The last few years have seen a dramatic increase in interest in a series of questions like the following: is the world somehow getting smaller? Is the world becoming more homogeneous? Are unique places disappearing? And more technically: how does one think about borders in an era in which information can move so freely? What can we expect to happen to the nation-state? Will national identity come to be redefined, or cease to exist? And finally: what has been the role of technology in the various changes that have occurred?

If these questions have been in the air for many years, there can be little doubt that they have become more frequent since the development of the Internet, and that they are now posed with a greater sense of urgency. Might not there be a true declaration of independence for cyberspace? How can we be sure of the dangers lurking there? What kind of world will we live in when e-commerce sites replace the corner store? And, who am I, really, when so many of my interactions with others are technologically mediated? These are all questions, in the end, about places and about interactions in space. For that reason, in order to formulate reasonable answers to these questions one needs an understanding of the concepts of space and of place.

It may at first glance seem that the matter is simple – the world is a world of places within a larger space. Yet if this simple answer works passably when one is trying to decide how to organize a closet, it runs out of explanatory power well before one attempts to mobilize it in answering the questions raised above. When one turns to concrete questions, about the source of territorial disputes, and the possibility of their resolution; or about the extent of and connections among markets; or about the appropriate ways to draw a map of the world, one immediately finds sets of beliefs so contradictory and yet so firmly held that this simple ‘location in space’ understanding of places emerges as quite useless. Something better is needed.

Here I would suggest that if one wishes to deal with these more complex questions one needs to see that in every era there has been a close interconnection between the technologies available for communication and representation and the ways in which people have conceptualized space and place. Indeed, in a particular era one cannot really make sense of those technologies without having an understanding of the ways in which space and place are conceptualized, just as one cannot understand those conceptualizations without having an understanding of the available technologies.

What follows will be in four sections. First, I shall lay out three traditional ways of thinking about space – as place, region and space. I shall show that each of those conceptions can only be understood against the background of the technologies available for the storage of knowledge, and for the representation and communication of that knowledge.

Second, I shall turn to the modern era. I shall show the ways in which elements of each of these earlier conceptions of space and place were in the seventeenth and eighteenth centuries fashioned into versions of what is now taken to be common sense. This new common sense set the stage for the development of a wide range of modern intellectual enterprises – from physics to political theory – but has at the same time functioned to obscure and devalue
why this process of obscuring has itself remained obscure: certain features of the concepts of space and place allow and even encourage a kind of discursive displacement. Through this process a group of authors, or even a single author, find themselves using terms like space and place in multiple ways; and it can easily appear that a rich and inclusive concept is being invoked, where the richness is in fact only apparent.

And finally, I shall turn to some current concerns about the relationship between technology and society. I shall show that these concerns are typically couched in terms of one or more of the spatial conceptions that I have described. It turns out that this contemporary discourse is very much subject to discursive displacement, and we often find that people who appear to be presenting opposing viewpoints are simply talking about different matters. Yet here, as is so often the case, this displacement has a positive side; it is part of the sometimes conscious process by which language changes, and through which the relationships among disparate phenomena come to be understood.

**On Topography**

The concepts of *choros* and *topos* raise immediate problems, just because over a period of several hundred years the two terms traded meanings. As E.V. Walter has noted (1988: 120–1), *choros*, the older of the two, originally appealed to subjective meanings, to the emotional cast associated with a place, as well as to the more ‘objective’ features of location; in contrast, the newer *topos*, which appeared for the first time in Aeschylus in about 470 BC, was typically used to refer to this more objective sense of the term ‘place’. But by the third century *topos* had begun to be used in the expression for holy places, while *choros* had begun to be used to refer to what we would now think of as regions, to administrative districts, and in the process had begun to lose its emotional tinge.

By the time of Ptolemy it appears to have come to be accepted that there existed a topographic tradition and a chorographic one, where the topographic appeared to require skill in drawing, and the chorographic dealt ‘for the most part, with the nature rather than the size of the lands’ and with ‘qualitative matters’ (Ptolemy, 1948: 163). Yet this way of rendering the distinction, laid out in the second century AD, misses something essential.

We can begin to get at something if we note rather a different way of characterizing the topographical tradition. As Fred Lukermann suggested, in classical geography

‘Topography’ was defined as the order of discrete units one to another. ‘Topographical location’ was referent solely to the contiguity of places. (1961: 194)

Now, this notion of a topographical description as referring to the ‘order of discrete units’ may seem perplexing, unless we note an essential feature of topographical accounts. While it would seem odd to devote oneself to constructing a simple list of the order of places (one would have the equivalent of a railroad timetable, without the time), if that list is in the form of a chronology or narrative of what was seen as one went from place to place the project seems far more comprehensible.

Indeed, we find just such topographical descriptions in Homer, where

We reached the Aeolian island next, the home of Aeolus,
Hippotas’ son, beloved by the gods who never die –
a great floating island it was, and round it all huge ramparts rise of indestructible bronze
and sheer rock cliffs shoot up from sea to sky.
(Homer, 1996: x, 1–5)

Here the reference to Homer points to a central feature of the topographic account of a place — that such accounts developed within cultures that did not use writing. They were originally oral
accounts, ordered in narrative and therefore temporal terms. They were accounts of places in terms of the things that a traveller saw, or would see, along a certain route.

Well known among topographical descriptions have been what are termed periploi, accounts of 'sailing around' some place. 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. By far the majority of them were women with hairy bodies. The interpreters called them Gorillas ... We captured three women ... who bit and scratched those who led them and did not want to follow. (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.

