Same, same, but different

A mixed-methods approach to enhance the understanding of spatial social science and the impact of neighborhoods.

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Abstract

Numerous approaches have emerged to encompass the social phenomenon of place. In the search of the meaning of place, researchers often either seek to outline the uniqueness of a single neighborhood with predominantly qualitative methods or reduce complexity of a number of neighborhoods using quantitative methods. They do so by arguing either that the local uniqueness is infinitely complex and thus irreducible or, that the complexity of local cases can be reduced to a few, significant variables by statistical models. This division leads to a fragmented series of local case studies on the one hand and a series of abstracted statistical patterns on the other. We argue that these approaches are not mutually exclusive but interdependent. The partial regularities we encounter statistically can be used as a gateway to understand the complex and contingent structures which cause those regularities. This implies to follow up the statistical analyses with case studies which embed the structural relations in concrete spatial settings. Thus, we argue for an integrated approach.

1.   Introduction

Neighborhood studies have played a major role in social science since the early 19th century (Gieryn, 2002). From small-scale qualitative studies that focus on entities as small as a village of a handful of inhabitants to quantitative studies that compare nations on key social factors, social science has tried to define what a "neighborhood" means and to what extent neighborhoods can explain social phenomena and social order. Since the Chicago School of Sociology inspired the way social science approached the concept of spatial social science, different schools of thought have considered neighborhoods as an inherent theoretical, qualitative, or quantitative concept.

In the last ten years alone, more than 18,000 published studies have examined neighborhood effects and more than half a million published studies in social science have investigated neighborhoods as a key concept[1]. Curiously, fewer than 350 studies published since 2010 in social

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[1] Defined by search queries on https://www.scopus.com/ where the term "Neighborhood effects" or "neighborhood" respectively was a key component of the title of the abstract in all papers in the last 10 years.

science have a primary focus on neighborhoods using mixed methods[2]. This implies that there is a general divide in the way we think of neighborhoods: they are either perceived as unique and infinitely complex and, as such, impossible to encompass with anything other than a deep, qualitative methodology or perceived as containers with common characteristics that can be adjusted for in statistical models. In one perspective, complexity is fundamental and important part of the reason why neighborhoods need to be treated individually, while the other perspective analyzes neighborhoods by reducing complexity by approximating overall traits.

In this paper, we argue that neighborhoods are more than infinitely complex and reducible. We outline an approach encompassing both perspectives described above to ensure not only that the researcher preserves the inherent uniqueness of a neighborhood and allows for unique and local explanations of common (or uncommon) phenomena but also that neighborhood selection, or any other type of case selection, can be done without deep and extensive knowledge of the neighborhood beforehand. The point of the paper is twofold. On one hand, we outline why a mixed methodology is indispensable for identifying a given trait, effect, or concept of a neighborhood, and on the other hand, we outline an approach that provides a less biased selection of cases. We examine how to select neighborhoods that may illuminate the characteristics for explaining vital differences.

2.   Neighborhoods and mixed methods?

The term 'neighborhood' has a double association: with geographical space that which includes a set of homes and with a social construct that identifies the cohabitation within the geographical space. According to Robert Sampson, there can be no theoretical or empirical "right" answer to what a neighborhood consists of (Sampson 2012). Traditionally, the term refers to locally bound, shared values and beliefs. However, neighborhoods form a non-constant entity. The important factor is proximity enabling face-to-face interaction. We may therefore consider 'neighborhood' a variable term that spans from having only a common formal address to establishing what Sampson calls 'collective efficacy', with reference to Albert Banduras' concept of self-efficacy (1997). The term refers to lived social relations supported by local institutions and organizations (R. Sampson, 2012).

