

## Chapter 11

# *The elusive geography of communities*

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### CHAPTER SUMMARY

This chapter is a philosophical and historical overview of geographers' concepts of community. Nelson highlights many of the challenges in defining "communities of interest" for redistricting. He also illustrates the idea of functional regionalization and discusses possible ties to redistricting.

### 1 THE GEOGRAPHIC COMMUNITY AS A PRINCIPLE OF REPRESENTATIVE GOVERNMENT

The justification for organizing votes and constituencies in a representative democracy according to spatially defined units is not merely convenience. Electoral systems where representatives are chosen to represent territorial areas are premised on a deeply rooted and ancient assumption that geography is a key structuring factor in political and social communities. But although there is an obvious relationship between geographical terms for electoral units (like *district*, *riding*, *precinct*, or *ward*) and the geographic terms for more substantively constituted spatial units (like *region*, *neighborhood*, *community*, or *polity*), defining the precise interplay between these terms—both conceptually and in terms of actual lines on the map—is far more elusive in practice. For this reason, the principle that electoral districts should represent something known as "communities of interest,"

while widely recognized in common perceptions of good district-making and even established in some cases as a legal requirement, has exerted relatively little force in the campaign to salvage electoral boundary-drawing from partisan manipulation.

In this chapter, I provide a brief overview of the role of space and place in shaping social and political life, and push at the term “community” to investigate its complicated status vis-à-vis territorial definition. I then summarize how geographical methods have been brought to bear on the problem of defining and delineating functional areas for the purposes of administrative activities. Finally, I offer the concept of geographic “coherence” as one desideratum for drawing electoral maps that match as far as possible the underlying patterns of human interaction and codependence. Geographic coherence does not necessarily match exactly with other objectives of good districting schemes, such as competitiveness within a party system or racial proportionality. Yet it offers one potential principle for district-drawing that could mitigate against partisan chicanery while remaining flexible enough to accommodate the wide variety of spatial distributions of political interests found in the real world.

## 2 ARE COMMUNITIES PLACES OR NOT?

In common use, a kind of conceptual homology exists between *geographical places* and social and political *human groups*. Indeed, one of the broadest terms for both of these categories, *community*, may shift from indicating a place to indicating a social group within the course of a single sentence—we refer to communities in one breath as bordered locations inside which one might be spatially located and in the next breath as human groups linked together by some mutual common attribute. A register of other linguistic clues suggests the same conceptual affinity between places and groups: *region* comes from *regio*, the domain ruled by a monarch; *landscape* derives from the Germanic *Landschaft*, a unit of self-government; a *neighborhood* is both a spatial definition used by planners as well as a group of people who share the quality of neighborliness (Crary 1959; Jackson 1964; Minar and Greer 1969; Paasi 1991; Olwig 1996; Chaskin 1997; Looker 2015). And there is no better semantic proof of the relationship between politics and place than the fact that *politics* itself derives from *polis*, referring to the Greek form of social organization within a city’s walls, a term “connecting a human community and a determinate territory.” (Wolff 2014, 801)

Since it is easier to interact with people who are nearby than those who are far away, it stands to reason that space and social structure are closely linked in this way. A basic principle of geography is that people and things that are spatially proximate will be, *ceteris paribus*, more likely to form meaningful and durable patterns of mutual influence than people and things that are far apart. In fact, it is almost impossible to split apart the deeply engrained cognitive metaphor that links commonality and shared location: try to imagine a group of people “together” without automatically picturing them as physically proximate. And how do mathematicians visualize a set of objects with a common attribute? By clustering them together on a page and drawing a border around them, in a Venn diagram.

In various interpretations, the role of spatial proximity and spatial exclusion as a factor in social and political life is the basis for the entire enterprise of human geography. For geographers, space and territory are not neutral containers in which other phenomena take place; instead, they are treated as both the *producers of* and the *productions of* social, political, economic, and cultural formations. And although spatial proximity undoubtedly creates a condition for social interaction and interdependence, it does not necessarily follow that human groups will always coalesce neatly into internally homogenous and externally bounded geographic units. Such categories as ethnicity, race, religion, language, or position within an economic class system are all important dimensions of group affiliation, and, while these may be spatially correlated, they do not necessarily collapse into neatly spatially demarcated territorial objects.