If we follow the suggestion of authors like Havelock (1986) and Ong (1982), this narrative form should come as no surprise, since in a pre-literate society the use of narrative is an excellent mnemonic strategy. But if narrative is one such strategy, when we turn to other early authors we find a second. 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. (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. (1988: 54)

Here the narrative is interspersed with symbols, which as in Homer fill the function of ordering the world and rendering it memorable.

Indeed, these early topographic accounts describe a world awash in symbols. It is a world in which the snail can be a sign of the season for work, but where the snail is connected with the heavens, with the place of the Pleiades, and where both are connected to what one sees on the earth – the labour of farmers. Here, in an important sense the snail, the heavens and the farmer are all elements of a larger web of symbols, where the elements that make up the world are all and always actively significatory. This is not a world captured in maps, or lists, or other written descriptions; neither is it a world in which one is actively searching for some simplifying world picture. Rather, it is a world in which people inhabit places, where the relationships between those places and others are represented just in terms of narrative and symbol.

If within the topographic tradition places are represented through narrative accounts, we can see the places themselves as constituted through the practices that are the subject matter of those accounts. In constructing those accounts their authors describe what is acceptable and what is not; they define places as constituted of sets of possibilities and constraints. Places are defined in terms of those things that are in place and those that are out of place, those that belong and those that do not.

It may seem as though today we are far indeed from the primary oral cultures within which topography emerged. But this way of experiencing and representing places is in fact alive and well. We see the experience in the everyday activity of judging that something – dirt, pollution, or a suspected criminal – is 'out of place' (Wood and Beck, 1994). We use topographic representations in the everyday practices of giving directions (Denis et al., 1999). And this appeal to landmarks and narratives was right at the centre of the landscape studies of influential planners like Kevin Lynch (Appleyard et al., 1964; Lynch, 1960). In each case we create or appeal to accounts that are in an important sense the work of insiders, of people whose knowledge of places both emerges from and is represented in terms of the experiences that they have had while passing through a place. Primordially oral and narrative in form, topographic accounts have made the transition to later technologies of representation and communication, though not, as we shall see, without certain difficulties.

On Chorography

If the topographic tradition provided a model for representing everyday places, and a model that was equally at ease in oral cultures and in later textual cultures, it in fact existed alongside a second mode of thinking about and representing places and space, the chorographic. Here chorography seems to occupy a kind of middle ground, between the generalities of geography and the particularities of topography.

It may seem odd that I say that the chorographic existed alongside the topographic, given my earlier comment about the difficulty in the absence of writing of maintaining a store of knowledge about locations and their interrelations. But there has always existed a text adequate for the storage of certain kinds of geographical information, and that text is in the heavens. In fact, chorography began its formal existence as a branch of astrology, and 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; Lukermann, 1963; see, more generally, Barton, 1994).

This appeal to the heavens was not, of course, new. Recall Hesiod’s dictum that ‘When the Pleiades born of Atlas rise before the sun, begin the reaping; the ploughing, when they set’ (1988: 48). Here the obvious interpretation is that the heavens are being used as a kind of calendar. But at the same time, they are providing a means for distinguishing among the places on the surface of the earth itself. There is a sense here in which one can map from the stars onto the earth, and use the pattern of the stars as a means for discerning a pattern on the earth.

The origin of this view is controversial. It appears to have reached a level of some sophistication in Babylon by 1000 BC, and to have been put in written form there in about 700 BC. In Greece the matter is more complex. Writing in about 7 BC, Strabo (1917) claimed that by the fourth century Eudoxus had developed a systematic ordering of the earth, based on the heavens. But others believe the first systematic understanding was developed by Eratosthenes, who died in 196 BC (Honigmann, 1929), or by Hipparchus, who died about 120 BC (Bunbury, 1959).

In any event, 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 heavens one could tell whether one was in the torrid, temperate or frigid zone, and within each existed a different way of life (actually, it was at first believed that nothing could live within the torrid zone, between what later came to be termed the Tropics of Cancer and Capricorn). Each zone was, that is, a separate and identifiable region.

Writing in the second century, Ptolemy described the aim of chorography in this way; it is

the description of the individual parts, as if one were to draw merely an ear or an eye ... chorography deals, for the most part, with the nature rather than with the size of the lands. (1948: 163)

And in his Tetrabiblos, he expanded upon the idea of such regions.

Thrace, Macedonia, Illyria, Hellas, Achaia, Crete and likewise the Cyclades, and the coastal regions of Asia Minor and Cyprus ... have in addition familiarity with the south-east triangle, Taurus, Virgo, and Capricornus, and its co-rulers, Venus, Saturn, and Mercury. As a result the inhabitants of these countries are brought into conformity with these planets and both in body and soul are of a more mingled constitution. They too have qualities of leadership and are noble and independent, because of Mars; they are liberty-loving and self-governing, democratic framers of law, through Jupiter;

collectors of music and of learning, fond of contests and clean livers, through Venus. (Ptolemy, 1940: 137)

Contemporary readers typically find statements such as this unnerving; the apparently uncritical acceptance of the causal role of Mars and Venus does not sit easily with the modern temperament. But I would suggest that two points need to be kept in mind here. First, if we strip away the references to the heavens, we are left with a series of characterizations of regional cultures that may seem simplistic, but that nonetheless have an air of familiarity. They are not, in the end, that different from the characterizations that one hears today about Chinese, Finns or Californians.

