

Toward a Geography of a World Without Maps: Lessons from Ptolemy and Postal Codes

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Discussions within geography of the history of the concepts of “space” and “place” are often Whiggish rehearsals of perceived mistakes and misapprehensions; there is little sense that earlier understandings of the concepts have anything important to offer the contemporary geographer. Conversely, one finds little that suggests that reflections on contemporary life might shed light on those now seemingly antiquated concepts. Both views are unfortunate. In fact, viewed from the perspective of current practice, the classical division of *topos/choros/geos* makes sense not, as is commonly thought, as an ontologically oriented oversimple conceptualization of scalar differences but, rather, as an outgrowth of epistemological differences. The discourses that emerged around those concepts—topography, chorography, and geography—each relied upon a different way of knowing, storing, and communicating knowledge. Indeed, in the absence of the appropriate affording technologies—the map and the data storage device—we had a world without space, which (along with its conceptual relatives, including the “geographic”) emerged as a relatively recent invention. At the same time, against the background of this rereading of the concepts of space and place, much that occurs today turns out to be a matter of place, not space. In fact, the concept of space typically operates either metaphorically or reflectively, and the current practice of using the terms almost interchangeably (as with the practice of using the term “spatiality” to refer to matters concerning both space and place) merely obscures. *Key Words:* *space, place, spatiality, information technology, ZIP Codes.*

Geographers have long struggled with the question of the relationship between humans and the environment. Are humans part of nature or have they fallen away from it, victims of their own reason, hubris, or desire? Are people’s actions somehow determined by the environments within which they live? The products of those ruminations have often been characterized in scientific texts through images of boxes—their borders solid or dashed, their interiors empty, solid, or hachured—and arrows—thick or thin, single- or multiheaded. Very often, alongside the boxes for people and nature there are additional ones representing society or technology viewed as mediating or determining factors. Those representations have laid out not merely the particular answer being adduced but also the grammar of possible answers. We are part of nature or not. We affect nature; nature affects us; or we affect one another.

Within geography there have been a parallel set of discussions about the relationships between humans and space. And they have, in a sense, followed the same tack. If the names have been different, the boxes and arrows have been familiar. Yet, as in the case of the nature-human issue, one has often felt trapped within a world, the limits of which are circumscribed by a set of representations. Here Wittgenstein’s “The limits of my language mean the limits of my world” (Wittgenstein 1961, § 5.62) seems painfully true.

For many students of the human-nature question there has seemed to be a way out: the key has been to see “nature” itself as a “construction,” as a concept—or entity—that has a history, that came into being at a particular moment, and that can only be understood against the background of other similarly historicized and particularized concepts (Tuan 1971; Oelschlaeger 1991; Cronon 1996). But in the case of the human-space issue, this tack has seldom been taken. Granted, even a cursory glance at the geographical literature will reveal a landfill-sized collection of works claiming that “space is constructed.” But, nonetheless, space is naturalized, taken always to have existed. And one looks almost in vain for works that suggest that just as there was once a world without nature, there might have been, or might today be, a world without space.

That, though, is what I wish to argue here. While there is good reason to believe that places, and the concept of place, are quite ancient, there is equally good reason to believe that the concept of space arose rather recently and that it is, in fact, an invention. The invention of the concept of space was, in a fundamental way, dependent on the development of a particular set of technologies, those used for the storage of knowledge, or of what we might today prefer to call information. Finally, the invention of the idea of space and its gradual application within a wide range of sciences, as well as

within popular culture, ought not to mislead us into thinking that it is appropriate today to speak as though we live in a thoroughly spatial world; indeed, much that occurs in the world today can be understood only if we take seriously the idea that it is not in any significant way spatial, but is instead grounded within places alone.

This article has two parts. In the first, I offer a brief sketch of three traditional geographic ideas—*topos*, *choros*, and *geos*. The standard reading of those classical ideas—that the three differ by virtue of the scale at which they view the world—presumes just what it ought to question, the notion that we can point to some permanent and overarching groundwork within which all exists. In contrast, the distinction among *topos*, *choros*, and *geos*, and among their associated geographical subjects, the topographic, the chorographic, and the geographic, needs to be seen as one among three modes of geographical knowing, each with its own ontological commitments. A part of what we today think of as the subject matter of the discipline of geography, the part that Ptolemy termed the “geographic” and that we often think of as the spatial, emerged long after the other two. The emergence of a concept of space was connected with the emergence of a set of technologies that enabled one to gain, store, and have access to knowledge of phenomena in space. Here, perhaps surprisingly, the map was not necessarily one of them.

Granting that this may seem an unfamiliar set of claims, in the second section I address the matter from a different and more familiar perspective. I show that in the recent development of the U.S. Postal Service we see this same history, this move from a topographic/chorographic world to a world that at least claims to be dominated by the geographic, as one might say, writ small. I use this example advisedly, not to pick on the Postal Service or to suggest that there has been something special about its evolution but rather to suggest that the development there is very much of a piece with developments seen elsewhere.