This contingent relationship between territory and community becomes especially clear when considering the historical trajectory of modern social life. With the rise of modern forms of transportation and communication, the intensifying complexities of industrial integration, and the spread of diasporic populations, the “primary community” consisting of face-to-face relationships faded in importance. Thus, social scientists throughout the twentieth century increasingly dismissed the importance of spatial propinquity in producing meaningful and durable forms of community structure. The sociologist Louis Wirth, for example, argued in 1938 that “in the face of the disappearance of the territorial unit as a basis of social solidarity we create interest units,” (Wirth 1938, 23) and the geographer George H. T. Kimble expressed a similar conclusion in 1951: “whatever the pattern of the new age may be, we can be sure that there will be no independent, discrete units in it—no ‘worlds within worlds.’” (Kimble 1951, 173) To observers like these, the ability to read a daily newspaper published a continent away, the rapid migration of huge groups of people to new places, and the standardizing logic of industrial capitalism all offer examples of the de-spatializing forces that were rendering propinquity less and less important as a condition for binding individuals together into meaningful interest groups.

Not coincidentally, the rise of national political parties was one of the historical developments closely tied to the erosion of geographic solidarity. As Mac Donald and Cain (2013) note, the delegate theory of representation implicitly rests on the assumption that “constituents residing within the boundaries of a given district or territorial jurisdiction” will have “widely shared attributes and a greater sense of kinship.” By contrast, in the virtual model of representation, “supra-territorial interests such as a political parties, classes, or organizations” are the basis for a representative’s legitimacy. This duality—on the one hand, communities are geographic places, and, on the other hand, communities are nonspatial interest groups—therefore underlies a basic tension in representative theory. Such a tension is evident even in early disputes over electoral boundary drawing: in Massachusetts at the time of the original gerrymander in the state senate, for instance, the state’s lower house still apportioned representatives based on the fundamental unit of the township—a geographic unit that seemed to exemplify the organic, bound-together form of place-based community (Nelson 2018a)—and thus retained an artifact of the geographic-community delegate model even as Elbridge Gerry’s Democratic-Republican party redrew the map according to the

logic of a virtual, party-based theory of political power. The scandal of this original gerrymander, then, was “not only the undue pursuit of political advantage, but also the disruption of organic geographic communities” (Stephanopoulos 2012, 1408). Vermont retained a system in which townships each sent one representative to the lower house, and counties a representative each to the upper house, until 1965, representing the tenacious historical legacy of geographic-community maximalism.

### 3 THE FUNCTIONAL LOGIC OF REGIONAL DEFINITION

Even as the assumptions of social theory shifted away from the organic concept of place-bound community, the practical problems of how to measure, map, and govern spatially defined entities continued apace, often in the hands of planners, administrators, and statisticians—not to mention electoral commissions. Such questions can be grouped together as the *regionalization problem*: how do we divide space according to some sort of empirical justification rather than merely retaining the boundaries inherited from the past? Here it is worth pausing to note a semantic subtlety. While “region” often carries the connotation of a specific type of unit occupying a scalar size larger than a city but smaller than a nation-state, for regionalization studies in geography, it can refer generically to any spatial unit defined according to some organizational logic, and we can speak about regionalizing an area as small as a classroom or as large as the globe.

The regionalization problem has sharpened at moments where the physical transformation of spatiality has seemed to outpace the administrative functionality of older units. Indeed, the contradistinction of a “functional” area versus a “political” or “historical” area is a basic assumption of such work, one that is retained in the vocabulary of studies like those of “functional urban regions” (Coombes et al. 1982; Noronha and Goodchild 1992). The practical geographic exigencies of administration have long dictated how political units are drawn: to take just two older examples, the medieval parish was based on the layout of the manorial farming system and the limits of church congregation (Whyte 2007), and a circuit court’s jurisdiction was once based on the area that could be traveled by a judge during an era of horse transportation (Glick 2003).

