

SPATIAL DATA AND THE END OF DEMOCRACY

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When one looks at works on the role of spatial data in society, one cannot help but be struck by the following. There is a great deal of scenario writing, and a great deal of thinking about possible futures, but much is assumed to be the same. Indeed, there is what strikes me as a gaping hole in most projections, an area left unconsidered. That hole—its sources and implications—will be my topic here.

I think it best to begin with an example, one that parallels what I have to say. About twenty years ago the sociologist Richard Sennett wrote a little book titled Families Against the City (Sennett 1970). In that work he noted that at the end of the nineteenth century a major change had taken place in the structure of the home and family; the family became smaller, nuclear, and more closely oriented around a father who was the source of authority, but worked away from the home, and around the homemaker mother. Sennett asked the following question: Given that this occurred at the time of—and as a result of—the rise of urbanism and industrial capitalism, were children raised in the new form of household better or worse suited for the sorts of lives that they were going to need to lead? Was a male raised in the new household more or less able than one raised in the old type to deal with a society in which he needed to market his labor, and in which there was great uncertainty? Sennett concluded that, ironically, the new form of household produced workers less able to cope with the world than did the old. They were less flexible, less adaptable, less able to deal with new and different situations.

Now, what does this have to do with information technology and spatial data? I shall suggest that we are today undergoing a similar social transformation. And the unmentioned effect is not that people will be less capable of fitting into the work force—although this will turn out to be a related and complex issue—but rather that they will be

less able to govern themselves. We are facing a society in which people will lack the ability—at the most basic level—to be democratic. This is happening in part because the individual is being reconceptualized, in a way related to the development of information technology and systems more broadly. It is happening in part because of the ways in which geographic information systems and spatial data are associated with changes in the individual and the individual's relationship to the places within which democracy is practiced.

In what follows I shall sketch out what I take to be the operative mechanisms within this process. If this promises to be merely a jeremiad, I shall in fact close with some suggestions about ways in which the problems that I see can be ameliorated, in ways directly related to the subject of the workshop, spatial data.

RETHINKING PEOPLE

First to the issue of the rethinking of the individual. Here I shall point to three issues—intellectual property and identity; fragmentation and the virtual self; and the individual as consumer.

Intellectual property and identity

The first issue concerns intellectual property. As you know, there have been two main traditions in the law and discourse about intellectual property. On the one hand, in England and America, it has been traditional to see rights to one's intellectual or other creations as deriving from one's having invested labor in them. Here the model is the individual worker, building a house, and gaining a right to that house, where he sells the house for money, and thereby transfers the right (Curry 1994a; Locke 1947; Rose 1993; Woodmansee 1992).

In contrast, the European tradition sees property rights as far more fundamental (Hegel 1967). Property, in fact, is viewed as a central way in which people develop and express their identities. We become people by being in public; we show who we are by virtue of what we produce and own—books, paintings, clothes, homes, and the like.

Now, recent discussions of intellectual property, discussions in fact largely fueled by issues raised by computer software, data, and networks, have in many cases asserted that in the end the products created within a corporation ought to be treated in ways more consistent with the Lockean tradition. They ought, in fact, to be treated like works made for hire. On this view the employee does his or her work, gets paid, and goes home. That is simply the end of it. This is very much the view put forward in recent discussions of the NII and the GII by representatives from Sony and other international multimedia corporations. One writes a song, gets paid, and that is that. Every song becomes a jingle.

For now—and I'll come back to this—I wish to make a single comment about this move, away from the Hegelian, romantic view of property and to one wherein labor is

always and only a matter of contractual relationship. That is that this European view of property was not promoted as one that we ought to have. Rather, it was argued that at least in our modern, individualistic, rationalistic society this is the one that we do have, and that it is at the very root of our having an identity. From this perspective, to institutionalize a different one is to undercut the very possibility of an identity. To take away property is to take away identity. It is to abandon the possibility of a person seeing herself or himself as having a permanent stake in the world. (Although, as we shall find, this is not entirely true.)