We can identify several steps toward a shared identification between people living in proximity to one another. The first step consists of regular interaction, which may lead to mutual recognition. This may further lead to mutual trust, which may facilitate mutual support and assistance. The final step involves sharing an identity as members of a collective of interdependent people with common interests based on the vicinity of their homes. We seek to explain the emergence of this collective efficacy by identifying its basic conditions and causal mechanisms. The types of explanatory factors include geography, material resources and social relations.

Our effort depends on clarifying "how to define and demarcate a place" (McLaughlin et al., 2011). It is impossible to define "place" in any consistent way across different contexts, disciplines, and arenas. Sociologists need to operate with multiple conceptualizations of place in order to include the varied and different social, cultural, historical, and physical qualities of place. It is not sociologically meaningful to define place by administrative boundaries, as these boundaries are often arbitrary and do not always correspond with the meaning people associate with spaced cultures and social relations. For sociologists, place should be considered a

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[2] Adding the term "Mixed methods" in the search query in abstracts in the above selected papers.

differentiated and context-sensitive construct, a variable factor that is tied to social relations that are locally defined and experienced.

Local communities are, of course, subject to general sociological influences, such as demographics, economics, education, ethnic composition, and urbanization. However, local communities are simultaneously influenced by social relations between inhabitants. This social aspect of embeddedness in a neighborhood is expressed as a sense of belonging. It refers to how people identify with a place through social bonds in the form of family ties, friendships or neighborships (Jørgensen et al., 2016). Thus, two communities with identical economic and demographic compositions may demonstrate different social lives: one may be closely integrated, while the other may simply demarcate a common address. To explain how such a difference emerges, we need a dual perspective, particularly a macro-perspective on how and why late-modern societies socially and culturally cluster into local subunits and how social bonds emerge within these subunits. Thus, we need both a perspective from above, namely, "power, position or capital-centered", and from below, namely, "people- or relational-centered". Further we need to connect these perspectives into an integrated framework.

This approach follows Göran Therborn's (1991) distinction between explanatory models, which "treat actors as given and situations as discriminating", and explanations, which presuppose that "people act the way they do because they have certain resources to draw upon" and that people act differently to the extent that their structural locations differ (Therborn, 1991). This distinction enables us to understand how belonging and structural location are changed or maintained as outcomes of actors' choices and actions. It also points out that norms, beliefs, and identities are not reducible to blunt instrumental rationality (Therborn 1991: 189). In agreement with Therborn, we suggest regarding these perspectives as dialectical aspects of the same issue instead of as contradictory positions. As these dual approaches follow very different research designs, we need to reflect on how they may be combined.

This reflection is partly based on the discussion about methods, especially mixed methods (Bryman, 2007; Ho et al., 2007; Plano Clark & Creswell, 2008; Riis, 2001). The discussion is often based on a dichotomy: how much or how little one methodology should be used compared to the other and what the scope and relevance of each method are to the specific research question. In this paper, we outline why this dichotomy can be faulty with the example of neighborhood studies. It aims to combine agency-based and structure-based approaches to connect interpretations of aims and motives with explanations of causal conditions and mechanisms. It especially seeks to interpret the distinct variables of the analysis within the holistic framework within which they operate. Such a comprehensive design is called for to produce a theoretical framework that may guide pragmatic efforts to support neighborhood building.

3.   Extensive analysis – producing an overview

Most research on neighborhoods attempts to understand a specific effect, essence, or outcome of either a generalized set of neighborhoods or of a smaller, finite set of neighborhoods (Benenson et al., 2009; DeSilva et al., 2012; Friedrichs et al., 2003; Johnson Jr et al., 2004; Lynch & Rasmussen, 2004; Sharkey & Elwert, 2011; Zhang, 2004). They typically ask how a type of neighborhood affects the residents within it. This question assumes that neighborhoods are geographically well defined and that the effect is relatively uniform across neighborhoods of a certain type.