Second, in the period between Hesiod and Ptolemy the nature of discourse concerning causation began to change. If in Hesiod’s period the world consisted of places rich in signs, there did not exist a means for ordering the various types and functions of signs. And so, it was common to elide what we would take to be the clear distinction between the name of something, its causal powers, the material of which it was made, and the events with which it was associated. It was not, in fact, until the fourth century BC that Aristotle developed the famous typology of causes, or explanations, within which these signs come to be seen as clearly distinguishable:

In one sense, then, (1) that out of which a thing comes to be and which persists, is called ‘cause’ ... In another sense (2) the form or the archetype, i.e. the statement of the essence, and its genera, are called ‘causes’ ...

Again (3) the primary source of the change or coming to rest; e.g. the man who gave advice is a cause, the father is cause of the child, and generally what makes of what is made and what causes change of what is changed.

Again (4) in the sense of end or ‘that for the sake of which’ a thing is done, e.g. health is the cause of walking about. (‘Why is he walking about?’ we say. ‘To be healthy’, and, having said that, we think we have assigned the cause.) (1941: 194b 23–35)

By the time of Ptolemy the discourse about the relations between the heavens and regions on the earth had begun to fall into line with the terminology used by Aristotle. But even in cases where an author seems explicitly to be using the concept of cause, it is risky for the reader to assume that the concept is as clearly delineated as it was in Aristotle; a closer reading often reveals a world in which the boundary between cause and sign is not at all clearly demarcated. Indeed, we see this repeatedly in works on the relationship between people and the environment, where it is often difficult to determine whether the author is speaking of cause, or of sign (see the medical works of Hippocrates, 1950; see also Glacken, 1976).
From Chorography to Geography

There was a third way in which in the period between Hesiod and Ptolemy the discourse about places underwent a subtle but dramatic set of changes. Recall that within the topographic tradition a description of places did not involve a clear distinction between the question ‘What is next to this?’ and ‘What did we come to next?’; distance and extension were in a certain way equivalent to time and sequence. The connection between any two places was characterized in terms of just such a relationship, and that relationship was imagined to be the relationship, and not merely some vernacular version of a more precise and accurate representation.

But by the fourth century BC — and here once again Aristotle was a key player — the conceptualization of space and place had undergone a substantial formalization. For Aristotle, empirical observation showed that the world tends toward status. Objects move until they stop. And the critical issue, and the absolutely central issue here, is why they stop: they stop because they have reached the place where they belong. They have reached their natural place. In the Physics this view was laid out in terms of the basic elements, air, earth, fire and water. Light things made of air and fire rise, while heavy things of water and earth fall. Each moves until it reaches its natural place, and once there stays, absent disturbing, unnatural motions. As Aristotle put it,

All place admits of the distinction of up and down, and each of the bodies is naturally carried to its appropriate place and rests there, and this raises the place either up or down. (1941: 211a 3–5)

So in one way Aristotle’s work is based on a conceptualization within which place is absolutely central, and in which an adequate account of the world needs to be couched in terms of the question of what goes where. In an important sense, Aristotle has developed a physics that is grounded within a world of places, and their relationships one to another.

At the same time though — and in the same work — he has developed a very different way of thinking about space and place. There he argues that ‘Place is what contains that of which it is the place … [and] place can be left behind by the thing and is separable’ (1941: 211a 1–3). Here he has laid out an alternative 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.

This, in Ptolemy, comes to be the model at play in conceptualizing the geographic. For Ptolemy, the geographic

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 … while chorography does not require the mathematical method, in geography this method plays the chief part. (1948: 163–4)

When Ptolemy turns away from the chorographical to the geographical the concern turns to the representation of the entire surface of the earth; and his Geography relies upon mathematics as a means for ‘securing a likeness’ of the earth. Here the observer becomes strictly a visual observer, and the place of that observer is defined in those same visual terms. The observer, in Ptolemy’s attempt to project the round earth onto a flat surface, is always an outside observer, and the view is always a view from above.

On the face of it this mathematics-based representation looks very much like that which we see in Ptolemy’s astrological work, and might be imagined in that way to resemble chorographical representations. But there is a fundamental difference between the division of the world into klimata and the development of a representation of the world in which a grid of lines of latitude and longitude is laid over a representation of the world. For in the former case the lines establish regions of difference, while in the latter case the lines may (though they need not) merely be markers on a surface of infinite variation.

Space and Place after Ptolemy

The Rise of Space

It may seem a luxury to have discussed at such length these three traditions — the topographical, the chorographical and the geographical — and the more so just because the first two seem almost to have vanished. The term ‘topographical’ is used today to refer to maps, and in a sense rather different from the one in which it was used two millennia ago; and few but geographers have even heard of the chorographical. In a sense, they have been swallowed up by the geographical.

But in fact, in the topographical and the geographical we can see rather clearly the issues that arise in contemporary conceptualizations of space and place. And in the effacement (and reconstruction) of the topographic and the chorographic we see at play certain social and technological forces that remain important today.

So, for example, in Ptolemy’s geography the earth is imagined to be a globe that has some objective existence, such that in principle any person should be able to determine the location of every object and event on that surface. Here space is imagined to be absolute and pre-existing, while location is always a matter to be defined in terms
of that absolute space. The location of any particular object is a contingent matter; things do not belong in one place or another, and space is not hierarchical.

Here the arrangement of objects on the face of the earth can be characterized through the use of a mathematical system — in this case a grid — that is independent of the features on the earth. Rather, that grid is imposed upon the surface by a viewer. Further, the viewer is imagined to be capable of imaginatively stepping outside the earth, and viewing it as if from above. And it is possible to take advantage of that vantage point to create representations of the earth's surface.

This conception of space is in fact very much like the one propounded in Newton's *Principia* (1686).

