks offer expert advice based on "reason" and imply their advice is inclusive of all populations, despite the fact that, in reality, they have both interests and ideological alignments. The politics of their regime of sight is as "a view from everywhere." Scientists, by way of contrast, legitimate their expertise as located outside politics. They claim objectivity as a result of their science being peer reviewed. The politics of this regime of sight is as "a view from no-where." There are several ways in which this seems to happen for the OECD's education programs. As a think-tank for the developed world, its view is one from everywhere in that it claims forms of expertise based on reason, inclusion, and representation. The OECD also commissions work and takes advice from leading scientists to shape the content of its programs. In this sense, the OECD claims legitimacy for its programs via experts who sit outside of politics and whose expertise is presented as objective. When linked to vertical encompassment (above), and data and numbers as objective facts, a combination of regimes of sight—from above, nowhere, and everywhere—enables the OECD to reach down into national territorial spaces to make selective features of education systems visible and actionable.

Ideologies, Devices, and Politics

So far, I have argued that statecraft involves indicating and making visible selective aspects of social life. However, how one represents the world of people and things, and their relations to each other, also matters and has effects. Researchers may use a range of devices here, but these are not just mere devices. Different devices make

certain kinds of representations possible. Devices, powered by data, are epistemic objects, and as such are imbricated with ideology intended to shape consciousness and desire (Robertson & Sorensen, 2018).

A good example can be found in Quinn Slobodian's *Globalists* (2018). He shows how the idea of a world economy came into focus as a response to the Great Depression in the 1930s, and in the search for a global economic solution (Slobodian, 2018, p. 56). One of the more infamous statistical representations was called the Kindleberger Spiral—a circular graph to track the decline in volume of world trade. Slobodian (2018, p. 59) describes this as "barometer vision": a means of measuring the pulse of the world economy and, by doing so, seeking to make visible the laws related to the sequence of economic fluctuations. If one could "see" the economy correctly, he argued, one could prevent future depressions. Over time, scholars have come to take for granted that such representations are a way of "seeing" economic activity. In short, they have come to see as legitimate a particular mode of representation, as if the data and the object were one and the same thing—in this case, the economy and representation of the business cycle.

Representations emerge out of classificatory judgements where "we learn to split, lump together, and assign things and people, including ourselves, to categorical schemas passed on to us" (Fourcade, 2016, p. 175). These categories gain their identifications and authority as a result of being "collectively crafted, sustained, and enforced" (ibid) in ways that take on meaning and stamps of approval. In participating, we are bound to each other.

Fourcade identifies three kinds of classificatory judgements: nominal, cardinal, and ordinal. Nominal scales of measurement are oriented to "essence" as a result of lumping things together (e.g., top performing countries in science; working class). Cardinal scales of measurement and judgements are tied to practices of collecting and accumulating (Fourcade, 2016, p. 177), such as the number of teachers without a teaching qualification (leading to concerns over teacher quality). Ordinal scales of measurement are used to refer to a specified position in a series of things, and the sense in which it is ordered—as in top to bottom, best to worst, more improved to least improved, and so on. These positions are often vertically represented, but they can also be horizontally presented. Vertically represented ordinal judgements typically operate according to a polarity of up and down positions (1–100) of relative ranks (no matter the size of difference either between or across ranks), and are used to imply different judgements and valuations (e.g., well above average to below average).

Modern ordinal judgements tend toward numerical commensuration. In so doing, researchers present them as an objective process of quantification, for example, the top 5 or 10, or 25 countries on the OECD's PISA or TALIS lists of rankings, or the top 50 secondary schools in England at Level 4. Thus, they use comparison and competition to drive learning and improvement in education systems. Elsewhere, I have called this vertically presented ordinal system "vertical vision" (Robertson, 2018). Ordinal systems have their own spatial dynamics. This is because only one entity can occupy one space at a time—although in some cases entities differ only

very marginally. Small differences are amplified, and large differences are scaled back.