Until the early 1960s, the delivery of the mail in the United States was a purely topographic enterprise. In this case, that meant that the delivery of the mail occurred almost completely without the use of maps. Rather, the postal system operated through the use of the standard topographic means of information storage, through embodied knowledge and its representation in narrative form. It was only with the development of the ZIP Code, in the early 1960s, that a chorographic feature of postal addresses emerged, as particular ZIP Codes came to be symbolically associated with particular social, cultural, and demographic characteristics. And it was not until the 1980s that the Postal Service “went geographic”; at that

point it adopted the map as a guiding device, one that drove the creation of the nine-digit ZIP+4 system, as it had not driven the earlier systems that it subsumed and (rather unsuccessfully) attempted to replace.

The example of the Postal Service suggests that much of everyday life goes on in a world without space. The geographic did not, as many might like to believe, emerge, once and for all in the time of Eratosthenes, or Ptolemy, or Varenius, or Newton, Halley, and Harrison. Rather, it has emerged and continues to reemerge in particular places under particular conditions. Indeed, as in the case of the Postal Service, much of what goes on in the world is not, and will never be, geographic, at least in Ptolemy’s narrow, spatial sense of the term; rather, it is enmeshed in particular places and in the practices, ideas, and symbols that constitute those places. And even in the case of those places that seem somehow “the most spatial,” the most carpentered or measured or simplified or interrelated, actions of the sort that create the topographic and the chorographic are always at work.

Hence, to argue about the “impact” of technology on space or spatial organization is to miss a critical point, which is that technologies inevitably operate within places, and that it is—and was—from within places that space emerged. This argument will resonate with more recent claims, extending back through works of scholars like Gillian Rose (1999) and Judith Butler (1996), to Austin (1975), Searle (1969), and perhaps Wittgenstein (2001), about the performative nature of human activity. If it is true that through a performance the letter carrier creates a kind of place, the postal carrier route, it is equally true that the cartographer and bureaucrat who created the nine-digit ZIP Code that lies at the heart of the “going geographic” of the Postal Service were engaged in performances that created not just places but also, in a different way, space.

Topos, Choros, Geos

Students of the history of geography have long struggled through discussions of three traditional Greek terms, *topos*, *choros*, and *geos*. Conventionally, *topos* has been viewed as referring to place, *choros* to region, and *geos* to the face of the earth. Hence, we have three ways of doing what is broadly termed geography—the topographic, the chorographic, and the geographic—and each is directed at a different object. In this view the distinction amounts to a matter of scale; it has been imagined that places combine to constitute regions, which in turn combine into the earth as a whole.

If there have over the last thirty or so years been increasingly visible and animated discussions of place,

region, and space, these discussions have, by and large, left aside the topos-choros-geos triad, assuming that there is little of interest to be found there.¹ Here, though, drawing upon work by Lukermann (1961), Walter (1988), and Miller (1995), I shall attempt to resuscitate the concepts by taking seriously the possibility that when looked at in the proper way there is among them a difference that makes a difference. This work is not, I hasten to add, an inquiry into the “real meaning” of the concepts, and it is not an attempt to elaborate the “real history” of the concepts. Neither is it an attempt to rein in the immense catalog of objects that at various places and times have been called maps. Rather, I attempt in the case of each concept to point to certain technologies and practices in a way that highlights the differences among the three. My goal is less to achieve some sort of historical accuracy than to illuminate some features of space and place and of current discourse about them.

On Chorography

Chorography, the oldest of the three terms, began its formal existence as a branch of astrology (Barton 1994). It was not until the middle of the seventeenth century that a clean break between the two was effected in the later work of the first truly modern geographer, Bernhardus Varenius (1650; see also Lukermann 1963). This connection with astrology points to two central features of chorography. One is that, like astrology, chorography attempts to find some order in the world by seeing a relationship between events and the places and times at which they have occurred. In astrology one can sort people in terms of the places and times of their births, in a classification system that stores this knowledge in terms of the configuration of objects in the heavens (Ptolemy 1940). Similarly, the earliest chorographers stored information about the face of the earth in terms of those same celestial objects. So, for example, by the beginning of the Christian era a system had been developed that divided the surface of the earth into a number (five, six, or seven) of horizontal bands, or *klimata*, each with a different character. From the configuration of the heavens one could tell whether one was in the torrid, temperate, or frigid zone, and within each existed a different way of life—or, in the case of the torrid, no life at all. Each zone was a separate and identifiable region.

Second, and again as in the case of astrology, the chorographic was not a quantitative system, and the surface of the earth was not seen as a surface of infinite variation. Although today we have a tendency to see

these zones as defined in terms of the spatial and geographic system of latitude (and longitude), this way of seeing *klimata* in fact misinterprets them and misrepresents the chorographic. Portions of the torrid zone were not more and less torrid. Rather, the torrid zone was torrid.

From the point of view of my argument here, the important thing to note is that a chorographic account could exist in the absence of any map of the earth or, indeed, any form of writing. And this is because the world itself—terrestrial and celestial—acted as what one today might think of as a kind of information storage device, one that operated via what amounted to a set of signs or symbols. In Hesiod, for example, we find the admonitions:

When the Pleiades born of Atlas rise before the sun, begin the reaping; the ploughing, when they set . . .