The fragmented self

Before saying why, let me turn to the second and third ways in which the individual is being reconceptualized. The second I described as a matter of fragmentation and of the creation of the virtual self. In fact, this should be a matter especially familiar to those who use spatial data.

It has been a commonplace, certainly in this century, that the self is becoming increasingly fragmented. Many claim, with Yeats, that as with society, with the individual the center will not hold. We see this increasingly in discussions of cyberspace. Much of this discourse, though, has until recently come from the mouths of alienated intellectuals, who were sure that the anxieties that they felt in Cambridge were of a piece with those felt by the farmer in Dubuque. I've been skeptical of those earlier claims, yet I believe that today certain technological changes are in fact making this fear, finally, real. I have in mind the creation—often using geographic information systems and spatial data—of virtual or digital selves, through data matching and data profiling (Agre 1994; Clarke 1994; Curry 1994b).

We all know that it is possible using a wide range of publicly available data to create profiles of individuals, based on their individual habits of consumption, but also on inferences based on their places of residence. Now, in the privacy literature there is an active discourse about whether and how the creation of these digital individuals is a violation of privacy. For those who believe that the right to privacy is a matter of a right to keep private information, there is something paradoxical about complaints about digital data when those data have long been freely available. This was the complaint of those who favored the production of Lotus MarketPlace (Culnan 1991; Gurak 1995; Seymour 1991).

But for another group, who see privacy as in part a matter of individual autonomy, the creation of these digital individuals creates a threat to autonomy (See for example the articles in Pennock and Chapman 1971 and Schoeman 1984). It does so just to the extent that we now live in a world in which one can never tell which version of you is the one on which the bank or department store or government agency is acting. We now live multiple existences, where different people take different versions of us to be real. And it is, to reiterate, the existence of spatial data that fuels the development of these digital individuals.

Individual as consumer

This leads to the third issue. Here I have in mind the way in which the individual is primarily defined as a consumer. In part, of course, just because so many of these digital individuals are created within commercial geodemographic systems, themselves devoted to issues of site location or mass marketing, the focus has increasingly turned away from what one does for a living—what one produces, for example—and toward what one does purchase and might purchase.

Now, there are two points here. First, as in the matter of property, we find that who we are is in flux. Just as the removal of the possibility of permanent individual property rights in what we create removes an element that has helped us maintain a permanent identity, so too does the construction of digital individuals as sets of contingently interrelated characteristics remove an element of that identity. I'll return to this in the second section of my paper, but for now the critical point is this; where the common sense way of thinking about one's identity imagines that I am who I am because of a long and complex set of facts, of shared stories and events, places been and people known, this view sees who I am as simply a matter to be determined through a process of cluster analysis. I may be a blue blood today, hard scrabble tomorrow.

There is a second point here, related to the ways in which the spread of this way of thinking about the individual is coming to be institutionalized. I am not the first to note that people are increasingly treating all manner of people as consumers. As a professor I am told that my students are consumers, and I ought to treat teaching as a matter of selling a product. Physicians have customers, and not patients. Attorneys have customers and not clients. I suppose some ministers and priests think of their flock as their customer base. And of course, political candidates treat their constituents as consumers, just as people in a broad range of ways treat government as a provider of services, and complain if it is not as efficient as business.

The critical issue here is that the individual is losing an understanding of what it might be like to be involved in politics other than as a consumer, other than as a person who is going to treat the political as an extension of the market that one enters and leaves as a matter of preference. And spatial data is right at the forefront here, whether in marketing candidates or in delineating new congressional districts, what I call "designer districts" (Anderson and Dahlstrom 1990; Morrill 1991).

The end of the individual?

So there are three ways in which recent technological changes are associated with changes in the ways in which the individual is conceptualized. Changes in thinking about intellectual property are moving us away from a view of the individual as a genius, a locus of creative activity, and a holder of permanent rights to the products of that activity. The creation of data profiles is making the individual multiple, while making the individual appear merely as a contingently related congeries of attributes. And various

forces are moving us in a direction of seeing more and more relationships on the model of the consumer and the supplier.