Ordinal rankings are also epistemic devices that have inscribed onto their surfaces the spatial politics of the rules of the game being played (in the case of school league tables and PISA, competition for position) and the solution to be actioned (school and system improvement). In England, school effectiveness research has strongly influenced the education policymakers working on solutions. The same applies to the OECD. This epistemic standpoint can be found in the various OECD reports on what makes a good (or quality) school. As I show later in an analysis of England's spatial and social inequalities, the school effectiveness literature has been roundly critiqued for focusing on the internal dynamics of schools, rather than offering a relational account linking the internal to the external. Focusing on the internal dynamics, such as school leaders or clarity of mission, places the full onus on the organization—the teachers in the school—to take responsibility for the students' learning. Similarly, the vertical organization of space sets up relations between schools, countries, and regions that trigger a race to the top, kept in place by learning how to get ahead from those above. Regular cycles of data collection and data presentation add a temporal rhythm to this dynamic.

Whilst difference is important, this is a new kind (as in 1, 2, 3…), where the standardizing of difference imposes a new kind of rationality on a country's education system. This is "standardization not as simple equivalence, but as inequality structured through the form of equivalence" (Mongia, 2007, p. 410). Standardization, as a technique of educational governance, reduces the "volume" of inequality between institutions, suggesting that the race is broadly one amongst equals. Yet as I will show in the following section on inequalities in England, this is far from the case. Many different kinds of schools exist, with different missions, levels of resources, governance structures, modes of accountability, and levels of achievement.

Lumpy Spaces: Spatial and Educational Inequalities in England

Despite the bleaching out of the differences that matter, lived spaces are real, material, and for many, increasingly precarious (Sassen, 2014; Streeck, 2014). There is considerable evidence that socioeconomic and educational inequalities have increased in many OECD countries, especially since the 2008 financial crisis. Streeck charts the shift from a tax state to the debt state, with the state moving the burden of education and social welfare to families, whilst thinning the social safety net.

As early as 2008, the authors of an OECD report—"Growing Unequal? Income Distribution and Poverty in OECD Countries"—flagged rising income inequalities and poverty across a range of OECD countries. Figures for the UK lay well above the OECD average for much of the 1980s and 1990s, but then a reversal set in.

Income inequality fell between 2000 and 2005, a shift that can be attributed to Blair's election in 1997 and Labour Party policy to invest in the social welfare sector. The number of children living in poverty fell from 14% to 10% between the mid-1990s and 2005. Despite this, child poverty rates remained above the levels recorded in the mid-80s (7–8%) and mid-70s (5%) (see OECD, 2008). Nevertheless, the gap between the rich and the poor was still greater in the UK than in three-quarters of OECD countries.

Despite the overall increase in income inequalities across OECD countries,[1] many of whom had embraced neoliberal policies, the OECD was insistent its member countries embrace, rather than retreat from, greater integration into the global world order. The OECD argued what was needed were more adequate statistical infrastructures to monitor changes in poverty and income inequality over time (OECD, 2008, p. 3).

In 2011, the OECD returned to the issue of growing global inequalities in "Divided We Stand" (OECD, 2011). Here, it registered an increase in inequalities in the UK from 2008 onward.

Barely months after the 2008 financial crisis, Sir Michael Marmot was appointed to head England's Commission on Equity and Health Inequalities (Marmot, 2010). The Commission's task was to propose a set of strategies to address the social determinants of health inequalities—two of which were deemed to be related to education. The 2010 Marmot Report made for a sobering read. The lower one's social status, the worse one's health, wellbeing, and life expectancy. Those living in the poorest neighborhoods, on average, died 7 years earlier than those living in the richest. Importantly, the Commission found similar patterns across education level, occupation, and housing conditions (Marmot, 2010, p. 12). Such social and economic conditions, the Report's authors noted, were neither a matter of chance nor bad behavior. Rather, they were caused by social and economic inequalities that shape the nature of child development and learners' levels of achievement.

The widening of these divisions by 2017 led Alan Milburn, (Social Mobility Commission, 2017a) Chair of the Social Mobility Commission, to declare that Britain was a deeply divided nation. Milburn presented the following statistics to show the widening gap's scale and significance: Between 1997 and 2017, (i) the bottom fifth of households saw their incomes increase by just over £10 per week compared to over £300 per week for the top fifth; (ii) the wealthiest 10% of households owned 45% of all household wealth; (iii) in 1998, the highest earners were paid 47 times more than the lowest—by 2015, this gap was 128 times; (iv) in the capital, London, almost two-thirds of workers were university graduates, compared to one third in the Northeast; and (v) a new generational divide had now emerged where poverty had been halved amongst pensioners, whilst many workers were on zero hours contracts or sufficiently low rates of pay to qualify for benefits (Social Mobility Commission, 2017a, pp. 4–5). This was the new working poor. In the

[1] Although Wade and Birdsall (2002) point out that globally inequality was falling largely as a result of the rise in China's wealth.