—(Hesiod 1988, 48)

When the carryhouse [snail] climbs up the plants to escape the Pleiades, then digging of vines is past, it is time to sharpen sickles and wake up the labourers. Avoid shady seats and sleeping till sunrise at harvest time.

—(Hesiod 1988, 54)

Here something in the heavens is a sign that it is the time and place to engage in a set of actions. Note that this is not a simple unilinear relationship; the snail climbs the plants at a particular time, and that time, too, is connected with—and not simply signified by—something in the heavens. The world is one wherein objects and events exist in and are elements of multiple webs of significance. And although in Hesiod the world described is very much one in which the written word is not a part of everyday life, this appeal in the chorographic to signs and symbols persists after the widespread use of writing; we see an early version in Hippocrates (1950 [~ 400 BC]), where people who live in a particular area are described as having particular personalities, or medical conditions, or as being of a particular cultural type. And, as we shall see, we find it alive and well in the twenty-first century.

On Topography

Based upon the root “choros,” the chorographic was later joined by the related topos, and thence topography. If chorography is these days something known only to geographers, the term “topography” has had rather a different and more visible history. The term once referred to “a verbal description of a place,” then came to refer to “the practice of delineating a place, usually on a

map,” and finally came to be used to refer to “the characteristics of a place,” as in “Vermont has interesting topography.”²

If we turn to the earliest of the three definitions, where topography involves the description of a place, there may seem little but scale to distinguish it from the chorographic. But it seems to me useful here to turn away from this now-conventional way of looking at the matter and, as in the case of the chorographic, consider the topographic to have at one time been quite distinct from the practice of mapping, and to have involved the description of places in terms of words rather than inscribed, visual images.

There is in fact good reason to take this tack. Consider the example of the *periploi*, accounts of “sailing around” some place that are well known among topographical descriptions. In one of the most famous of these, the *periplus* of Hanno (apparently from the first half of the fifth century), we read that

We quickly sailed out and passed a land full of fire and incense. . . . Frightened, we quickly sailed away from there also, and sailing on for four days we saw by night the land full of fire. . . . [W]e came to a gulf called Horn of the South. In the gulf there was an island, like the first, and containing a lake. On the lake was another island full of wild men.

—(Ramin 1976, 120)

Today, of course, any account of the *periploi* includes a map. But as Dilke (1985) points out, it is unlikely that the originals contained maps; they were simply narrative in form.

Topography, Chorography, and the Art of Memory

Indeed, if the word *topos* itself emerged after the invention of writing, it is nonetheless useful to try to rethink the topographic against the background of verbal activities that do not involve writing. I find telling the connection between the rhetorician’s use of “topics” and the use in oratory of memory systems that rely upon the construction of a memory palace. It has long been recognized that while users of Western languages are, by and large, notoriously bad at holding lists of unrelated things in memory, when those things are embedded in a narrative or associated with symbols they become far easier to remember. This fact was, of course, the basis for the codified “art of memory,” described by Cicero (1964) and analyzed by a number of recent historians, notably Frances Yates (1966) and Mary Carruthers (1992).

Briefly put, the art of memory is a system by virtue of which one is able to commit to memory a list of items, either words (such as a poem) or the names of objects.

The user of the system first constructs a set of places, which will be a permanent part of that individual’s system. The places are typically rooms within a mansion; the important thing is for the user to have a clear sense of what is next to what and of how to get from one room to another. When confronted with a set of items to be memorized, one puts the system to use by figuratively placing the items, sequentially, within the rooms, in a way that creates memorable associations. If the first name on the list is “Smith,” one might place a horseshoe on a hall table, with the idea that horseshoes remind one of blacksmiths, that in turn remind one of the name “Smith.” And so on.

The system, in fact, works through the interconnection of three processes. First, one constructs a narrative of the route from room to room and of the objects in each. Second, because the user of the system has spent considerable time constructing the rooms and moving among them, it is possible imaginatively to simulate the experience of moving from room to room. In a sense, one appeals to the well-known gambit, in trying to find a lost item, of placing oneself in the place where one last remembered seeing it and then retracing one’s steps. And, finally, one appeals to the ways in which objects have symbolic associations, such as the association between horseshoe and blacksmith, and blacksmith and Smith.

It should be clear that the first two elements of the art of memory, the use of narrative and the appeal to the experience of moving between locations, are closely connected to what I have termed the “topographic.” The topographic aims to describe places by describing what one experiences as one moves around within a place and relies upon the relative ease of remembering the nature of places when those accounts are couched within narrative terms. (From this perspective, the comment by Fred Lukermann that in classical geography, “‘Topography’ was defined as the order of discrete units one to another . . . [and referred] solely to the contiguity of places” [Lukermann 1961, 194] takes on a very different meaning.) And the art of memory draws upon that same experience, and those same narratives, to different ends.

At the same time, turning the art of memory around, one could very well say that it shows the way in which the carrying out of actions in given locations, described within narratives and repeated in ways that express what is possible—and not possible—within those locations, that is, the process through which a memory palace is created and maintained, is just the way in which places are created.³ In the topographic tradition one creates a new place by acting, routinizing, narrating, and in the process, creating an account of what constitutes a place,

of what in a place is possible and what is not possible. Places are performed.

