Defining Neighborhoods in Space and Time

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Defining Neighborhood and Community

The terms *community* and *neighborhood* reference some of the most notoriously slippery social science concepts. One publication (Hillery, 1955) appearing more than five decades ago listed more than 90 definitions of community, tapping 16 different themes. The concept of neighborhood is similarly diffuse, precluding scholarly consensus (Keller, 1968). "There are many ways of defining neighborhood" and "different definitions serve different interests" (Brower, 1996: 17). Each of these two concepts has received scholarly attention for a century or more (Burgess, 1925; McKenzie, 1923), has waxed and waned in that period as a topic of interest to both scholars and policymakers, and has been defined in numerous ways.

The core idea of community is "social interaction, common ties, and coresidency" (Brower, 2011: 3). The core idea of neighborhood is that it is "a social/spatial unit of social organization, and that it is larger than a household and smaller than a city. The problem with presenting a further list of definitive characteristics is that they often become *normative* rather than *descriptive*" (Hunter, 1979: 270; emphasis added). Although a neighborhood is geographically delimited, all residents may not strongly agree about exactly where it begins and ends, depending on a range of housing, land use, personal, and political factors (Firey, 1945; Taylor, 2001). Recognizing the important differences between the terms *community* and *neighborhood* (Brower, 1996; Brower and Taylor, 1997; Hunter, 1974; Hunter, 1975), this work uses the term *neighborhood,* given the generally stronger spatial and geographical emphasis linked to this term versus *community*. Quoted materials with the term *community* retain that language.

Key Structural Attributes

In urban and suburban settings, at least in countries such as the United States and Canada and those in Western Europe, neighborhood has several key structural attributes. First, neighborhoods have layers of concentric geography within them, starting with the streetblock or segments thereof (Suttles, 1972). Streetblocks have their own microecological principles (Taylor, 1997). Although the character of and dynamics in a streetblock link to the broader neighborhood setting, residents may feel more socially integrated and safer on their own streetblock compared with locations even a bit farther away (Taylor and Brower, 1985). Additional neighborhood layers extend out from the streetblock and may even include large regions of a city.

No single layer of neighborhood is correct for research or policy purposes. Rather, the spatial scale chosen to represent a neighborhood layer should match the spatial scale of the dynamics considered from a policy or research perspective (Hipp, 2007). For example, if contested drug corners are the focus of policymakers and research analysts, then Thiessen polygons[1] around intersections are conceptually compatible for research, policy, and practice purposes (Taniguchi, Ratcliffe, and Taylor, 2011). From a policy perspective, like that of crime analysts, the key definitional issue may be how the operationalization of the concept links to police resource needs and deployment and to quality-of-life concerns of residents (Buslik, 2009).

Second, neighborhoods are imbricated, or overlapping, for organizational and political economy reasons (Logan and Molotch, 1987). "Overlapping of community boundaries not only produces confusion and ambiguity but means that residents do not necessarily see the city as divided into mutually exclusive local areas" (Hunter, 1974: 87). The ambiguous nature of these boundaries has positive integrative aspects and may reinforce rather than undercut the symbolic functions of neighborhood (Hunter, 1974). Operationalizing these overlapping ideas into workable, bounded, and nonoverlapping neighborhoods presents challenges. Consequently, it is not surprising that police struggle "when defining neighborhoods, applying crime-prevention services, and deploying resources to an area" (Buslik, 2009: 5).

Third, neighborhoods change over time, often because of changes in local organizations and connections between those neighborhoods and outside interests. So it is no surprise that neighborhood boundaries and names change over time as well (Hunter, 1974). A study of empirically derived Baltimore neighborhoods and how their boundaries and names shifted between 1979 and 1995 identified eight different types of boundary and name changes (Taylor, 2001: 303–363). The sizes and types of changes arose from how local power differentials and ecological disparities intersected with one another. The disturbing policy implication was that the places most in need of stable coproduction arrangements with agencies such as police at the same time presented the greatest challenges to such partnerships because of just these changes.