Foreword to a second report also published in 2017 by the Social Mobility Commission (2017b), its Chairman, Alan Milburn, wrote:

> In Britain today we face profound questions about the country's future … The public mood is sour, sometimes angry. Whole tracts of Britain feel left behind. Whole communities free the benefit of globalisation have passed them by … The growing sense that we have become an us-and-them society is deeply corrosive. (Social Mobility Commission, 2017b, p. 1)

In 2020, the Institute of Health Equity published "The Marmot Review Ten Years On." A decade of austerity policies (Blyth, 2013) dubbed "the punitive turn" in England, presented by policymakers as an inevitable response to the financial crisis, resulted in a bigger gap between those who live in well-off neighborhoods versus those who do not. Over this period, government spending on social welfare declined as a percentage of GDP, including education, public order and safety, housing, and community amenities (Marmot, Allen, Boyce, Goldblatt, & Morrison, 2020, p. 9). And it is not just financial cuts overall, but how and where they have fallen, which has impacted most on inequalities. The most depressed areas—especially in the north of England—have had the greatest reduction in per person spending, including in education, whilst those in England's most deprived neighborhoods show increased levels of poorer attainment as well as school exclusions.

The authors of an Institute for Public Policy Research (IPPR) study (Gill, Quilter-Pinner, & Swift, 2017) show that those permanently excluded from school are four times more likely to have grown up in poverty, seven times more likely to have a special educational need, and ten times more likely to suffer mental health problems. It was in these areas of deepening disadvantage, the "left behind communities" (Sensier & Devine, 2017), that the decisive vote to leave the European Union was won in December 2019.

In its "State of the Nation 2017" report, the Social Mobility Commission (2017a) focused specifically on what it named the "place-based divide" in England. In their report, they show that classic "north/south" spatial divide arguments do not hold. To begin, disadvantaged students in London do better than pupils in any other region, despite the fact that London has the highest levels of childhood deprivation. "Almost three quarters of the best local authority areas in the top 10% are in London, which performs well in both primary and secondary education. Twelve of the best places are in inner London where 26% of secondary students are on free school meals compared with the national rate of 13%" (Social Mobility Commission, 2017a, p. 43). Researchers present its diverse school population, along with better resourcing and qualified (as opposed to unqualified) teachers, as explanations for this difference. They typify London as a social mobility "hot spot."

By way of contrast, some rural, coastal, and former urban manufacturing areas perform badly (Social Mobility Commission, 2017a, p. 43). Researchers call these social mobility "cold spots." They house local authorities and schools making up the bottom 10% of performers on the social mobility index (made up of 16 indicators). Substantially fewer disadvantaged students on free school meals go on to secondary schools rated "good" or "outstanding," compared with a slightly better rate for such students in these areas able to access good or outstanding primary schools (p. 45).

In all of these places, whether as former manufacturing urban areas blighted with structural unemployment, or coastal areas with an aging population, along with socioeconomic deprivation and intergenerational unemployment, the context impinges on families and the school. These areas find it difficult to recruit, and retain, qualified teachers; aspirations are low amongst students; and there are lower levels of funding and investment in the schools and the region. Unsurprisingly, "13% of disadvantaged students in former industrial areas and 14% in remote rural cold spots progress to university compared with 27% in hot spots" (Social Mobility Commission, 2017a, p. V). The report's authors conclude by arguing policy interventions should be given to Regional School Commissioners, new funds should be targeted at these areas aimed at boosting local innovation, and schools in marginal places might form education partnerships across regions to boost expertise (Social Mobility Commission, 2017a, p. 53).

Yet the turn to social mobility as a means of resolving socioeconomic inequalities, epitomized by the establishment of the Social Mobility Commission in 2010, is problematic. Social mobility sounds progressive, but is used to appeal to individuals and their aspirations to leave place and community behind. Attainment gaps are parsed as aspiration gaps. When social mobility is coupled to the ideology of meritocracy—where talent and effort expended on education is rewarded with a better job than one's parents' work—it becomes difficult to see the structural determinants of social inequalities (Littler, 2017).