As nineteenth-century governments modernized and rationalized systems like census-taking and postal delivery, the relationship between administrative logic and place definition became even stronger. London, for instance, saw the introduction of a Metropolitan Board of Works in 1855, with a geographical boundary that allowed it to operate according to the drainage lines needed for sewer construction, dictated by topography and gravity, rather than the hodgepodge boundaries of ancient constituencies; and in 1857 a comparable London metropolitan postal district was established to rationalize mail routes. These two single-purpose geographies provided the basis for the wholesale reorganization of metropolitan London under the auspices of the London County Council in 1889, which exercised not only bureaucratic functions like its predecessors, but also gained the

power of a representative body (Saint 1989). The London example suggests the reciprocal structuring process between the material imperatives of the administrative state (the need to run sewage downhill demanded a rupture of older municipal boundaries based on a vanished manorial system) and the geographical structure of a political body (a metropolitan public works district also needed a tax base, a representative body, and, ultimately, a defined constituency on which to base its legitimacy).

This period saw countless examples of industrialized metropolises experimenting with similar territorial reforms as their physical forms diverged from historic boundary lines. New York consolidated its five boroughs in 1898, a geographic fusion that seems obvious in retrospect, but that was fiercely opposed by many Brooklynites, who did not consider themselves part of the same political community as Manhattan (Henschel 1895; Coler 1899). Reformers in Boston sought a similar metropolitan consolidation in the 1890s, with one influential journalist calling the metropolitan area “the true Boston—geographical Boston, as distinguished from political Boston” (Baxter 1891). Figure 1 shows the multiple overlapping functional districts in the Boston metropolitan area in the 1930s, forming a ill-defined but nevertheless considerably integrated metropolitan community. So many cities across the industrialized world went through similar territorial explosions at this time that the influential Scottish planner-geographer Patrick Geddes coined the term “conurbation” to refer to the new type of urban form created by cities growing into one another (Geddes 1915).

Since the early twentieth century, geographers have taken considerable interest in the empirics and methodologies of this regionalization problem. Some of the earliest academic works in geography were attempts to classify the world into regions according to climatic, biological, and geomorphological attributes. As the discipline formalized in the early twentieth century, the goal of identifying geographic objects remained paramount: when J. G. Granö sought to define geography’s mandate in 1929, he called it “a science that forms entities” (Granö 1997). With the rise of urban geography and regional studies in the first half of the twentieth century, efforts to define the regional economic geography of metropolitan integration (Dickinson 1934), understand the regional subdivisions of nation-states (Ogilvie 1928; National Resources Committee 1935), or establish methods for regional survey (Hudson 1936) became key undertakings. Figure 2 shows a New Deal-era study of “natural community” boundaries that were meant to serve as the outlines for county planning districts in Oregon.

During the middle of the century, as geography turned toward statistical methods in its attempt to become a formal spatial science, and deepened its integration with governmental planning bureaucracies, work on the regionalization problem became ever more of an exercise in descriptive modeling—and geographers became gradually less interested in hazy terms like “community” that lent themselves poorly to statistical analysis. Functional geographical definitions such as the “metropolitan statistical area” have their origins in this line of research (Berry, Goheen, and Goldstein 1969; Berry 1964; Nystuen 1968; Bunge 1966). As innovative and sophisticated as these research programs were, they nevertheless began to drift away from the concept of a region as a socially or politically constitutive