Absolute space, in its own nature, without relation to anything external, remains always similar and immovable...

Place is a part of space which a body takes up, and is according to the space, either absolute or relative...

Positions properly have no quantity, nor are they so much the places themselves, as the properties of places. (1934: 6–7)

And as it happens, it was Newton who produced the illustrations for Varenius' *Geographia generalis* (1650), seen by many as the founding work of modern geography.

So it seems fair to say that by the eighteenth century this conception — of what is conventionally termed 'absolute' space — had entered into the mainstream. It has since become the accepted way of imagining and conceptualizing space and the objects characterized as being within it, and has come to be seen as foundational for discourse about the workings of the world, at an everyday as well as a conceptual level.

In doing so it has effected the rejection of Aristotle's view of the universe as a universe of places. Newton can thus be seen as having been a significant player in the formulation of a view of the world in which places are of no importance, and, in fact, one finds little theoretical discussion of the concept of place for the next 300 years.

Still, and in spite of its widespread acceptance, the view of space as absolute has faced opposition on several fronts, and the positions taken by those opponents have remained important alternatives.

One of those alternatives was articulated in a series of letters between Leibniz and Newton's proxy, Samuel Clarke. There Leibniz noted how people come to believe in space, through the concept of motion.

They consider that many things exist at once and they observe in them a certain order of co-existence, according to which the relation of one thing to another is more or less simple ... When it happens that one of those co-existent things changes its relation to a multitude of others, which do not change their relation among themselves ... we then say, it is come into the place of the former; and this change we call a motion in that body. (Alexander, 1956: fifth paper, § 47)

The way in which we understand motion leads to the belief in the existence of absolute space.

And supposing, or feigning, that among those co-existents, there is a sufficient number of them, which have undergone no change; then we may say, that those which have such a relation to those fixed existents, as others had to them before, have now the same place which those others had. And that which comprehends all those places, is called space. (Fifth paper, § 47)

Yet, Leibniz argues, to go along with Newton and move from this perception to the conclusion there is something called 'absolute space' is to move from the realm of science to that of metaphysics. Rather, we need to understand that space is nothing more than 'something merely relative, as time is; ... I hold it to be an order of coexistences, as time is an order of successions' (third paper, § 4). Space, that is, is purely relational; it consists just in those relations, and nothing else.

Nonetheless, if Leibniz is rejecting much about Newton's view, he is also accepting much. Both, in the end, are abstract and formal. So both involve the rejection of views of space or place that give a central role to the actions of everyday life. In Newton this is a rejection of the relational in favour of the absolute; in Leibniz there is an embracing of the relational, and a rejection of the absolute. But in both the relations of contiguity that before were temporalized, and described in narrative terms, are reinscribed in the quantitative terms appropriate to modernism.

If one avenue for appealing to a more concrete conception of space was cut off in the Leibnizian, relational model, another was soon thereafter cut off in the epistemological move now associated with Kant. In his 'pre-critical' inaugural essay Kant (1929) had formulated an argument in support of the view that space must be seen as absolute. We see that this must be the case, he argued, when we attend to the simplest of matters. Consider, he said, a pair of gloves. If we look at the relationships among the parts, at their angles and lengths, we find that a right-handed glove and a left-handed glove are in fact identical. So if space is indeed just a matter of relations, the two are identical. But just try putting a left-handed glove on your right hand!

But in a sense, this argument is merely of scholarly interest, just because Kant is now remembered for having laid out, in his later *Critique of Pure Reason* (1965), a very different and more influential view. The argument there is subject to a range of interpretations, but it was — and is — widely seen as meaning that space is not something that is 'out there', but rather is believed to exist as a result of a
sort of mental structuring of the world. Indeed, in the nineteenth and twentieth centuries this view, that people mentally structure their worlds, has come itself to be seen as a kind of common sense, and this view has provided an intellectual foundation for a wide range of forms of inquiry, from cultural anthropology to social psychology, and means of understanding differences, of race, gender and ethnicity.

So we might well see Kant’s inaugural dissertation as far more important than it is usually seen to be, just because it is the swan song for the view that in theorizing about space one needs to begin from the embodied individual. After the Critique of Pure Reason it became possible to see space as a purely human invention, something that could not possibly have causal efficacy, but must instead be caused, that must be a part not of the substructure but of the mental superstructure of the world.

The Reinvention of the Region

Thus, by the end of the eighteenth century the concept of ‘place’ had lost its status as a theoretical concept, and so too had ‘space’. This is not, of course, to suggest that the topographic and the geographic had simply disappeared. In a rather less theorized form the topographic tradition retained a place. Indeed, in its barest form, and with the clearest connection to its oral roots, it has persisted, as in the practices of giving directions, describing travels, and the like. Is there, after all, all that much difference between Pausanias’ second-century AD ‘Further along the road you come to the SPLIT as they call it; on this road Oedipus murdered his father’ (1987: 49) and this by Lévi-Strauss?

At Dakar we had said goodbye to the Old World and, without sighting the Cape Verde Islands, had reached the fateful latitude seven degrees north, where in 1498, during his third voyage, Columbus, who was heading in the right direction for the discovery of Brazil, changed course towards the north-west, and so managed, by some miracle, to arrive two weeks later at Trinidad and the coast of Venezuela. (1977: 67)

In both there is an elision of the boundary between space and time, as movement is narrativized. In both there is an appeal to the symbolic, as a means of ordering the landscape. In both the relationships among places are characterized in relational, rather than absolute, terms. And in both is the author at the centre of the account.