If we turn back to Sennett's argument where are we left? In fact, I would argue, matters here are not so simple as they might seem. Recall that Sennett thought that the new family was not preparing the individual for life in a modern, capitalistic, and individualist society. But for much of the twentieth century it was, in fact, possible for many workers to get a factory job, go to work every day, keep their hands clean, and do very well.

In an important sense, the society that Sennett described is only now coming into existence. For it is now that we are beginning to see people as needing to be fast on their feet, flexible and ready to change jobs at a moment's notice. We are for the first time seeing a society in which almost everyone needs a resume, in which this marketing device is not something of use only to the professional. And we are seeing a society in which the worker needs to be able to represent herself in multiple ways. If marketers see each person as the armature to which are linked a wide range of digital individuals, the individual needs to be able to market himself or herself in different ways to meet different contingencies.

There is, given what I have said, a commonly accepted set of strategies by which the individual is imagined to be able better to negotiate his or her way through society. What we do not see, though, is evidence that the individual today is any better able than was the child in the late nineteenth century, through parenting or schooling, to put these strategies into play. Instead, what we see is anxiety, and in that anxiety a turning away from the public. We see people attempting to solve the threats of fragmentation and contingency by the use of more fragmentation and more contingency.

RETHINKING SPACE AND PLACE

Furthermore, if we turn away from the individual to the matter of the spaces and places in which the individual acts we see a parallel process. And here again, the issue of spatial data is right at the forefront. This is an extremely large topic, so I shall just touch on what I take to be the most central issues.

The first concerns, in rather a different way, the issue of privacy. When we think of privacy we very often—this is certainly the usual view in America—think of it as an individual issue. We need a right to privacy in order to be able to be left alone, to retain some arena in which we have control. But there is a more important function to the right to privacy. In private we can collect ourselves, think new thoughts. We can try out ideas on our friends. (Imagine that you were forced to publish the first draft of every scientific paper or business plan or send every love letter that you wrote.) In private we can do a wide range of things, things that constitute the construction of an identity. That identity is, in fact, critical for the carrying out of social life, and particularly public and political life.

But in several ways the private is being undercut. We see this in the way in which the government has recast the right to privacy through the reinterpretation of the fourth amendment on search and seizure, in the attempt to stamp out the drug trade. In this matter there can be no doubt that in a series of cases since the 1960s the United States courts have for all practical purposes repealed that amendment (Curry 1994b).

We see it in a different way in commercial geodemographic systems and the digital individual. In the case of search and seizure privacy is undercut because the home becomes more porous; in the second case, of geodemographics, privacy is undercut because people act as though they know what goes on there. In both ways the possibility of a private life is diminished. And with it is the possibility of individual identity and of democratic rule.

At the same time, there is an important sense in which the existence of new technologies, such as computer networking, enhances the possibility of a form of private life that is equally inimical to the carrying out of democratic rule. Here I have in mind the way in which on the Internet, through usegroups and chatrooms, it is possible to engage in concerted and long-term relationships that involve single themes, that involve only people with whom one knows that one agrees, and that remove one from the everyday interactions that have in the past acted as moderating forces. I need here only mention right-wing militants, child pornographers, and radical environmentalists. I could as well include people who play Doom.

Here these new technologies are associated with a restructuring of the world, one foreseen one hundred years ago by Georg Simmel in his “The metropolis and mental life,” where the world is fragmented and individuals have little in the way of constant relationships with one another. More importantly, and in a way that Simmel may not have seen, Richard Sclove has argued that today the individual fails to establish the sorts of interpersonal relationships—with the neighbors, the people in the hardware store, the paper boy, and the like—that are essential to the carrying on of the forms of local government that are the basis for larger scale democratic institutions. It isn’t just that they fail to go to party caucuses; rather, it is more basic, a matter of failing to develop the sort of relationships that allow the appreciation of difference, that is essential to democracy.

This dual process—of the destruction of private places and the introduction of new patterns of fragmented and constricted forms of interaction—has been a central element of the computerization of society. Yet in some ways it has been obscured by a more visible process, and one that has often been taken to be the central problem with geographic information systems, the adoption of universal spatial standards.