Multi-Scalar Governing and the Recalibration of Difference

I began this chapter by asking how the national state and OECD govern the education system in the context of growing social inequalities and legitimation deficits. I also asked about the political work that producers of devices like league tables and rankings do so as to transform structural differences into differences to be attributed to the individual's and nation's capacity to learn, aspire, and be socially mobile. In this section, I examine how the OECD "sees" the English education system and what it makes legible, before moving on to look at how the national state also "sees" education objects/institutions and those who are located in these spaces as subjects.

Seeing England's Education System: The OECD

I begin with a focus on the OECD's flagship initiative—PISA, and specifically their PISA 2018 Report on England (Sizmur et al., 2019), in order to compare its account with other accounts presented above on the state of education in England, and in particular what one might learn from it so as to make better policy. PISA is described as:

> … the study of educational achievement organized by the Organization for Economic Co-operation and Development (OECD). PISA is conducted every 3 years; it assesses the abilities of pupils aged 15 in reading, mathematics and science. Pupils are assessed on their competence to address real-life challenges, and each round of PISA focuses on one of the three main areas—reading in 2018. (Sizmur et al., 2019, p. 14)

PISA's "purpose" is clear: to produce statistical data that "enables a government to benchmark education policy and performance, to make evidence-based decisions, and to learn from one another" (Sizmur et al., 2019, p. 14). Learning from one another means taking note of where England is in relation to the 79 other participating countries. These countries are diverse—culturally, politically, and economically—and the tested schools range in location from a city in China (Beijing) to countries in quite different stages of development (cf., Albania, Canada, Morocco, Japan, Vietnam, and Saudi Arabia).

The English state looks out at the local education authorities, networks of providers, and schools. Standing above the English state is the OECD, looking out at the world and bringing England into a relationship of equivalence with the 79 others who make up the PISA countries. Sub-national country-level differences disappear, whilst the topographies of countries are now re-represented by a graduated palette of colored worth. Complex social life in schools is managed using vertical vision, as numerical data points on a vertically-organized ordinal table to represent a country's performance in mathematics, science, and literacy. Worth (as better or worse) is calculated by and calibrated via an average, in this case the OECD average for member countries.

Nevertheless, assessors declare that some socioeconomic and cultural differences matter. In Chap. 3 of the PISA 2018 Report on England (Sizmur et al., 2019), the authors present pupil background characteristics and reading scores, the latter being the main focus for the 2018 Report. They report socioeconomic background as the ESCS Index (economic, social, and cultural status), which they base on student responses to questions about their parent's backgrounds, levels of education, and possessions in the home—a rudimentary and contested conception of social class as stratification, rather than class as domination and exploitation (Skeggs, 2015, p. 206). The assessors set the index to a mean of 0 across OECD countries, with a standard deviation of 1. England's mean score on the ESCS Index was +0.28, meaning that pupils on average have a higher socioeconomic status than the average across OECD countries (p. 58). This representation is at odds with the OECD's data on income inequality and poverty, where the UK is well above the OECD average and rising, suggesting that different sources of data or different modes of representation are used for frequently political purposes.

The report's authors show a gap in attainment between high ESCS Index pupils versus low ESCS Index pupils for England. More advantaged students in England achieved higher reading scores than their less advantaged peers (Sizmur et al., 2019, p. 59). England's national measure of disadvantage is free school meals (FSM). For this report, the authors matched the English PISA sample to the school census database, where 11% were eligible for FSM and 89% were ineligible. Those eligible for FSM score below those ineligible, and this difference is statistically significant.

What the authors do not reveal, but is known from the "Report on Social Mobility" (Social Mobility Commission, 2017a, 2017b), is that this does not hold for all geographic spaces. Students enrolled in London schools receiving FSM are not only likely to perform much better than FSM and non-FSM students in other geographies of England, but as I noted at the start of this chapter, some 50% of disadvantaged students in London (many receiving FSM) find their way to university.