In one sense, then, the underlying structure of topographic accounts and of places defined within them seems in clear contrast to that of the chorographic. The chorographic traditionally centered around the identification of places on the surface of the earth, where those places were characterized in symbolic terms, and where they were imagined as having an existence independent of humans. Klimata would exist whether people did or not.

But I noted above that within the art of memory a central matter is the association to their referents of objects placed figuratively within a memory palace. In a sense, the memory palace, constructed through a topographic process, is itself filled with objects the essential function of which is symbolic. We see this in the description of place-making by French geographer Paul Vidal de la Blache; in his 1903 *Tableau de la Géographie de la France*,⁴ Vidal declared,

It is man who reveals a country's individuality by moulding it to his own use. He establishes a connection between unrelated features, substituting for the random effects of local circumstances a systematic co-operation of forces. Only then does a country acquire a specific character differentiating it from others, till at length it becomes, as it were, a medal struck in the likeness of a people.

—(1928, 14)

For Vidal, the everyday activities of human life result in the alteration of the landscape, though today it would be more common to see him as describing the construction, perhaps the social construction, of a place. The landscape begins to transcend the everyday accounts of the activities that constitute it and can from a different—chorographic—perspective be seen as a whole, as a medal, as a symbol. So, one way to see the difference between the topographic and the chorographic is to see the former as in a number of ways appealing to activities and to performances that occur in time—whether walking through a place or telling a story about walking through it or, later, drawing the route through it—and to see time as associated with the chorographic in a very different way, as where the configuration of the heavens constitutes a sign that the time is right for some activity.

At the same time, though, if we turn back to the way in which signs operative in the chorographic function as information storage devices, we need look no further than astrology to find a case in which narratives provide means of keeping track and making sense of otherwise disparate and difficult-to-remember information. This is

one aspect of what I would take to be a fundamental instability in the ontology of places, where places understood topographically come to be re-seen chorographically, and vice versa.⁵

The premises that underlay the formal art of memory retained a general currency well into the seventeenth century and the rise of what Foucault (1973) termed the “Classical Age.” In *On memory and reminiscence* (Sorabji 2004), Aristotle had noted that we tend to bring things to memory by a process of association. One image brings another to mind. This happens, he says, in three ways: through contiguity, or similarity, or conflict. If Aristotle applied this model to memory, others applied it to mental operations more generally, and thereby to the structure of the world itself. Indeed, and as a number of scholars have pointed out (Yates 1966; Bolzoni 1991), it long underpinned scientific practice and provided a model for the organization of knowledge. Abjuring the now-conventional cladistic model of classification, it organized knowledge through association. Institutionalized in museums (Findlen 1994) and in curiosity cabinets and *Wunderkammer* (Bolzoni 1991; Meadow 2002), it attempted to provide a model of the universe and, at the same time, a model of knowledge. One could move from any part of the model, by a process of association, to any other. The physical model, as developed by, for example, Camillo, was imagined as a model of the universe that was, in a sense, isomorphic with, but not a spatial mapping of, the universe. Like my characterization of both the embodied and narrativized knowledge of the topographic and the symbolic order that defines the chorographic, the physical model fundamentally holds that things or people or activities belong in particular places, where one important way of characterizing that relationship is in terms of associations.

On Geography

But if this idea of belonging was central within chorographic and topographic understandings of place, it had already, by the time of Aristotle, become possible to argue that “[p]lace is what contains that of which it is the place . . . [and] place can be left behind by the thing and is separable” (Aristotle 1941, 211a 1–3). Aristotle laid out an alternate vision, wherein what is important will turn out to be space, and not place, and where space will come to be conceptualized as an inert container.

Ptolemy, working within a context in which writing had become the primary mode of storing knowledge, adopted the model of the container to advance the aim

of chorography as

the description of the individual parts, as if one were to draw merely an ear or an eye. . . . [C]horography deals, for the most part, with the nature rather than with the size of the lands.

—(Ptolemy 1948, 163)

In contrast, the geographic

is concerned with quantitative rather than with qualitative matters, since it has regard in every case for the correct proportions of distances, but only in the case of the more general features does it concern itself with securing a likeness, and then only with respect to configuration. . . . [W]hile chorography does not require the mathematical method, in geography this method plays the chief part.

—(Ptolemy 1948, 163–64)

When Ptolemy turns away from the chorographic to the geographic, his concern turns to the representation of the entire surface of the earth; his *geography* relies upon mathematics as a means for “securing a likeness” of the earth. He diverges from the traditional division of the world into *klimata*, creating a representation of the world in which a grid of lines of latitude and longitude is laid over the world; if the division of the world into *klimata* established regions of essential difference, in Ptolemy the lines are reduced to the status of markers on a surface of infinite variation.

In a sense, what today counts as the geographic was well established in Ptolemy. There is an approach to representation wherein it is imagined that the earth can be seen as a surface divisible by a mathematical grid. The earth is imagined in visual terms and as though from above. And the elements on the earth are represented in ways that suggest that their locations are merely contingent. But built into these premises are two others. First, within the context of the geographic, places and regions are locations that can be represented cartographically. Second, there is no intrinsic order among the elements that constitute places and regions. If we can see in the topographic a world ordered in terms of narrative and in the chorographic one ordered in terms of semiotic relationships, in the geographic, the order is extrinsic, applied by an author imagining himself or herself to be an external observer.