And of course, the geographic tradition remained important, the more so because of the practical – and especially economic – aspects of the age of exploration (Sobel and Andrewes, 1998; Andrewes et al., 1996). But in a fundamental sense, the nineteenth century was a time of the invention of the region, and the revivification of the chorographic (Kimble, 1951). In fact, it was only then that it became possible to see the landscape in the way that Paul Vidal de la Blache described it, in his The Personality of France (1928):

A geographical individuality does not result simply from geological and climatic conditions. It is not something delivered complete from the hand of Nature ... [A] country is a storehouse of dormant energies, laid up in germ by Nature but depending for employment upon man. 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)

Here we see echoes of the places developed within a strictly oral tradition, and in one sense, of course, this is no surprise, since the peasants of whom Vidal spoke were largely illiterate. And here at the regional scale we see in operation one of the fundamental means of the construction of places, the carrying out of habitual activities, or practices. As Vidal put it,

Man is an animal of habits even more than initiative ... he digs in willingly, if he is not shaken by some shock from outside, into the way of life in which he was born. (1911: 304)

But if the inhabitants of these regions were largely illiterate, it is important to see that the modern region, whether the agricultural region of France or the nation-state, was in important ways a product of new technologies, and especially the printing press. Nowhere is this laid out more clearly than in Benedict Anderson’s celebrated Imagined Communities (1991). In that work Anderson describes various elements of the rise of the nation-state, but pays particular attention to the development of printing. Printed language, he suggests, at once creates a unified field for communication and exchange; gives a fixity to language; and creates a language of singular authority (Anderson, 1991: 44–5).

Anderson in fact suggests that there is something inauthentic about the nation-state, that it is only ‘imagined’, and is to be contrasted with those places that are ‘real’. It is to be contrasted, perhaps, with the region that Kimble described, wherein people have ‘real’ relationships one with another, or, more generally, to be contrasted with the places of the lost – or, in fact obscured – topographic tradition.

It seems to me, though, that with respect to the possibility of creating the modern region a number of other technologies need to be considered, as do other features of print technology. One of those, certainly, is the use of print for the dissemination of
documents containing data about individuals. In the sixteenth century, not long after the development of the printing press, there were moves – in France, for example – to create registers of populations. But such systems were gradually replaced, beginning in the seventeenth century, when the development of what was termed ‘political arithmetic’ seemed to provide tools useful to the nation-state, both for social control and for political and ideological purposes (Hacking, 1975; Rusnock, 1995).

By the beginning of the nineteenth century political arithmetic had been replaced, at least in France and Great Britain, by statistics. Ted Porter suggests,

Implicitly, at least, statistics tended to equalize subjects. It makes no sense to count people if their common personhood is not seen as somehow more significant than their differences. (1986: 25)

As Horkheimer and Adorno had earlier put the matter, this view derived from a deeper belief, that Bourgeois society is ruled by equivalence. It makes the dissimilar comparable by reducing it to abstract quantities. To the Enlightenment, that which does not reduce to numbers, and ultimately to the one, becomes illusion; modern positivism writes it off as literature. (1972: 7)

And so, as statistics replaced political arithmetic, there developed what Ian Hacking has termed ‘an avalanche of numbers’ (1982). Noting that between 1820 and 1840 ‘the rate of increase in the printing of numbers appears to be exponential whereas the rate of increase in the printing of words was linear’ (1982: 282), he argues that in France

After 1820 ministry [annual] reports were still supposed to have limited circulation, but the sheer fact of multiple printings put them in the public domain. They were ready to be reproduced or condensed in the mass circulation police gazettes and the like ... Disease, madness, and the state of the threatening underworld, les misérables, created a morbid and fearful fascination for numbers upon which the bureaucracies fed. (1982: 286–7)

Growing bureaucracies, then, created the categories by which people were categorized, managed the enumeration and statistical analysis, and maintained themselves even in the absence of evidence that their products were of any real utility.

If Anderson’s ‘imagined communities’ can be thought of as new, so too can the regions defined through these technologies. For here we have a region – or place – that is not defined in terms of people’s everyday interactions and in terms of sets of narratives told about those interactions, as in the case of places developed among people who communicate only orally. But neither is this a region grounded simply in the written word. It is not just defined in terms of lists of characteristics, or chronicles of events, each connected with its author and the circumstances in which it was written. The particularity of the lists of individuals, maintained in a church or government office, has been replaced by the census, where individuals are of interest only in so far as they can be treated as members of a particular class. Indeed, here the individual exists only as a set of characteristics, attached to a neutral self.

So here the modern nation-state is a region that – in part I hasten to emphasize – is created through the production and circulation of works whose explicit aim is to characterize that place in a thoroughgoing way (Giddens, 1981; 1991). Its inhabitants take on an existence as members of broad and fluid sets of categories, some of which may have no apparent meaning to them. They are, in an important sense, virtual individuals. But they are virtual individuals who exist in a place that is very real, a place that in part obtains its reality through the process of creation of that virtuality.

**Discursive Displacement**

Apart from the development of print media and of statistics, there was of course a range of factors at work in the creation of regions such as the reified nation-state of which Anderson speaks. Technological developments such as the railroad (Borchert, 1967), the telegraph (Thompson, 1947), the photograph (Trachtenberg, 1989) and standardized time (Bartky, 1989) worked alongside political and economic changes to promote the view that we live in a world that can properly be thought of as a world of regions.

As in the earlier cases of place and space, this development did not go untheorized; the late nineteenth and early twentieth centuries saw a spate of works, many focusing on geopolitics, that attempted to make sense of this world of regions (Mackinder, 1904; 1919; Ratzel, 1899; see also Innis, 1950; and more recently Godlewska and Smith, 1994; and Livingstone, 1992).