A second sociocultural dimension is ethnicity—with nominal categories such as "mixed," "other," "Asian," and "Black." Again, the PISA data is complemented by a matched England school census data base for ethnicity of participating students (Sizmur et al., 2019, pp. 64–65). The Report's authors reveal that mixed and white pupils achieve, on average, higher mean readings scores on PISA 2018 than pupils from other ethnic groups. Mixed and white pupils significantly outperform Asian and Black pupils. Yet, as this is neither linked to socioeconomic status nor to the geographic location of the school, the authors overlook the poor attainment levels of geographically specific working-class white students in the urban industrial areas, as well as in rural and coastal areas.

Seeing England's Schools: The National State

Despite the significance of the spatial and social inequalities shaping the quality of schooling in England, the national state routinely overlooks these inequalities' importance in its policy interventions. This is not a new problem. Beginning in the 1970s, sociologists pointed to the neglect of context (Ball, 1981; Halsey, 1972; Willis, 1977). In this section, I explore what the English state chooses to make visible, what aspects become the objects of policy intervention, and its "treatments" and "repair" strategies and ideologies. Sociologists like Lupton (2004, 2005), Thrupp (with Thrupp & Lupton, 2006), and Braun, Ball, Maguire and Hoskins (2011) have highlighted this selectivity, arguing that education policymakers must, as a matter of social justice, take seriously the wider structural dynamics that shape school contexts: "Even the same kinds of schools can be different" (Braun et al., 2011, p. 587).

As Thrupp and Lupton (2006, p. 308) observe, it is not just a matter of looking at schools as different from each other with regard to their *internal* organization—such as a school's leadership, its management, or the nature of its pedagogy. Instead, they show that it is the *external* contexts that particularly matter. The external characteristics of the school's context that majorly impact the school can include pupil intake characteristics (such as social class, ethnicity, special needs students, refugee populations), the school's area characteristics (rural, urban, city, industrial), and how it is governed more broadly (local education authority, market position compared to surrounding schools, private).

Drawing on detailed work on schools in New Zealand, Thrupp (1999) shows that socioeconomic composition affects a school's processes in numerous ways. It can boost academic performance in middle- and upper-class settings and drag performance down in low socioeconomic settings. Lupton (2004, 2005) builds on Thrupp's

work to show that even in "ostensibly similar SES schools there are other contextual differences which may cumulatively make a difference to school processes and student achievement" (Thrupp & Lupton, 2006, p. 309). In short, different kinds of difference matter differently!

Whilst disadvantaged contexts impact schools' organization and processes, their effects can also differ significantly from one area to another (Lupton, 2004, p. III). Lupton's (2004, p. 6) study of four disadvantaged schools in very deprived neighborhoods (top 3% most deprived wards in the country) is worth elaborating upon here, for she provides the kind of empirical evidence that illuminates how and why, for example, the social mobility hot and cold spots discussed above exist in the same geographic spaces. Lupton nuances the relationship between context and disadvantage. All four schools had: (i) a proportion of students receiving free school meals (a proxy for deprivation) that was twice the national average; (ii) a higher than average number of students with special needs; and (iii) lower than average prior attainment (as reported in OFSTED inspection reports). Two schools had a majority of pupils whose main language was not English. Yet these differences, she notes, are not reflected in the standard indicators of disadvantage.

Lupton shows that poverty matters, and whilst school managers respond to challenges within their schools arising from SES differences, small numerous additional tasks accumulate in such a way that additional burdens are placed on the teachers and the school. Lupton shows that additional learning needs require relevant resources (especially for ethnic minorities) that teachers either make or acquire. Material poverty amongst families means that the school and not the family must pay for enrichment activities, stretching school resources. All four schools had a number of students who were emotionally disturbed and disruptive in classrooms, so that managing this took a great deal of teacher and school time. Moreover, students with poor attendance profiles made it difficult for teachers to take each day for granted.

A key finding is that there were important differences between each of the four schools. "One poor area was not the same as another" (Lupton, 2004, p. 12); different social and economic characteristics work out differently. Some students from non-English speaking backgrounds had additional burdens placed on them at home that limited their capacity to engage properly. However, they still aspired to do well. Other students from dysfunctional home lives had emotional needs that caused considerable disruption at school. Some white working-class families had negative attitudes to learning, whilst some ethnic families (e.g., Asian) were pro-school. Free school meals (FSM), a proxy for disadvantage, did not always translate into poor student attainment. In different combinations, these differences resulted in more or less favorable contexts for learning. As Lupton notes: "some high FSM, high ethnic minority areas may actually offer more favourable environments for schooling than white, lower FSM areas. Simple poverty and ethnicity measures are not sufficient and may even be misleading" (Lupton, 2004, p. 34). Although it does not hold for all social groups, some first-generation learners are often quite highly motivated and can overcome the limitations of current social class location tied to occupation.