But this means that the geographic lacks the mnemonic underpinning that patterns of associations provided for the chorographic and the topographic. As a consequence, it requires a substantial medium for the storage of its content. So it is difficult (though not impossible, as we see in the case of those early geographic information systems that lacked a mapping facility) to

see the geographic flourishing in the absence of the cartographic and of a cartographic that uses a medium that is permanent, portable, and reproducible.

Put in another way, the development of the cartographic provides a means for the storage of masses of information, where that information is coded in terms of a system of spatial coordinates. Here the model of knowledge expressed in the *Wunderkammer* appears hopelessly ill equipped to deal with a universe that is a space and not a place. In a spatial universe one is committed to a different model for the organization and representation of knowledge, one that is not bound by the needs of the mnemonic and one that can classify objects and individuals in multiple ways. This model, where objects in a homogeneous space are classified in terms of sets of characteristics or attributes, is, of course, the model that has over the last several hundred years come to be taken as a form of common sense in science and has, at the same time, been institutionalized as the central way in which governments keep track of land and people (Heller and Brooke-Rose 1986; Hacking 1990; Caplan and Torpey 2001).

Lessons from the Postal Service

But if the geographic seems to have achieved a sort of rhetorical hegemony in some areas of human life, it is important to see that this has not been universally so. Indeed, within an oral culture, or within oral portions of literate cultures—and there are a great many of these—it is not merely possible, but common, to see oneself as residing in a world of places and regions, a world without maps and without space. Even though we are increasingly surrounded by maps, people today very largely live out their lives with little attention to or need of them. The remarkable thing is that this has become so difficult to see. In the popular imagination, the topographic and chorographic lie in the penumbra of the geographic. Perhaps surprisingly, the recent history of the Postal Service provides a case in point.

The Carrier Route

In the United States, it is largely taken for granted that every residence and business has an address, consisting typically of a street number, a street name, a municipality, and, finally, a state. The Postal Service has, until the recent intervention of emergency preparedness and homeland security interests, been the arbiter of addresses, and this has seemed, in part, to place it firmly on the side of the geographic. But the matter is in fact far more complex than that. Indeed, on inspection one finds

within the operations of the Postal Service elements of the topographic, the chorographic, and the geographic.

Consider the issue of the sorting of mail. Prior to the development of the ZIP Code and of computerized sorting methods, the process worked in the following way: When a person mailed a letter, that letter went to a local post office, then to a sorting facility, then perhaps to a larger regional sorting facility, from there to a sorting facility near the destination, and then to a destination post office. Depending on the size of the facilities from which the letter was sent and to which it was addressed, there were more or fewer steps in the process, but it was essentially one of a move up and down a hierarchy.

When a letter arrived in the destination post office, it was necessary that it be “cased,” sorted into a shelving system consisting of slots organized in the order of the letter carrier’s route, which was, and is, called a carrier route. Most post offices had a number of letter carriers, and hence a number of carrier routes—as many as twenty or more. After the sorting process was completed, the carrier walked or drove the route and delivered the letters. This is, by and large, the process used today, and it is, more or less, the process that letter carriers have always used.

The decision to direct a letter to one carrier’s station rather than another was made by a person who needed to know every address within a postal jurisdiction and to know the letter carrier who delivered to that address. And, as might be expected, in a larger city learning this mass of information was a substantial task. Indeed, the organization, storage, and retrieval of a large number of disconnected facts is just the sort of task that most people find difficult, or even impossible, without recourse to technological aids. Where such aids were not available, some letter sorters made recourse to the art of memory. In his *Post Office* (1971), the autobiographical novel by beat author Charles Bukowski, postal worker Henry Chinaski is forced by a vicious supervisor to learn, over a weekend, all of the postal routes and addresses within a huge Los Angeles territory. Desperate, Chinaski invents a system right out of the art of memory, but with a typically Bukowskian slant. In his memory palace, each room is occupied by a gorgeous woman, each one ready to engage in a different and more exotic form of sex. With the help of the system, Chinaski learns the routes and escapes what had seemed a certain punishment, abuse and then unemployment.

This appeal to the art of memory and the narrativization of the carrier route, of course, points to the topographic roots of the process of sorting the mail. These roots are also in evidence in the delivery of the mail. The letter carrier delivers the mail along a

narrativized route; the route varies little each day and, having been learned, it can be traversed with little conscious attention. It is like the “familiar path” that the biologist Jakob von Uexküll (1957) described. This is not a world captured in maps, or lists, or other written descriptions.

The ZIP Code

If the topographic underpinnings of the Postal Service were, in one sense, obscured by the existence of a numbered street address system, they came to be obscured in a different way after the development in the early 1960s of the ZIP Code. The process of the sorting of mail had been relatively simple in those smaller municipalities that had only one post office. But increasing urbanization, and the growth of the total mail stream itself, meant that an increasing portion of the mail was going to areas served by several post offices, and there it was necessary that someone, at some point, be able to look at a street address and determine to what post office it needed to be routed. In cities such as New York, Chicago, and Los Angeles, this was no mean feat.