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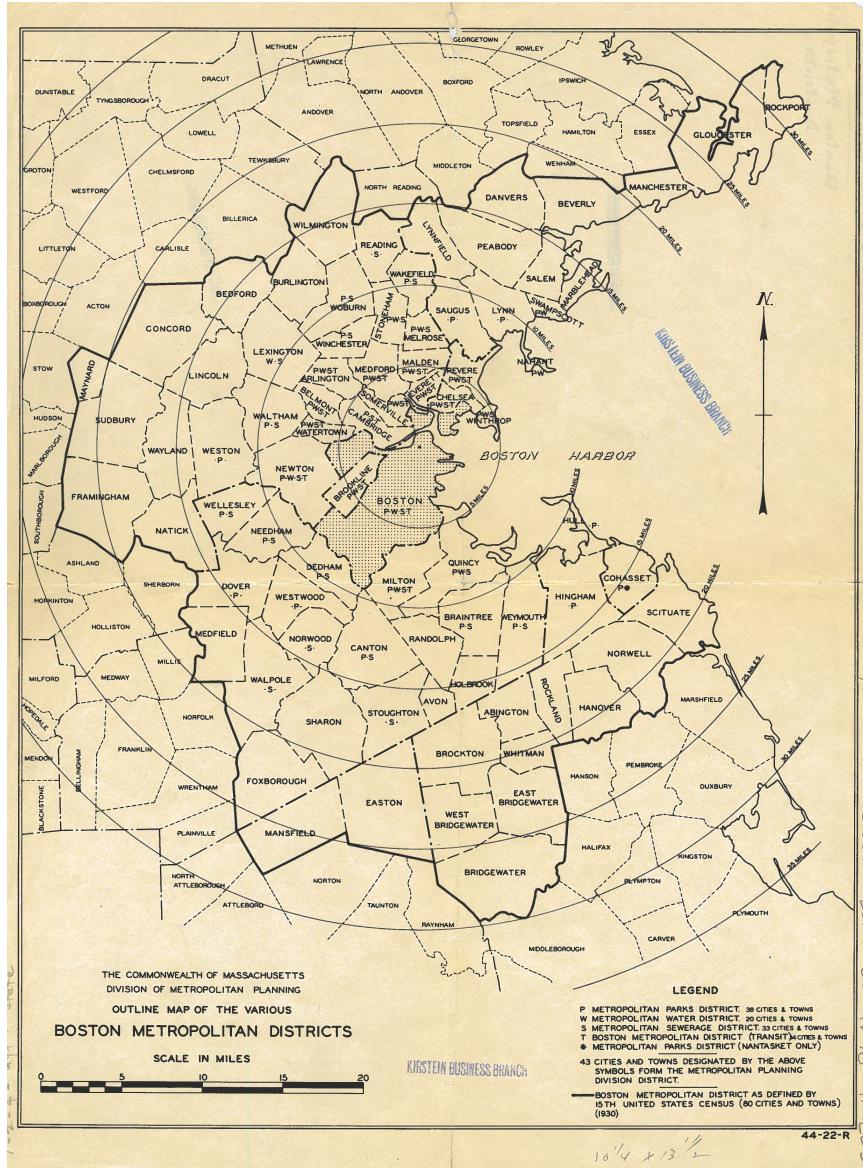


Figure 1: Multiple ways of districting metropolitan Boston, 1930s. From the Commonwealth of Massachusetts Division of Metropolitan Planning. Courtesy of the Leventhal Map & Education Center at the Boston Public Library.

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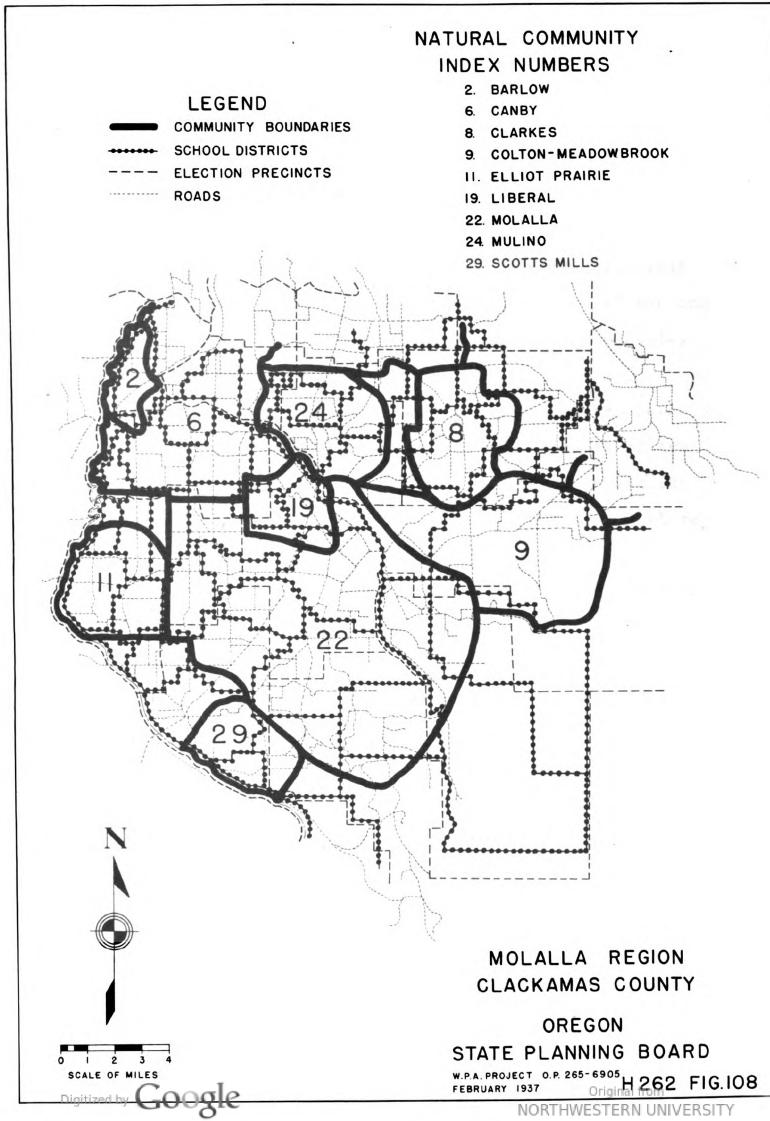