But here, as in the earlier cases of place and space, there came to be at work a process that I term ‘discursive displacement’. (Note that I use the term here in a somewhat different way than do authors such as Gayatri Spivak.) Indeed, this process of displacement has consistently characterized the discourse about space, place and the region. And the place where this displacement is most evident is not in the topographic or the geographic, but in the chorographic. There, one is inclined to say, there has been a dual process of displacement, toward the topographic and toward the geographic, that has persistently undercut attempts to treat it as real.

In his *The Betweenness of Place* (1991), Nicholas Entikrin argued that the discourse
concerning places suffers from a tension, wherein it is at once pulled toward the particular and toward the universal. I would suggest, though, that here this tension can better be seen not in the arena of places, but in that of the region, in the chorographic. And it seems to me the key to understanding that tension is technology.

Recall that in its earliest form chorography appealed to the heavens as a means of characterizing regions; a region could be defined in terms of its position under a certain constellation. Now, unambiguous as this may seem, this means of definition right at the outset established a tension, and enabled the process of displacement. That is because if the heavens provided a means of definition, they were able to do so only to the extent that people were able to keep track of them. And that was typically done by the symbolic reidentification of patterns in the heavens with objects on earth—the ram, etc.—and by the construction of narratives about the characteristics of those symbolized patterns. So while the stars functioned as a kind of ur text, they at once invited the viewer to think about their referent—the places on the earth—in terms derivative of the oral.

At the same time, descriptions of regions very often take those regions to have just the sorts of characteristics, of symbolic and narrative interconnection, that we typically associate with places. Nations, for example, typically have founding myths, and the date of the founding of a nation-state is the most celebrated of holidays. Indeed, narratives underlie almost all holidays, and those narratives are one important means by which nations establish and maintain their identities (Zerubavel, 2000).

So too are narratives of inclusion and exclusion strongly associated with the definition and maintenance of borders. One maintains a border through joint narratives of its legitimacy and of the means by which it is maintained. In the United States, for example, the stories of barbed wire, surveillance cameras and sensors, and armed INS agents are surely as effective at maintaining the border as those agents and objects themselves.

So on the one hand, there is a kind of displacement in the case of the chorographic that involves accounts of regions taking on the characteristics of the most traditional, oral topographical accounts. The accounts take on a narrative form; they appeal more to various sorts of symbols; their authors personalize the accounts; and they define the region in relational terms.

But on the other hand, there is another form of displacement, as the discourse of the regional is pulled into the geographical. In the most obvious way this happens as it comes to be accepted that any region can be given borders and plotted on a map, given geographical coordinates. If this seems an obvious thing, reflection will show that it has only been very recently that this view of the region has come to be accepted. For example, if we look at the means that were used by Europeans during the sixteenth and seventeenth centuries to establish sovereignty over non-European lands, we find the following:

Cutting trees and boughs, and digging or making, if there be an opportunity, some small building, which should be in a part where there is some marked hill or a large tree, and you shall say how many leagues it is from the sea, a little more or less, and in which part, and what signs it has, and you shall make a gallows there, and have somebody bring a complaint before you, and as our captain and judge you shall pronounce upon and determine it, so that, in all, you shall take said possession. (Keller et al., 1938: 40)

Nowhere is there mention of the establishment of a border; rather, what is described is much more in keeping with traditional topographical methods of place-making and description.

But if, as Bernard Heise has shown, through the seventeenth and into the eighteenth centuries there was little sense of the world as being divisible into regions that had natural boundaries, there was an emerging sense of something else:

baroque writers saw [geographies] as historical-political entities constituted through the various negotiations pursued by Europe's ruling Houses and governments. John Speed's The Theater of the Empire of Great Britain (1611), for instance, constructed his geography quite literally as a political body. (1998: 157)

So in contrast to earlier works, Speed's intention was instead to

Take a view as well of the outward Body and Lineaments of the now flourishing British Monarchy... which shall be the content of our first or Chorographical Tome. (quoted in Heise, 1998: 157)

The chorographic, in this way, begins to become a subset of the geographic, as it comes to be seen as possible to place the 'outward Body and Lineaments' on a map.

Still, it is not really until the nineteenth century that the map attains a sort of primacy. For until the institutionalization of the methods of land surveying used in, for example, Jefferson's official US land survey system, where a grid was laid out on the surface of the earth, the typical way of marking out boundaries was in fact topographic in form; it involved walking and following a set of directions, in what is in the US referred to as the 'metes and bounds' system. Even if a piece of property was mapped, the map had no legal reality; it was merely a representation of a route to be taken, and that route defined the border.

But with the development of systems like the one introduced by Jefferson, the map began to take on a more important role, as a true representation of what
existed. Here the farm, village or county became disembodied, as each took on a new relationship with the map, one in which the region was merely an area circumscribed by a line (Thrower, 1966).

At the same time, in this way the chorographic began to give primacy to what had previously been a matter of the geographic, the view from above. And this view became increasingly important through the eighteenth and nineteenth centuries as nation-states began increasingly to develop historical atlases, that appealed to topographical narratives, but at the same time attempted ideologically to support the state through images 'from above' of the extent of the state and its location in relation to others (Black, 1997).

I have laid out several ways in which there is what I term a displacement in discourse about space and place. The topographical moves toward the chorographic; the geographic moves toward the chorographic; and the chorographic moves toward both the geographic and the topographic. Or, places come to be treated like regions; space gets turned into region; and regions come to be treated like places, and like spaces. Or, relationally defined places become absolute spaces, while spaces come to be seen in relational terms, while in the case of regions, both may happen, and at once.