The process was aided in part by the use in those cities of postal zones that gave a number to each post office; in Los Angeles, for example, Westwood would have been zone twenty-four, and an address would have been designated “Los Angeles 24, Cal.” But under the sweeping technical reorganization instituted under President Kennedy, a system for associating numbers with all post offices and all addresses was established. In that five-digit system, the Zone Improvement Plan (ZIP), the first digit referred to a region, the next two digits to a subregion, and the last two to a post office. In metropolitan areas, the last two digits might have been the previous postal zone; in others they were simply arbitrary. Each letter carrier’s route was further designated, numerically, by a number, such as CR 03, so the original, 1963 system was in effect a seven-digit one, dividing the country into units of perhaps 500 mailing addresses.

Originally, the intention of the Post Office Department was that ZIP Codes be used only by corporations and other entities that engaged in large-scale mailing. It was assumed that the everyday personal mail sent by individuals, an increasingly small portion of the total mail stream, could operate as it always had. So, as a means of encouraging the use of the ZIP Code, the Post Office offered discounts to those who used it to send multiple items to a single ZIP Code or carrier route, and then presorted their mail accordingly. Given this in-

centive, the direct-marketing industry immediately saw the advantage of directing their marketing efforts at the scale of the carrier route and ZIP Code. By 1967, articles in journals such as the *Direct Marketing* (ZIP code 1967) and *Harvard Business Review* (Baier 1967) extolled the virtues of ZIP-code-based marketing.

But if it was now possible, for example, for a company to sort through its sales records and in that way find the carrier routes that seemed most likely to contain good prospects, there were real limitations to this process. How could one determine which carrier routes were adjacent to which? What if one wanted to send mail to everyone who lived near a particular store? And how might one learn more about residents of a particular area, about their demographic characteristics?

Knowing that the Bureau of the Census collected mountains of demographic data, and had begun to do so in a form that allowed those data to be mapped by census tract, block group, and even block, direct marketers sought maps of ZIP Codes. But there were no such maps. Although using data that it had, or to which it had access, the Post Office would have been able to create them, it found them irrelevant. Within the operations of the Postal Service a map of a ZIP Code, or of a carrier route, had no ontological status.

Undeterred, private industry created those maps. They created them, in effect, by drawing the route traced by each letter carrier, then drawing a boundary between it and its neighbor—in order to create a map of a carrier route—and then drawing a boundary around all of the carrier routes that shared a single ZIP Code—in order to create a map of a ZIP Code. The regions created were based upon topographic constructs.

Yet the creators of the maps made them into very much more, as the root of a new industry, the geodemographics industry. Drawing upon Postal Service address data and combining those data with other data, including publicly available government data and then increasing amounts of consumer information, several companies, notably Claritas and CACI, and then others, created computerized systems based upon the premise that, as Claritas put it, “You are where you live,” or “YAWYL” (Walsh 1982; D. J. Curry 1992; Goss 1994; Phillips and Curry 2003).

Operating first at larger levels of aggregation, the geodemographics companies gradually narrowed their focus. Increasingly claiming that the “where” in “You are where you live” could better be described at the carrier-route level, then the level of twenty households, and then even fewer—perhaps three to five—they maintained the view that at some scale it was possible to find regions that truly were homogeneous. They argued that

at that level one could find a set of signs, key purchases, ways of dress, types of residence, that represented the place and everyone within it. At some level, they claimed, we live in a world in which chorography works. And that was true, they somewhat perplexingly claimed, even if those areal units were in some basic way artifacts of labor relations agreements within the Postal Service and of the daily travail of the postal worker.

The Postal Service Goes Geographic

Almost as soon as it was created, the ZIP Code system was in need of upgrading. A number of factors—including the still increasing size of the mail stream, and especially of so-called junk mail from direct marketers, pressures to decrease costs, pressures brought on by employee unions, the privatization of the Post Office Department, and its transformation into the Postal Service—pointed to what some perceived as a need for a system that would allow for greater automation. Beginning in the 1970s, the Postal Service established bulk mail centers, which used automated letter-sorting machines (LSMs) and optical character readers (OCRs) in order to route the mail. But at some point it was still necessary that a person with local knowledge decide which letters were to go into the letter carrier’s pouch, and in which order. The solution seemed to be a more detailed coding system.

And so, the Postal Service embarked upon an addition to the five-digit ZIP Code. The new nine-digit system, or “ZIP+4,” would not simply add two digits to the existing “ZIP Code plus two-digit carrier route” system. Rather,

[t]he sixth and seventh numbers denote a delivery sector, which may be several blocks, a group of streets, a group of post office boxes, several office buildings, a single high-rise office building, a large apartment building, or a small geographic area. The last two numbers denote a delivery segment, which might be one floor of an office building, one side of a street between intersecting streets, specific departments in a firm, or a group of post office boxes.

—(U.S. Postal Service 1993)

Hence, in one address in Los Angeles where the five-digit ZIP code is “90025,” the ZIP Code+carrier route is “90025 C021” and the nine-digit ZIP Code is “90025-5018.”