Figure 2: Districting in Oregon, from "A study of natural communities in three Oregon counties: an attempt to determine the importance of natural communities as a basis for community planning in country districts"

object: regions became merely objects of scientific categorization, rather than the building-blocks of group life that had been posited by earlier approaches steeped in cultural and historical studies.

## 4 GEOGRAPHIC COHERENCE: FROM EMPIRICAL EVIDENCE TO THE STRUCTURE OF A POLITY

A suggestive link between the regionalization problem and the larger theoretical question of whether and how spatiality structures group life can be found in Geddes's work, which included both an empirical study of emergent urban consolidation as well as a meditation on "the coming polity," in which he questioned what forms of spatial organization were most suitable for a democratic society transformed by the material conditions of modern life (Branford and Geddes 1917). The word *polity*, in fact, lies at the very heart of the conceptual intersection of territory, community, electoral representation. If common interests forged through the conditions of geographic proximity really do structure community life and form a mass of people into a meaningfully identifiable polity, then ensuring that these groups are represented within a representative or federal system becomes a matter of crucial importance. Should—and can—the boundaries of an electoral district be drawn so that they match the boundary lines of a polity?

This brings us back to the question of why and how we should organize our electoral constituencies according to geography. How can it be that, on the one hand, space and propinquity are losing their relevance as structuring factors for group life in a globalized world, and, on the other, that places and boundaries still retain their essential importance in defining political jurisdictions? Part of the reason is historical lag: our concepts of political authority and citizenship have not yet caught up to the scrambled spatial conditions of the present day. Yet part of the reason is that, in spite of airline travel and the Internet, places still are enormously important in defining interdependence and mutuality.

Moreover, the relationship between place and representation remains deeply embedded in the theoretical and legal framework of modern democracies. "The roots of Anglo-American political representation lie in the representation of communities, not individuals," writes Gardner (2002, 1243; see also Gardner 2006). "Originally, representation in Parliament was a metaphorical representation of *the land itself*" [emphasis added]. As Gardner argues, the trend in twentieth-century liberal philosophy has elevated the atomized individual over the constitutive community as the basic quantum of political representation—a theoretical shift very much in parallel with the observation of the social scientists like Wirth or Kimble who saw geographic community as a relic of premodernity. Yet, as Gardner argues, by way of recourse to John Dewey, Nancy Schwartz, and Hannah Arendt, it is the common political action of a community, situated in place, acting through its representatives, that "continually reconstitutes the polity" (2002, 1248).

This principle of hewing electoral districts according to geographic patterns of social structure is given voice in the numerous legal mandates to respect the so-called “community of interest” when drawing electoral maps (Brennan Center for Justice 2010). When explaining what exactly is meant by a “community of interest,” lawmakers have usually invoked the same confusing slippage between spatial and nonspatial forms of group life that has been the discussion of this chapter. The Colorado constitution requires that “communities of interest, including ethnic, cultural, economic, trade area, geographic, and demographic factors, shall be preserved within a single district wherever possible.” Vermont statute requires “recognition and maintenance of patterns of geography, social interaction, trade, political ties, and common interests.” The California constitution requires that “the geographic integrity of any city, county, city and county, local neighborhood, or local community of interest shall be respected in a manner that minimizes their division to the extent possible,” and goes on to note that “a community of interest is a contiguous population which shares common social and economic interests.”