The term "neighborhood effects" was coined by Milton Friedman and elaborated by William Wilson (Friedman, 1955; Wilson, 1987). This term has inspired a series of studies that regard

neighborhoods as physical constructs, as observable and measurable. We can, for instance, measure distances between neighborhoods and distinguish the inhabitants of each neighborhood by looking at a map (Duck, 2013; Jackson & Mare, 2007; Sharkey, 2013; Sharkey & El-wert, 2011). The common assumption is that neighborhoods can be defined by perimeters visible on a map. Statistical analyses rely on these borders to separate inhabitants in different neighborhoods.
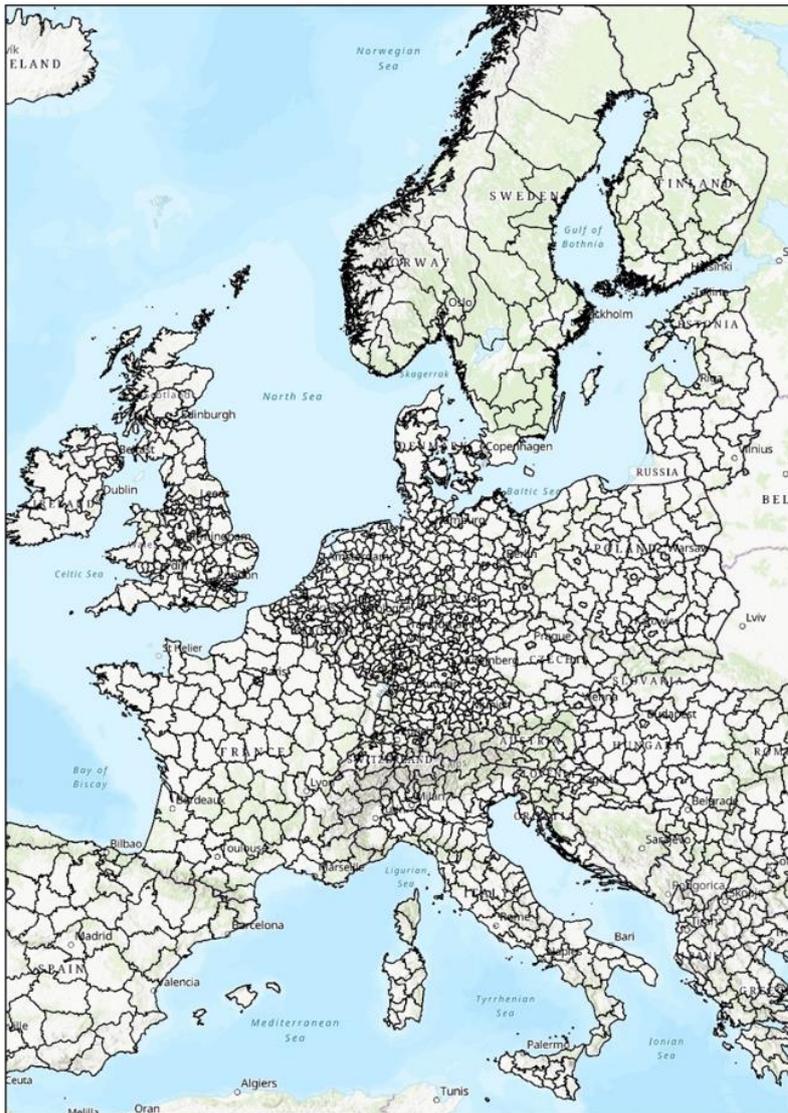

Figure 1: NUTS-level 3

The problem with using static neighborhoods becomes apparent as we realize that the same borders do not apply to social phenomena. The problem occurs when the utilized separators are

expected to encompass other phenomena as well; homogeneity is expected within static areas because we expect the effect to be universal.