How does this happen? Consider a person whose only means of communication is oral involved in a discussion about a place, with a person who is also able to write, draw maps and so on. The first person talks about events that happened at a particular place, placing them in narrative terms, always talking about one place in relationship with another. The second person listens to the first, but is prepared to construct a map of the travels described, to annotate the map with lists of items and people mentioned, and so on. Even so, this second person is able to engage in a discussion that the first finds comprehensible, to which she finds herself able to respond. In one sense the two are engaged in a discourse about places. But in another, the two are doing very different things. And we can see this even more clearly when the second person engages in a written exchange with a third. The third begins sketching out the precise location of the events and locations described by the first, and then continues by calculating distances, areas, intersections of activities, the location of the sun in relationship to the stars during the day of the discussion.

At this stage the discourse has moved beyond the point at which the first person is able to find it comprehensible. And this begins to point to the differences in the discourses being carried out by the first and second. In effect, as Wittgenstein (1968) put it, each is playing a different language game. Each is saying (or writing) things comprehensible in one context and not in another. And the discursive displacement occurs when people use what appear to be the same words and sentences, but where on reflection each person may see those words as 'going with' rather a different set of others.

In fact, the words 'space' and 'place' are semi- nally ambiguous, just because each has from early in its history been capable of being used within the three different discourses of the topographic, the chorographic and the geographic. And as I have suggested, this ambiguity has been supported by the development and use of a series of technologies, of writing, surveying and mapping, and then of transportation and communication, just because it seems possible to build a mutually comprehensible discourse about space and place around each technology.

This long-standing technological support for the intuition that I can at once be at a location that is a unique 'here' and at a location that can be precisely characterized in terms of a larger space has been an important element in the promotion of this discursive displacement and the support of the ambiguity of place and space. And it seems to make sense to argue that it is the lack of such technological support that has stood in the way of the development of such an ambiguity in the case of concepts that are in some ways like the concept of place, such as community, culture and society. While it is possible to imagine community at a range of scales, from the very small to the global, what is lacking in the discourse that surrounds the concept is this displacement, this tendency to move into discourses more proper to cognate concepts.

**Space and Place Today**

By the twentieth century the notion that we live in a world of regions had become very much a part of common sense. The region had come to be taken as a natural unit, whether at the scale of the neighbourhood, the town, the state, the nation or the continent. In each case it was imagined to be possible to circumscribe an area, to draw a line around it in a way that would define an inside and an outside. Indeed, if in various cases it was possible to imagine that constituted a region might change, or might historically have been different, there was little disagreement on one fact: The region, the chorographic, existed.

At the same time, one essential element of the common-sense discourse about regions was the belief that all of these regions could be arrayed within some absolute space. The chorographic existed against the background of the geographic; any region could be displayed on a map, on the globe. And finally, places were conceptualized as locations-within-space; the topographic had shrunk to a point.

In a very important sense, accounts by theorists and historians of those regions accepted those
views. Granted, we find in their accounts a more sophisticated understanding of the ways in which regions are constructed, as of the means by which geographical space is measured and represented. But the acceptance of these two prongs of thinking about space - that the region is a natural object and that there is some absolute space - was almost universal. Indeed, we can see its universality if we look only as far as the blank reactions to claims by physicists at the turn of the twentieth century that space is relative; non-physicists seemed to find it impossible to imagine alternatives to the chorographic/geographic orthodoxy, and certainly were unable to see that such alternatives were all around them.

One part of this failure arose from the ways in which those interested in what have come to be termed the social sciences represented regions. Their research, often deriving from fieldwork, and from extensive interactions with inhabitants of the regions being studied, was typically reported in the form of representations from which those individuals had been excised. In a recapitulation of the move from the early to the later Kant, the body had disappeared. And in the process, those individual and local practices through which regions are constructed had also disappeared, leaving, for many, the region to exist merely as a mental construction, as a set of beliefs. This was, in fact, the state of thinking - both vernacular and theoretical - about space and place within the first half of the twentieth century. We see it in a wide range of areas, from the most mundane to the most notorious (as in the Nazi thinking about region and space: Herf, 1990).

The World as Picture

But in the latter part of the twentieth century there developed two opposing intellectual movements, one deconstructive and one constructive, that gave rise to a recasting of these ways of thinking. And these intellectual movements have, in turn, fed into a more popular sentiment that has proclaimed the death of the region.

The first of these, the deconstructive, is perhaps most clearly seen in the work of Heidegger, and particularly his celebrated essay on ‘The age of the world picture’ (1977). There Heidegger pointed to the modern era as the source of the idea that it is possible to step back from the world and see it as though it is a picture, one comprehensively visible to the individual gaze. This idea, in turn, leads to the idea that we can see the earth, in its entirety, as a laboratory, as the site of a set of controlled experiments. In the end, the idea of the world as picture leads to the idea that everything in the world can and should be an object of empirical enquiry.

Continued in several of Heidegger’s other works (1993a; 1993b), this deconstructive approach might perhaps best be seen as involving the recognition of the historical contingency of the geographical, which now comes to be seen as emerging from within a social and technological complex. At the same time, it begins a repudiation of the long-standing view that vision is a natural process that needs no explication (Jay, 1993).