These standards seem in and of themselves to involve an effacing of the everyday places—home and church and park and monument—that give meaning to everyday life. It may seem odd that I mention this process last, since so many would mention it first. I mention it last, though, not because I think it unimportant, but because I think that in its barest form this argument is often simplistic and overdrawn. I would, in fact, argue that the sort of appeal to homogeneous space that is the main aim of these critiques is not very new. And neither has that appeal, at least in the past, had very much to do with the ways

in which people carry on their everyday lives. But it is particularly in the context of the processes that I have mentioned above, in the context of the rethinking of the individual and the refiguration of the places of everyday activity, that this appeal to universal forms of space takes on a new meaning.

For in this context, and especially in the case of telecommunications technology, the appeal to traditional, Newtonian images of space functions to disorient. When people believe that the image of space as absolute has supplied the foundation for their everyday lives, the development of new technologies can seem to remove that foundation. The possibility of what has been called “time-space compression” can seem to leave everything up for grabs.

CONCLUSION

In fact, if the central social problems raised by geographic information systems and spatial standards were that they appealed to a conception of space that is inadequate, we would be up against it; there would be little that we could do. Like it or not, these conceptions of space are firmly embedded in our hardware and software, as in our automobiles and refrigerators. So my argument, that the very visible processes of universalization are only important against the background of the recasting of individual and place, in fact, leads to the possibility of ways in which one might develop standards and use spatial data systems without these untoward difficulties. In closing I suggest the following:

A good model for describing how not to look at technological change can be found in recent court decisions about search and seizure. There two very general tacks have been taken, each of which is unfortunate. First, there has been a tendency to imagine that if a new technology does something that was done by an older one, the new one does not create a difference that makes a difference. If we used to be able to get public records by going to the records office, spending hours waiting in line, and then struggling with each record, and can now get the same records with a few clicks of a mouse, nothing has changed. And second, when we look at the world we should see what everyone expects to happen as reasonable.

In fact, though, in the first case matters may have changed dramatically; dramatic increases in availability lead to dramatic increases in usability. And in the second case, we need always to recognize that what people accept and what they would prefer may be very different. So as we think about the future of the broad system of spatial data, we need to keep these two points in mind, and especially to do so as we think about the relationship between the systems and the possibility of maintaining a democratic society. I suggest the following four points:

- With respect to intellectual property, there have been rays of hope, as in the recent case of *Mason v. Montgomery Data*, in which the courts for the first time allowed the possibility of seeing the map as an object of at least some small measure of

creativity (U. S. 1992; Wolf 1993). I suggest that the consequences of orienting intellectual property regulations of spatial data in a way that leans more toward the European and less toward the work-for-hire approach outweigh the benefits. I would point to current United States trade practice as a very good example of how not to treat intellectual property.

- With respect to data protection and privacy, some would suggest that this problem, given the current state of things in the United States, simply cannot be solved. Others argue that we need to assert that the individual somehow owns his or her self. I would suggest a perhaps radical alternative: We need to see the digital individuals created by the geodemographics industry as real. After all, they are treated as real. So if one of my digital personas is damaged I should be able to sue. And I should be able to say where they go and when.
- With respect to public access and the right to know, we need to recognize that laws regulating access assumed that that access was much more difficult than it currently is. There is much about my neighbors that it ought not to be so easy for me to know.
- Finally, with respect to standards, we need to see that the concern over the imposition of universal over local standards is the very thing that the unabomber and the Oklahoma City bombers had in common. We do not need standards for everything, and the ones that we have need not always be general. Much in the Spatial Data Transfer Standard could just be abandoned.

In the end, after all, every question does not need to be answered, or even asked. Everything does not need to be an object of research. Every system does not have to be connectable to every other one, any more than every person somehow needs to speak the same language as everyone else. We can live in a world in which people have the opportunity to develop—and maintain—their senses of community and place. Indeed, we both can and should, because the very possibility of democracy depends upon it.

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