The usage of static areas in investigations of geographical distributions is common in studies based on typologies of areas. In the domain of the EU, the use of Nomenclature of Territorial Units for Statistics (NUTS) or local administrative units (LAUs) is the standardized way to understand social geography (European Commission, 2007; Pietrzak et al., 2014). The reason the EU decided to implement standardized units of space was to make cross-country analysis more homogenous by securing similar population sizes within each area unit. However, this approach is difficult to use to investigate area effects, so the EU had to disregard area size and mainly focus on population size. As shown in Figure 1, this has resulted in widely varying area sizes. Some countries, such as France or Germany, have small, high-density area units, where some cities are divided into different areas. Other countries, such as Denmark, Sweden, and Finland, are divided into areas that span hundreds of square kilometers.

This ensures the direct comparability of population sizes but neglects the issue of locally defined neighborhoods and internal concepts of place.

In short, reality does not always cohere with statistical data, especially when the data are coerced to fit specific units of analysis. As an example, areas that are homogenous in terms of income levels might be heterogeneous in terms of educational attainment, employment, family patterns or a plethora of other relevant phenomena. This challenges the idea of easily defined and static neighborhoods. The abovementioned body of literature relies on entities that might not respect community coherence. Thus, the first point of specific, extensive analysis is to base the definition of the area on social phenomena and not the other way around. Only specific and locally driven models can enable us to assess the effects occurring in a hyper-local environment.

Previous studies on neighborhood effects rely on the assumption that the same effect occurs and can be measured in the same way across distances and in different neighborhoods. This assumption is characteristic of classical tests of hypotheses in which neighborhoods are accounted for by statistical control (Fuller et al., 2005; Humberd et al., 2015; Krieger et al., 2017; Pais et al., 2012) and more advanced studies that seek to isolate neighborhood effects by spatial weights or counterfactual methods (Mennis, 2015; Sharkey, 2013; Sharkey & Elwert, 2011; Wei & Ye, 2009; Wodtke et al., 2011). These studies rely on statistical control in some form of regression analysis and rely little on descriptive statistics at any point. To account for the complex body of relevant phenomena, these studies invoke proxies to account for unobserved data, which refer to phenomena we are unable to observe directly but still believe influence the outcome. The overall problem with this approach is twofold. First, it relies on an assumption that proxies have the same underlying effect on the inhabitants of a neighborhood. For example, studies use parents' educational attainment as a measure of human or cultural capital assuming that this capital is universal among neighborhoods and results in the same outcomes. Even in instances where the proxy is supposed to add a control for something else, it still points to an inherent problem in using statistical control or counterfactual models as the only way to reach causal effects: The average effects do not uncover underlying mechanisms that are hidden even for the best set of proxies because we cannot deduce all intricacies inherent to each neighborhood.

Seeking direct causal effects is nothing new in sociology or in science in general. The aim to measure effects is, in fact, the cornerstone of many sciences. Even when the goal is not explicitly formulated as such, the aim remains to uncover some type of causal relationship. This

points to a further assumption, namely, that we can identify the mechanisms of either a finite or generalized set of neighborhoods purely by quantitative data that are measured disconnected from a specific neighborhood. Statistical inference is logically based on a deductive 'if X then Y' hypothesis. A causal hypothesis may be rejected when Y does not follow from X. However, this finding does not indicate how and why X leads to Y. It may point to indicators for causal conditions or mechanisms, but it does not indicate the functioning of the causal mechanisms, as it does not pursue the process of change. This is, however, possible by studying local histories. Thus, we propose to combine extensive and intensive methods. For instance, we cannot infer that a neighborhood is safe and sound simply because we do not observe any violence. It may be infested with gangs engaging in a ceasefire or awaiting the return of their members from prison. Statistical analysis is based on the specification of a small, discrete set of specific variables. To demonstrate how these variables may operate in conjunction, we must investigate specific cases.

This does not imply that statistical analysis is fruitless. Our point is quite the opposite. A statistical descriptive analysis provides a necessary overview for selecting cases for in-depth analysis. Without such an overview, we cannot know what the selected cases may represent. Without a statistical framework, we will not know how to join the available case studies into a complete and meaningful mosaic. In this paper, we suggest a combination of methodologies where quantitative, generalized models provide an overview map that points to challenging cases and calls for a closer and more detailed analysis using qualitative methods.