If respecting of communities of interest remains a legal desideratum for electoral maps, the actual definition of *where* communities of interest exist is elusive, and, due to this ambiguity, violations of the community of interest principle have been difficult to prove in court. As one legal scholar writes, “despite the widespread application of the concept, most states fail to define communities of interest thoroughly, rendering such statutes difficult to enforce” (Malone 1997, 467). Although the concept of a community of interest may make intuitive sense, when pressed to locate where exactly a community of interest begins and ends, its practical utility begins to fall apart. First of all, there is no standard for what dimensions of community ought to be prioritized. An economic area defined in terms of a labor-market area may be very different from a cultural region, which may in turn be different from a media-market circulation area. Second, even if the large set of potential community variables were narrowed down to just a single one, the spatial distribution of nearly every variable is fuzzy-edged, shading off at the periphery without any clearly demarcated border.

As the geographer Richard L. Morrill writes, the community of interest requirements express the belief that one basis for representation in a democracy is “territorial—not of arbitrary aggregations of geography for the purpose of conducting elections, but as meaningful entities which have legitimate collective interests that arise from citizens identifying themselves with real places and areas” (Morrill 1987, 253). Of course, the casual reference to so-called *real* places and areas is much easier to mention in passing than it is to rigorously define: is a commuter megaregion real? What about a neighborhood with no functional status but a strong sense of community identity? A statistical tabulation area? A historical culture-region?

It may be wise to sidestep the thorny ontological question of what constitutes “real places and areas” and to turn instead to a principle of geographic *coherence*, which can, first of all, be meaningfully tested against empirical measures of spatial structure, and, second of all, provide the theoretical outline for a flexible but nevertheless durable concept of geographic polity. If we accept that it is impossible to draw an absolute border around a perfectly self-enclosed social and political unit, it does not necessarily follow that *any* border we draw is utterly arbitrary. There are

indeed meaningful—and detectible—patterns of group integration that we should seek to respect when drawing electoral boundaries.

How, exactly, are these “detectible”? On the one hand, statistical techniques in network science and clustering, many of them drawn from work undertaken on the regionalization problem, offer frameworks for delineating functional regions that do not require an *a priori* use of existing political borders. To take just one example, Alasdair Rae and I have shown how a massively complex network of commuting patterns resolves into sensible regional groupings when subjected to a community detection algorithm (Nelson and Rae 2016). Commuter flows are just one of many types of interactions that connect people to one another and bind them into place-bound communities, but measuring how well or how poorly a proposed districting system respects these functional threads of human co-dependence offers one possible test for a map’s correspondence with at least one dimension of community interest. I have suggested a measure called the “ELBRIDGE score”—electoral boundary resemblance to identifiable geography—that tests how many threads of functional connection a districting scheme interrupts, with the assumption that a better map will sever fewer (Nelson 2018b). Figure 3 shows the Congressional districts of Indiana overlaid on top of commuter flow lines of commuters who both live and work inside the state’s borders. Under the principle of geographic coherence, a good district map will try to preserve as many of these functionally integrated areas as possible, so that district lines also enclose interdependent webs of commuter-based community patterns.

But it is important to recognize that not all patterns of geographic community will lend themselves so easily to statistical interpretation. In addition to these mathematical measures of coherence, we must consider the intuitive sense of citizens’ own geographical fields of belonging and mutuality. As Mac Donald and Cain (2013) write regarding the gathering of public testimony for California’s redistricting commission, individuals reveal important preferences about their sense of community that cannot be derived from demographic measures alone. Taking into account these qualitative definitions of geographic coherence is necessary if an electoral map wishes to promote citizens feeling as though their district boundaries match with boundaries that are meaningful in their actual lives.

However, geographic coherence alone cannot provide the sole principle for a just electoral system. Place-bound communities undoubtedly have genuine stakes within a representative democracy; they define the limits of important sets of common problem and interests, and they form the outlines for meaningful classifications of self-identification. Yet, due to the myriad ways in which geography has served as an anti-equalitarian tool—most persistently and infamously in racial segregation, but also in numerous other forms of spatial concentration of privilege and exclusion—it is crucial not to exclusively valorize geographic community over all other desiderata in a representative system. Wherever possible, geographic coherence should be respected in a districting scheme in order to preserve and promote communities of interest. But if such a principle has the knock-on effect of reinscribing patterns of unequal community standing, then it should be carefully weighed against competing principles such as the right of minority representation.