Despite these schools' complexities of difference and their spatial politics, they nevertheless become invisible in school league tables that represent student and school attainment in England. School league tables are produced annually out of large-scale assessments made at particular stages of schooling (Key Stage 2—Year 4; Key Stage 4—Year 10). These tables' producers promise to provide "choosing" families evidence on the quality of the school. They also promise to provide the school with data on its own quality, which in turn leads to school improvement. However, as an indicator of performance and quality, statistics experts are clear that "institutional and subsystems comparisons must be contextualized, principally by making adjustments for student status and achievements on entry to the education system" (Goldstein & Spiegelhalter, 1996, p. 388).

In response to criticisms regarding the crudeness of league table indicators, the UK's Department for Education introduced adjusted (value-added) comparisons between schools and value-added measures (VAM) to capture and judge whether a school had enhanced its students' performances between entry and exit. Yet as Goldstein and Spiegelhalter (1996, p. 388) point out

> … such an aim, although worthy and an improvement on unadjusted 'raw' league tables, is generally unrealizable; adjusted league tables inherit many of the deficiencies of the unadjusted ones and an appreciation of well-established statistical principles of uncertainty measurement needs to inform public debate.

Obscuring the differences that matter, whilst projecting an air of certainty through the seeming objectivity of numbers, closes down the need for public debate.

Like the OECD's PISA results, league tables are also subjected to ordinal classificatory principles to both rank schools (1, 2, 3, and so on) and attribute value—"above average," "average," and "below average." Their vertical arrangement sets up a new moral economy—orchestrated through vertical vision—whose category-making principles produce a new kind of stratified difference: of those who aspire to move up, and those who are anxious not to lose height. As the title of Epseland and Sauder's (2017) book describe them, league tables and rankings are "engines of anxiety" powered along by an emotional economy in such a way as to obscure the role of the state in the reproduction of inequalities.

Sightlines of Social Justice

At one level, PISA provides very little of relevance to English education policymakers concerned with intervening in schools and their communities with robust evidence. By failing to work with policy tools that make visible and actionable structural, spatial socioeconomic and cultural differences, PISA data is almost worthless. At another level, however, PISA is a tool for positioning the English education system's performance in relation to other OECD countries, and in doing so, structures global inequalities into relations of assumed equivalence between countries in a world system (Mongia, 2007). This is Thomas Friedman's (2005)

"flat earth" and "level playing field," pitched by the OECD as important for human capital formation and economic development.

In this sense, national league tables of schools' performance and international rankings of student attainment help generate alternative narratives of difference that researchers should attend to. This imposes a new economy of worth and value onto education—one that brings social justice more into line with principles of market justice rather than social justice (Streeck, 2014). Streeck describes market justice as

> … the distribution of the output of production according to the market evaluation of individual performance, expressed in relative prices; the yardstick for remuneration according to market justice is marginal productivity; the market value of the last unit of output under competitive conditions. (Streeck, 2014, p. 58)

A PISA score is precisely that: a unit of output under competitive conditions.

League tables and rankings, set alongside discourses of social mobility, reinforce the methodological individualism of political liberalism. In so doing, they place the onus for success on both the individual and the school's internal dynamics. By "setting aside settings"—whether at the level of the individual or the school—the national state and the shadow state (OECD) systematically obscure knowledge about the underlying structures and their relations. The use of data and the mobilization of vertical vision work to further distract attention from the contexts that matter, for whom, and how.

In a recent paper, Jonathon Mijs (2019) pointed to the paradox of growing inequality: Across a range of countries, high levels of income inequality and belief in meritocracy seem to go hand in hand. One could assume that the reality of increasing inequalities might be accompanied by popular concerns and legitimation shortfalls, something that I have been concerned with in this paper. Mijs (2019, p. 2) muses over what explanations researchers might consider. One might be lack of information: Lack of knowledge generates lack of concern. A second might be that an unequal society make individuals more tolerant of inequalities. However, in the paper Mijs offers a different explanation. Drawing on the International Social Survey Program (ISSP), with its data-sets covering 23 countries over a 25 year period, Mijs shows that respondents in high inequality countries have come to believe that success in terms of high incomes is not structural but the outcome of a fair, meritocratic process where societal success simply reflects their talent, ambition, and hard work. Low inequality societies believe the opposite. In short, a new kind of common sense has been brokered. With my analysis of the contemporary English education system, I suggest that the ways in which governance instruments are mobilized all but obscure structural inequalities in the state's policy interventions. The ramping up of individualism (choice), of competition (rankings), and the amelioration of discursive interventions (social mobility) all contribute to an articulation between meritocracy and inequality.