Descriptive statistics are often thought of as an introduction to advanced analysis; they cannot truly explain causes in themselves. As pointed out above, the causality we seek, especially in neighborhood studies, can be hard to capture by quantifiable proxies. The problem with the isolation strategy, in which the researcher isolates a given effect on a given phenomenon, is that the given phenomenon might not be static, and its cause can differ widely between, and in some instances within, cases. By relying on inferential statistics to discern phenomena, we often overlook simple but powerful tools for looking at data. As an example, very few studies on neighborhood effects use maps as a descriptive tool. When the goal is to isolate effects on a given phenomenon, we argue that a wide range of methodologies must be used to avoid reducing neighborhood dynamics and complexity to a rigid and nonsocial entity.

4. Selecting cases – setting up the microscope

In common language, a case is another term for an example, and thus, it refers to a typology of possible cases. A case is studied to obtain a more complex and profound comprehension of the typology. It is relevant not in itself but as an exemplification of the typology. This general usage is elaborated in social scientific methodology. It refers to exploring a bounded system (Creswell 2007, 73). In Robert Yin's paradigmatically used textbook (2003), a case study is an empirical inquiry that "investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (2003, 13). A case study refers to a type of research design, not to a method, such as ethnography (Yin, 2003, 33). Yin provides a further clue: "A case study would have to cover both the phenomenon of interest and its context, yielding a large number of potentially relevant variables" (2003, 48). According to Yin, the case study inquiry "copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result relies on multiple sources of evidence, with data needing to converge in a triangulation fashion, and as another result benefits from the prior development of theoretical propositions to guide data collection and analysis" (2003, 13-14). Yin stresses that case studies are not sampling units but analytical units, and each case study therefore forms a complete investigation.

This characteristic calls for a further reflection. The 'real-life context' is often pointed out as the vantage of a case study versus a statistical analysis based on decontextualized standardized measurements (Sandelowski et al., 2009). However, we do not posit social scientific methodology in a dilemma between a theoretically abstracted analysis of artificial data on the one hand and an empirically concrete study of divergent, contextualized cases on the other. These approaches should be seen not as mutually exclusive but as supplementary. A case study may indicate what a variable means when it is situated in a real, specific context. The variable blends into its context, and its meaning depends on this situatedness. The meaning of neighbor relations depends on their contextualization. Collective efficacy has different connotations in, say, a farming village, a concrete slum township, and a set of detached luxury villas. Examining it would require very large set of cases. Case studies may supplement quantitative analyses based on a simplified causal model to grasp the complex, interacting relationships of the real world. A case study may indicate whether the applied model provides a reasonable goodness-of-fit or whether it presents a misleading simplification.

Case studies can illustrate and exemplify the meaning of the indicators when they are embedded within a specific local setting. Surveys utilize standardized indicators, but we need to consider what they mean in practice, as with human thoughts and actions. Case studies may further provide arguments for the validity of the measurements utilized by surveys (Riis, 2001, *2022, Onwuebuzie & Johnson in *Plano Clark & Creswell (2008). The meanings of our indicators – closeness and distance, migration and stability, affluence, and deprivation – vary in different contexts, and we need to study the extent and impact of these variations. Cases illuminate the range of differences underneath superficial similarities. Finally, case studies may illuminate the actual processes, conditions and operative mechanisms and thereby identify the causal forces that are hypothetically assumed by regression analyses. Intensive studies can identify not only that variable Y is dependent on X but also how this dependence is operative. Thus, a 'typical case' may be selected according to a characteristic constellation of features in order to illuminate how they interact in practice.