With the addition of a multiline optical character reader (MLOCR) that both reads an address on the face of a piece of mail and sprays on that piece a bar code that includes the nine-digit ZIP Code plus the last two digits of the delivery address (the “delivery point”),

it then became possible automatically to sort mail into the order in which the letter carrier was expected to walk a route.

But at the same time, in the ZIP Code plus four system the Postal Service firmly embedded its topographic system within one that located individual addresses on a map and that did so in a way that not only allowed but, in an important sense, required that the system be mapped. In 1983, with the introduction of the new ZIP Code, the Postal Service added the geographic to its now long-entrenched topographic and chorographic elements.

If this would seem for most Americans to be the end of the story, there has, in fact, been a coda to it, as over the last several years the Postal Service took a further step toward operating within a system that uses geographic foundations as more fundamental elements of its everyday work. Beginning in the 1980s (and the process continues), the Postal Service embarked on an ambitious program to create a new “legible” system of addresses throughout rural America. The traditional rural address system had been based on a system of rural routes, where a house would have an address such as “Route 2, Box 185.” These were carrier routes, as in cities, but what distinguished them was that on the whole, the box (meaning free-standing roadside mailbox) number was typically given out chronologically; a new house was given the next available number.

This order made no particular difference when the population of rural areas was relatively stable and services were provided locally. But the growth of rural areas, in concert with the replacement of local services with regionally organized ones, set the stage for a change. Arguing that the development of universal emergency calling numbers, such as 911 used in the United States, was an important goal, local governments pressed for a readdressing of rural areas (M. R. Curry, Phillips, and Regan 2004). The new system, based on data derived from GPS-based surveys, gives each house an address based upon its distance in hundredths or thousandths of a mile from a key intersection. As a consequence, it is now possible to pinpoint houses simply by using a map that has an indication of its scale. Here, for the first time, the postal address system is truly map-based. Indeed, that this in a sense represents a clean break with the past is shown in advice given to local officials charged with implementing the readdressing system. There, William Lucy cautions that

the least effective method is to have the carrier sit down and go over the maps with the old addresses that you have gathered indicated on the maps and have them fill in the

missing boxes. This does not work well with most carriers since they are not used to looking at their route on a map and tend to get turned around and confused.

—(Lucy 1995)

Initially promoted within rural areas in the 1980s and 1990s, this system of legible addresses is slated ultimately to be extended to urban and suburban areas and to the interiors of buildings. As with its earlier elements, these new and proposed additions to the addressing system were initially promoted by the emergency response community (and more quietly by the direct-marketing industry). Their stated goal was more efficient routing of emergency calls, and they were, at the same time, to act as *aides memoires* for operators of fire and other emergency vehicles. Although the goal was to develop a comprehensive inventory of addresses and their geographic coordinates, the consolidation of those data across jurisdictional boundaries was not a primary goal. But since the terrorist attacks in the United States in 2001, the emergency response community has become more closely connected to national-level organizations, especially the Department of Homeland Security; and it now seems reasonable to expect that the geographic coordinates of individual apartments, offices, and telephone handsets will become elements of a coordinated national database. The “legible” addresses promoted by frustrated emergency medical technicians will become portions of the legible landscape of which James Scott (1998) wrote, as the system of house numbering, the existence of which was, until recently, very often dictated less by need than by habit, becomes an element of a mandate of the growing surveillance state.

The U.S. government has not, of course, been alone in turning to systems that are represented as “strictly” geographic. “Upstart” competitors to the Postal Service, such as DHL, United Parcel Service, and FedEx, have attempted to bypass the topographic and develop systems based from the outset on a geographic structure. For example, UPS has created a system that

will also include built-in geographic information system software to help planners map out routes. . . . Jack Levis, director of industrial engineering at UPS, said the new system will store routing data electronically and provide workers with automated truck-loading instructions. . . . [T]he software will also provide drivers with a delivery manifest for the first time. Until now, drivers determined their daily routes by checking the way packages were loaded in the delivery van, a process that required them to “touch the cardboard,” Wood said. With the new system, route information will be electronically transmitted to the

handheld devices used by drivers via Wi-Fi wireless LANs installed at UPS's delivery centers.

—(Brewin 2003)

FedEx, in designing its FedEx Home system, used a computer-based system developed by RouteSmart. As they put it,

By embedding and customizing the RouteSmart application within the FedEx Vehicle Route Planning (VRP) system, automated routing is now an integrated part of the FedEx Home Delivery daily dispatch process. With shippers supplying address information to FedEx Home Delivery in an electronic format, the VRP system automatically geocodes and assigns each package stop to a route. Once assigned to the route, the stops are sequenced into the best delivery order to minimize time and mileage driven and to ensure that the route does not become overloaded.

—(RouteSmart Technologies 2004)

Perhaps paradoxically, a system that is systematically organized on geographic principles generates, for the driver, what amounts to a set of verbal directions: Go here, then here, then here. For the driver, RouteSmart produces a topographic account of the places to be traversed, an account that is, in one sense, not that different from an account that might be given of the route of a letter carrier within the Postal Service, yet one that far from becoming permanent, embodied in the letter carrier, may never be repeated.