The geographer Carl Sauer, in a little-noticed 1918 research article, sought to “show

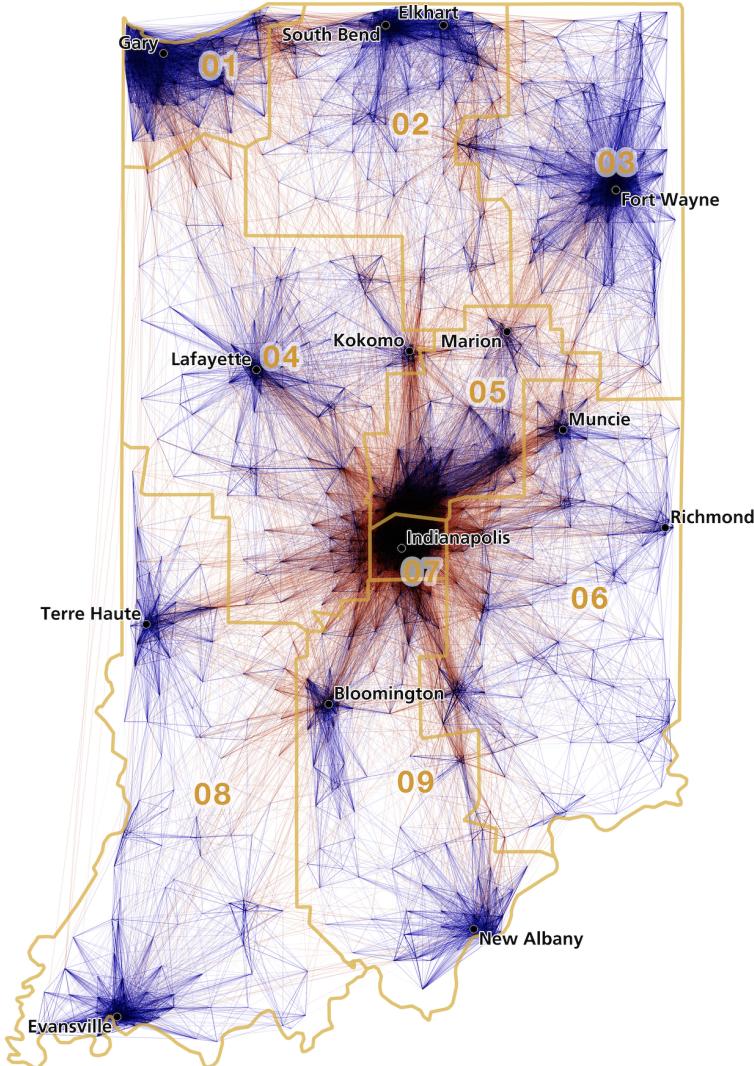


Figure 3: Commuter flows as a potential basis for regions. Commuter flows are overlaid on top of electoral district boundaries; purple flows begin and end in the same district (thus matching functional geography with electoral geography) whereas orange flows cross a district boundary (suggesting that a district “severs” a natural community). Indiana represents a state with a relatively high “ELBRIDGE score.”

the gerrymander to be a violation of the geographic unity of regions and to indicate the possibilities of equitable representation by reorganizing electoral districts on a geographic basis" (Sauer 1918, 404). Sauer was writing at a time when the organic principle of geographic "unity" still carried more currency than today. Yet we can retain Sauer's principle even if we reject the idea that social structure perfectly segments into a neat partition of spatial units: "reorganizing electoral districts on a geographic basis" would mean developing both a set of empirics and, perhaps more importantly, a set of political principles that identify the spatially structured polity—which is to say, a more substantive synonym for "community of interest"—as a key building block for political representation. The reason for doing so is not simply because appealing to geographically coherent communities of interest offers one tool for mitigating against partisan gerrymandering, but more broadly because such a method recognizes the important ways in which communities, representatives, places, and political action reciprocally structure one another.

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