We may also have two further reasons for selecting cases. On one hand, we may select cases that are successful despite their material conditions. This implies studying how certain neighborhoods realize collective efficacy despite relative deprivation. This points to seeking factors that are not available as statistical indicators but that may be illuminated by field observations and interviews.

On the other hand, we may select cases that are affluent regarding material conditions but do not realize collective efficacy. This means cases where the assumed conditions for success were present but were not realized. This implies studying why some neighborhoods produce insulation and mutual alienation, despite their affluent conditions. A case study may thus point to observable factors that block collective efficacy. However, it could also indicate latent factors, which only be inferred by their absence. We need to identify which necessary conditions were missing in such cases. This presupposes a theoretical framework that enables us to form hypotheses about possible factors and outcomes and to establish a framework for a comparative analysis, which contrasts cases with similar conditions but different outcomes and cases with similar outcomes but different conditions (Ragin 2000).

5.   Intensive analyses – making meaningful places tangible

The extensive analysis forms the background for intensive studies of selected cases. Each case study can therefore be initiated with background knowledge obtained from the quantitative

analysis. This directs the search by the investigator for the characteristics of a specific case: What makes it different, despite being same-same?

The level and composition of collective efficacy in a neighborhood cannot be measured without access to the everyday lives of people, groups, and institutions. Qualitative community studies are necessary, whether they involve participant observation or interviewing or both, because they can grasp the richness of social processes, structures, and cultures in ways other research methods cannot, and they allow identifying the impact of the specific place. The functioning of local communities and neighborhoods is a social process that requires several of the conditions for maintaining social cohesion, including collective action, a common public interest, a sufficiently developed social infrastructure, social capital, and a strong local identity. Small local communities or neighborhood groups can encourage the development of social infrastructure in different locations. Such development consists of not only social services networks but also a 'good neighborhood', social recognition, the empowerment of local residents, active participation in public affairs related to the resolution of issues affecting residents' life chances and subjective well-being. Separate neighborhoods and community groups can maintain the formation of common values and identities necessary for increasing the life chances of deprived social groups. Life chances are in this way connected to cohesion, as collective actions involve the type of (local) social interaction that creates mutual senses of being part of society as a whole and of being a part of local social networks in everyday life.

Having identified neighborhoods that are similar in terms of socioeconomic compositions but dissimilar in terms of the focal variable, these specific localities might represent an unknown relation between socioeconomic status, local attachment, and collective efficacy. Obtaining an idea of such unknown relations can be compared with tracking down nonspecific effects of place, which leads to digging into actual locations and conducting qualitative research that can shed light on, e.g., collective action, common public interests, social infrastructure, social capital, local identity, routines, and traditions.

In addition to being physical locations, localities, places, or neighborhoods with certain physical qualities are places (Cresswell, 2012; Lewicka, 2010) that people ascribe a special meaning to; thus, there is a need for a distinction that can grasp the different layers of placement. The meaning that people attach to a place or a neighborhood is usually organized around three social-spatial features: 1. the physical locality and the size of a place or neighborhood, 2. the social relations between neighbors, and 3. the symbolic and imaginative component (Watt & Smets, 2014).

Such research includes all types of local social relations, be it informal relations such as neighborliness, friendship and family or formal activities connected to local nonprofit organizations and other types of local associational life, see Table 1.

	Formal	Informal
Goal oriented	Committees	Celebrations of special occasions
Social orientation	Parties, Excursions	Friendships, chatting

Table 1: Types of local social relationships (Jørgensen, 2005)

It also implies a focus on the experienced size of a locality and on the symbolic component of a locality: is it a desirable or undesirable location to live in or more of an "in-between" location? According to Robert Sampson's concept of collective efficacy, as discussed earlier in this paper, local social relations must be activated and integrated as part of local social routines. Thus, actors, social activities and everyday routines come into focus to determine whether a locality is a community in a traditional sense, characterized by shared expectations and values (McLaughlin et al., 2011; R. J. Sampson et al., 2002). This overall way of addressing the meaning of a place is a break from predefined areas, whether these are administrative boundaries or urban sociological distinctions such as urban, suburban, or rural areas or towns (Gans, 2002). The important point is to analyze and expose the actual features of place as a variety of places with an attached variety of social features.