So, what is to be done? What are the social justice issues and sightlines here? One might begin with Streeck's conception of social justice as opposed to market justice above. He argues that a social justice perspective is

> … determined by cultural norms and is based on status rather than contract. It follows collective ideas of fairness, correctness and reciprocity, concedes demands for a minimum livelihood irrespective of economic performance or productivity, and recognizes, civil and human rights to such things as health, social security, participation in the life of the community, employment protection and trade unionism. (Streeck, 2014, p. 58)

Thrupp and Lupton (cf., Lupton, 2004, 2005; Thrupp & Lupton, 2006) call for education policies that are contextualized if they are to improve schools is implicitly a social justice perspective. They argue against the one-size-fits-all policies typical of the school effectiveness and school improvement research literatures that England's Department for Education and the OECD favor. As they say, generic discussions necessarily create accounts that are not *just too neutral*, but also too naïve. Those operating on such assumptions perpetuate unequal schooling and unequal outcomes by prioritizing what they value into epistemic objects, and by rendering those things that really matter invisible, and thus unimportant.

The ongoing costs for disadvantaged socioeconomic groups will remain high unless one challenges such governance of education frameworks, not least because this early set of experiences now sets the course for ongoing and accumulating limitations that structure a student's trajectory through education and into the labor market. Britton, Dearden, Shepherd and Vignoles (2016) show that the subject the student studies, at what kind of university, in what region, with what kind of student background (ethnicity, parental occupation, deprivation, and school type), and with what grades all significantly shape future income.

Final Conclusions

I began by arguing that the social nature of place matters for schools. As settings, they are not simply inert backdrops against which education activity happens. Schools are shaped by, and shape, the social-economic, cultural, political, and technological processes and relations in place. Schools are lived spaces of meaning, or to use Massey's words, they are "particular envelopes of time/space" (1994, p. 5). Yet these meanings are not just discursively negotiated; they also emerge out of the socio-materiality of places, as well as being shaped by wider governance projects and processes.

I have elsewhere argued that

> …the structures, processes and practices of education governance frameworks matter, because they shape the form, pattern and scope of education policies and practices, the opportunities they provide, and the outcomes they enable. Education governance frameworks, therefore, both intrinsically and necessarily, have social justice implications in that they structure, and are 'strategically selective' (Jessop, 2005) of, some interests, life chances and social trajectories over others. (Robertson & Dale, 2013, p. 427)

With deepening structural social inequalities, the challenge for both the national state and shadow sovereigns like the OECD is how to legitimately govern education when it is so deeply implicated in reproducing place-based inequalities and social

difference. The state's interests rooted in its dependence on capital accumulation, the contingent alignments of the economic elites with the political elites, and its function as a legitimator of capital have been laid bare. As Dale (1982) has argued, the contradictions for the capitalist state mean holding accumulation, legitimation, and social cohesion together in a contradictory unity.

A more serious engagement with, and recognition of, school contexts by policy-makers at multiple scales (sub-national/national and supra-national) is thus a social justice issue. However, this would mean challenging the state to "see" and account for structural injustices, and to be held account for them. Given that state's top-down view tends to overlook the differences that matter, strengthening teachers as professionals and bringing policy decision-making closer to communities might offer more differentiated responses to an improvement problem requiring diversity, variability, and flexibility (Harris & Chapman, 2004, p. 420).

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Fig. 1 Participants of the symposium "The Role of Socio-Environmental Settings for Learning and Educational Attainment" at the Studio Villa Bosch in Heidelberg, Germany. © Johannes Glückler, Heidelberg

Fig. 2 Villa Bosch, the head office of the Klaus Tschira Foundation, Heidelberg, Germany. © Peter Meusburger, Heidelberg

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