Fourth, neighborhoods are personally variable in contour, character, and salience. Sizable literatures in environmental psychology, community psychology, political science, and geography examine what individual and contextual factors link to how people cognitively organize their neighborhood. Neighborhood cognitions span views about the neighborhood's character, placement of its boundaries, locations of landmarks or pathways (Devlin, 1976; Devlin and Bernstein, 1995; Downs, 1981; Downs and Stea, 1977; Evans, 1980; Evans and Pezdek, 1980; Lynch, 1960), and application of which neighborhood names (Crenson, 1983; Hunter, 1974; Taylor, Gottfredson, and Brower, 1984). Individuals personally construct how and what their neighborhood is and how it changes (Aitken, 1990, 1992). In addition, they have different ways of transacting with their locale, that is, different modes of environmental knowing (Aitken and Bjorklund, 1988; Anooshian, 1996).[2] Those modes may shift over time for individuals (Anooshian and Young, 1981). Further deepening the

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[1] Thiessen polygons around points are such that the area within the polygon is closer to that point than any other point. In this work, the polygons were centered on corners.

[2] Aitken and Bjorklund (1988: 59) identify four modes of "transaction and transformation": "habitual" vs. "purposive behavior" applied to either "ordinary events" or "extraordinary events."

variability, in addition to individual differences and different modes of environmental knowing, is a range of different techniques with different properties. These are used for extracting information about mental maps or for organizing features of such maps (Golledge, 1987; Golledge and Stimson, 1997). The toolkit for examining all these matters has expanded dramatically with the arrival of Geographic Information Systems (GIS) (Golledge, 2003). Given these three sources of personal, mode, and toolkit variation, it is no surprise that people often disagree a lot about neighborhood names and boundaries (Coulton, Chan, and Mikelbank, 2010; Coulton et al., 2001; Lee, 1970).

Once thinking starts about *where* an individual is located relative to a census or community boundary (Rengert and Lockwood, 2009), additional person-place variation is introduced. Finally, overlaid on top of all this psychological and methodological variation are the previously mentioned political (Crenson, 1983; Logan and Molotch, 1987), structural (Hunter, 1974), and small-group (Suttles, 1968) dynamics that are also in play when thinking about labeling or bounding a neighborhood.

To some extent, variation in definitions can be incorporated in a number of meaningful ways for analytic purposes. Census data at the tract, block group, or block levels can be reallocated to correspond to defined areas around an individual or a location. Census-enhanced GIS spatial units can be created (Rengert and Lockwood, 2009; Wilson, 2007). Of course, with different types of units configured different ways, different varieties of the modifiable area unit problem (MAUP) can surface (Openshaw and Taylor, 1979). The MAUP is conceptually related to, but at the same time distinct from, aggregation issues (Oliver, 2001).

Closing Comment

When struggling through graduate school more than three decades ago, I heard one faculty member quip: "this is not so hard." You have to remember only two laws of psychology. First law: "everyone is the same." Second law: "everyone is different." Of course, what he did not add was the hard part: how to know when someone's behavior is evidence of the first law, and when it is evidence of the second law. When researchers think about neighborhoods, they have the same dilemma: all neighborhoods are the same; at the same time, all neighborhoods are different. Key structural commonalities do exist in neighborhoods. Which commonalities will be revealed or hidden depends on numerous factors, not the least of which is the researcher's or policymaker's disciplinary lens. Nested within those very commonalities are important variations in spatial scale, overlap, and temporal durability. These variations are not problematic per se, and may even be functional. The key issue for researchers and policymakers is finding a definition that aligns with theory and policy. Is the definition theoretically congruent with the dynamics of interest? Does it serve the needs of the policies or agencies in question? After those questions are answered, geographic boundaries representing "the" neighborhood can be delineated.

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