6.   Intensive analyses: key actors and snowball sampling

To "open up" a location is to read the interactional map of who knows who and how their social ties are; it is about reading the social cartography of a place. The examination of such social relations attached to a locality reveals how structure, culture and interaction interpenetrate (Fine 2010). Focusing on local social relations is, in micro-sociological terms, recognizing group and group life as important dimensions of understanding society. Group life is an ongoing process that is important for identity and for socializing new members. In Fine's words, "these tiny publics are knit together to form institutions, communities and ultimately societies that, although grounded in ongoing interaction scenes, are larger, more established, and more stable" (Fine, 2010). This leads to the conclusion that "…societies are constituted by a network of local worlds" (Fine & Kleinman, 1979).

The microscopic understanding of how routines, habits, and rituals are intertwined with local social relations is central in the search for an explanation of why things have different outcomes in locations that are socioeconomically identical. Local communities, social negotiation and a shared past are microsocial ingredients in understanding how local social communities and relations can produce outcomes and recruit selectively (Fine 2010:371). In practice, this means that we also have to be aware of hierarchies and social divisions and differentiations that take place. Donald Black (1993) argued that the type, scale, and severity of how social control affects individuals depend on social status and intimacy (Black, 1993). Social control, he argues, "appears in a radically uneven pattern across the social landscape" (Black 1993:2), and intimate close relationships lead to a range of types of social control. Social control refers in a broad sense to "how people ought to behave" in social life, how people define and respond to deviant behavior. This type of social control is beyond law, and contrary to law, it does not claim to be universal and independent of different contexts and other types of social variations. In this way, "Local scenes divide and separate, just as they provide a basis for integration between groups" (Fine, 2010; 371).

Key actors within civil society, business life, and local governance are central to "opening up" a locality and obtaining information such as that mentioned above. Key actors have considerable local knowledge about what is going and on who is involved in associational life, who is engaged in central issues, who knows who, how the local social life is divided horizontally and vertically, and so on. Key actors can therefore help identify local routines, habits, and rituals. Their experience is relevant as data, but key actors' knowledge of who is who and who is involved in what might also give an idea about critical cases and about informants who can offer a great deal of information. This is also why "chain sampling" is very common in qualitative enquiries (Given, 2008). Often, a few key informants or cases will be mentioned multiple times and thereby be attributed additional importance (Given 2008) for a qualitative investigation. A key

actor is a person who is socially central to different types of organizations, associations, volunteer and nonprofit organizations, local sports clubs, parochial church councils, homeowners' associations, politicians, public servants, government officers, local factory owners, business owners and so on. Typically, the criteria for selecting key actors for interviews are related to the research question. Key actors who are connected to a specific field or a specific social issue might have important experiences and information. However, it is an empirical question to determine how and whether they are relevant for an investigation.

7.   Connections and perspectives

Extensive study and intensive studies are closely connected in several ways. First, an extensive study points to the choice of cases and their relevance. It indicates which type of neighborhood a case is supposed to belong to and its general characteristics. This brings the selected cases into a comparative framework, indicating similarities and differences. An extensive study joins similar cases together and contrasts cases with divergent conditions. We propose relating local cases one another. A local case does not form an island or oasis. It is related to other localities. It may be a station for the inhabitants at a certain stage in their life cycle, i.e., as students or retirees. It may be an economic habitat for people who service people who live in more affluent neighborhoods. It may be a dormitory for people who are active in daily life outside it. These outward relations also influence inward relations. This comparative framework is the key to a local case and reveals questions that point to other cases as well as similarities and differences. Why is social life so different on the other side of the road? Because of the constellation of individuals?