Putting Space in Its Proper Place

I have taken as the implicit background for my above remarks a highly conventionalized, but widely accepted, history of space and place. According to that history, the world (and, indeed, the universe) was, once upon a time, seen as vast, too vast to be grasped in its entirety. While knowledge of the world was limited to knowledge of the local, the local was imagined as situated within this vastness. Through what might best be described as an evolutionary process, people gained an increasing knowledge of the local, of places, but began, too, to be able to situate those places within an increasingly comprehensible whole, which came to be called (but had always been) "space." By the time of Ptolemy, a sophisticated—and familiar—geographical ontology had developed, wherein there was a hierarchy from place to region to space and wherein knowledge of places tended to be tinged with subjectivity, while that of space became increasingly amenable to more rigorous, mathematical understanding. On this view, the situation today, where geographic information systems, global positioning sys-

tems, remote surveillance systems, and related technologies are increasingly parts of everyday life, is continuous with that past, and is in a sense an expected step in that evolutionary process.

I have suggested that the elaboration of this history has been less the working through of an empirical project than the recital of a telic fantasy. I have also suggested that there are good reasons for believing that a more empirically grounded account of the relationship between the concepts of space and of place will indicate that that relationship has been, and remains, far more messy than on the "standard" account. And I have suggested that such an analysis will show that prior to the invention of written maps and lists, the means for the storage of information were far too feeble to underpin anything resembling the homogeneous and metrical idea of space that we find in, say, Ptolemy; "space" was, in fact, invented rather late in the day, in societies that offered the appropriate affordances.

At the same time, my example of the U.S. Postal Service suggests that large parts of everyday life remain only vaguely and contingently connected with anything like an idea of space. This is not, I hasten to add, to say that those connections cannot, and cannot legitimately, be drawn; but it is to say that it is a mistake to imagine, as does the standard view, that these connections have anything to do with the ways in which the average person—and, indeed, the average scholar—acts and makes judgments about what occurs in particular places. People do not, on the whole, walk around with anything that could seriously be termed "maps" in their heads, and to attempt to resuscitate that idea by redefining maps as "sets of directions" (to take just one example) is to be dishonest. Complicating matters—and the case of the Postal Service shows this process in action—if the forms of knowledge of places are diverse, they are also subject to a sort of displacement, where the boundaries among them are elided as one moves without noticing from a chorographic conception, to a topographic, and to a geographic, imagining that one's reader or interlocutor is doing the same.

There are a number of conclusions that might be drawn from this analysis. I briefly offer three. First, theoretical debates within geography often involve the charge that one or another of those involved is guilty of conceptualizing space as inert or dead. I suggest that the carving off of the topographic and the chorographic from the geographic or spatial offers a more fruitful means of dealing with the issue of inertness. On the one hand, when one considers places from the perspective of the topographic or the chorographic, the spatial, far from being a necessary attribute of places, need not even enter

the picture; on the other hand, just because space is the outgrowth of an active process of construction by people within places, an inquiry into the appeal—and even comprehensibility—of conceptualizations of space needs always, in part, to involve an inquiry into those people and those places.

This raises a second and related issue. One very fertile area of discussion over the last several years has been that of spatiality. Here it seems to me to be more than simply raising a quibble to suggest that much of what passes as a discussion of spatiality in fact involves discussions about places and their construction. As I have suggested, certain forms of activities are purely local; there, the concept of space almost inevitably enters the picture only in the form of conceptual judgments and structures adduced after the fact, by individuals who are in some sense outside of the situation. And at the other extreme, there exist activities that, while plainly occurring within particular places, operate multiply within places of different sizes and scopes, and even within places that are distant one from another. I suggest that the term “spatiality” tempts one to see the first as always like the second.

And third, this analysis raises an issue of rather a different sort. Over the last several years, the term “transparency” has come to be a term of art. One hears, routinely, that the operations of government organizations and corporations ought, in certain ways, to be transparent, that they should be open to view. The (admirable) goal there is the creation of an environment within which untoward activities will be discouraged. But the discussion of the multiple ways in which space and place are conceptualized and created, and of the ways in which, through a process of discursive displacement, differences in understanding and commitment are masked, suggests that this transparency will often be only apparently realized.

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Notes

1. I leave aside certain recent works focused on Plato's understanding of *choros* in his *Timaeus* (1977); here see, for example, Sallis (1999).
2. My discussion of the terms “chorography” and “topography” relies in part upon Vic Walter's account in his *Placeways* (1988).
3. In *The Mind of a Mnemonist*, psychologist A. R. Luria described twentieth-century Russian journalist S. V. Sherevskii's use of just such a system:

Frequently he would take a mental walk along that street—Gorky Street in Moscow—beginning at Mayakovsky Square, and slowly make his way down, ‘distributing’ his images at houses, gates, and store windows. At times, without realizing how it had happened, he would suddenly find himself back in his home town (Torzhok) where he would wind up his trip in the house he had lived in as a child. (Luria 1987 [1968])

4. The introductory portion of Vidal's (1903) *Tableau de la Géographie de la France* was translated into English and reprinted in 1928 as *The Personality of France*.
5. I discuss this process of discursive displacement in more detail in Curry (2002).

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