Second, an extensive study provides background knowledge for an intensive case study by pointing out conditions and characteristics. Extensive data regarding the specific case directs the search for informants, the point of view, and the question. Local data enable the researcher to focus observations and questions and ask what the quantitative indicators mean in the concrete, local context. Local informants are the experts regarding their own locality, but their narrative is embedded in their setting and takes its conditions for granted. They do not possess the general picture. Inhabitants have only a vague comprehension of what distinguishes their own neighborhood from others, while the researcher has a more comprehensive overall picture in mind when addressing a specific neighborhood.

Third, an extensive analysis is descriptive, but this quality allows it to operate as a generator for causal hypotheses. Thus, there is a need for local historical studies that identify the processes. An extensive survey can only identify measurable conditions for change, whereas local histories can describe how actual changes were initiated and implemented. While most modern studies that fall under the "neighborhood effects" category rely on quantifiable proxies to capture social and cultural phenomena, we argue that some social elements will forever be elusive to capture in a quantitative setting given that the researcher has a limited number of variables and measurements available. As an example, one could look at the social life between houses in a neighborhood. While a survey could capture the intensity and quality of between-neighbors communication and even, perhaps, a more in-depth understanding of the different activities that take place, it does not capture the reasons why or the cultural phenomena that drive that specific behavior in that specific place. This does not mean that a survey on neighbor interaction has less value; rather, it means that proxies should be considered carefully and that a mixed-methods approach should be considered, especially when arguing that cultural differences are driving forces in the effect.

Fourth, the combination of extensive and intensive analyses provides a key to go beyond mere empiricism, which presents only quantitative data and produced observations. It does not just identify what happens in studied cases, but it points to latent potentials that have not emerged, such as why resourceful neighborhoods have not nourished a sense of neighborliness. It also reveals why local factors may blur quantitative indicators, such as why indicators of local integration differ between sections of inhabitants and thus average out.

Fifth, intensive local case studies point back to extensive surveys. It is impossible to perform a comprehensive quantitative analysis including all possible combinations of all the available variables. As the case studies provide some answers, they also present new questions, which call for further analyses of the available quantitative data. Intensive case studies may indicate the relevance of an investigation to a constellation of quantitative factors among a certain type of case. An intensive study should therefore be regarded as not providing the final answer but rather as comprising a phase in an extended research process that may involve both further extensive and intensive studies. Thus, the basic research question cannot be static. While the overall question can rely on a "classical" neighborhood effects hypothesis, the researcher must allow for variance and change to the composition of the hypothesis. Social phenomena are rarely static and can, even between very small geographical entities, have some important differences. The effect a researcher studies then becomes a question of not only what the effect is but also where the effect is and under what circumstances the effect emerges.

Social science uses metaphors: Society can be likened to an organism, a mechanism, a computer system, or a structure inhabited by human agents. The appropriate metaphor for the type of localized social study is an ecological field: Agronomists begin with surveying a situation and selecting small sections for intensive studies of local growth. This informs the plans for intervention – fertilization, pesticides, watering, etc. – and harvesting. The big difference is, of course, that plants cannot move by their own will. Human life can rarely be attributed to one specific trait or doctrine. Neighborhoods vary immensely as do the inhabitants within them, and we argue that the only way to capture specific traits within and between neighborhoods is to look with many different eyes and a mixed methodology.

While the overall discussions between methodologies are old (Bryman, 2007), the discussion of when to use applied mixed methods is almost non-existent in neighborhood studies. Place is often seen as a dichotomy as stated above and when mixed methods are applied to place, it's often by utilizing one method as the main method and the other as a much smaller appendix. This paper contributes to mixed methods research by, first, challenge the idea that one method is superior when wanting to isolate or describe specific place-based attributes and second, it suggests that a single methodology cannot do what most neighborhood research claim to do; understand the mechanisms in play when understanding the interaction between human individuals and the place they live.

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