More or less contemporaneous with Heidegger’s work was another body of work that in rather a different way took a deconstructive tack toward the concept of space. This was the later work of Wittgenstein. In his early work (1961), Wittgenstein had laid out a theory of language that was strikingly geographical. There he argued that language could be seen as ‘mapping’ onto the world, so that a linguistic statement had the same logical structure as some state of affairs in the world. But in his later work, and especially in his Philosophical Investigations (1968), he took that early work to task for having been taken in by a set of spatial terms that were in fact merely seductive metaphors. In the end, he suggested, it is all too easy to be taken in by terms like ‘space’ and ‘map’, to imagine that these terms are capable of doing conceptual ‘work’. But in fact, they very often are simply images, that turn our attention away from the fact that words only have meanings within the contexts of the individuals and groups that use them, in particular situations and particular places (Curry, 2000b).

Both Heidegger and Wittgenstein, then, took a deconstructive turn. Both called into question the modernist orthodoxy that had viewed the world as an object with a given form of spatiality, the map and visual image as capable of grasping that spatiality, and language itself as a spatially structured entity capable of mediating between a spatial world and an internal, mental space.

The New Topography

This deconstructive turn was soon followed by a constructive move, by a series of works that reinserted an emplaced body into the world. One element of this turn was the reintroduction into theoretical discourse of the concept of place.

Certainly one interesting - and telling - feature of this reintroduction has been the way in which the discourse around space and place has moved from one in which the concept of place did not exist to one in which the concept is almost ubiquitous - yet its past invisibility is itself unnoticed. It is as though the ubiquity of the word ‘place’ in everyday discourse has misled theorists into imagining that it must always have been there. But as we have seen, there was an almost 200-year hiatus in which the term was virtually unused. And this is more than a mere historical gripe, since the lack of historical continuity, and especially through what can only be described as one of the major eras of change in
human society, has rendered it more difficult to
make sense of the relationship between technologi-
cal and social changes on the one hand, and changes
in the nature and experience of places on the other.

In fact, it was only in the 1960s that the concept
of place began to re-emerge in academic discourse.
It seems fair to say that that emergence was largely
mediated through popular culture. So, for example,
reacting against modernist urban planning, Jane
Jacobs’ *The Death and Life of Great American
Cities* (1961) placed into popular discourse the
notion that in planning one needs both to look at the
everyday activities of people who live and work in
urban neighbourhoods, and to attend to neighbour-
hoods not simply as districts or regions, but rather as
places constructed through those everyday activi-
ties. And responding to the popular image of the
ugly American, Edward T. Hall’s *The Silent
Language* (1959) pointed to the ways in which
people interact with one another when in close prox-
imity, within places such as offices and cafés.
(Nonetheless, I should add, uses the term ‘place’ system-
atically.) This newly popularized discourse moved
in part into the social sciences, where it became for-
malized in environmental psychology (Proshansky
et al., 1970) and proxemics (Sommer, 1969).

But at the same time, there occurred a very dif-
ferent move, toward what might be termed a new
topography. Here the aim was very different; it was
not to explore ‘place’ as an ontological category. The
claim, that is, was that we need to recognize that we
live in a world of places, and that those places are
real. Introduced into academic work by authors like
Bachelard (1969), Relph (1976) and Tuan (1974),
this approach resuscitated the topographic tradition
by rejecting – as work in environmental psychology
and proxemics did not – the ontological priority of
absolute space. Rather, it took concepts like
‘absolute space’ and ‘region’ to be human inven-
tions, albeit inventions that have come to be embed-
ded in the everyday architecture and institutions of
the world (Tuan, 1974; 1980).

One element of this interest in the ontological
status of places was a desire to rethink the role of
people in the construction of places, as well as other
social formations (Lefebvre, 1991). In *Discipline
and Punish* (1977), for example, Foucault attacked
the traditional view that power operates in a top-
down manner, and pointed to ways in which individ-
uals engage in actions that in turn place limitations on
what they can do. He thereby sug-
gested that the means by which places are con-
structed are far more complex than they had seemed
when those places were viewed simply as homo-

Topography, Chorography
and Geography Revisited

The re-emergence over the last 25 years of place as
an important category has been a striking pheno-
menon, as has been the more recent development of
interest in space and spatiality. Today, we might
say that there are three broad approaches to the
concepts of space and place. On one end of a scale
we might place works that, as I have here, attempt
to draw on historical distinctions, such as the

In both cases, of place and identity, many have
gone further, to suggest not only that one ought to
be suspicious of claims to epistemological privi-
lege, but also that there can be no knowledge claims
that are other than local. On this postmodern view,
to accept the differences among places is to be led
down a slippery slope, to the conclusion that every
difference makes a difference (Dear, 1988; Soja,
distinction among the topographic, the chorographic and the geographic, or between absolute and relational models of space. In various ways those approaches focus on the distinction between the universal and the particular (Entrikin, 1991; Tuan, 1996), look to broader historical connections between those concepts and other philosophical issues (Casey, 1993; 1997), address particular issues such as resistance (Certeau, 1984), or attend to the relationship between those concepts and the technological regimes within which they have operated (Curry 1996; 1998; 2000a).

At the other extreme, many works operate within what might be termed the high-modern tradition. They accept as given the view that there is some encompassing absolute space, and that places are simply locations within space. Here the geographic becomes the substrate, and the chorographic and the topographic refer to the region and the location. Widely accepted throughout the social sciences, this view is right at the root of much of the discourse today based within maps, geographic information systems, and other geographic information technologies such as remote sensing and global positioning systems.

Between those two extremes lies the largest number of works whose goal is to understand the nature of new technologies. Here, as we shall see, the attempt to develop theoretical accounts of these technologies has both taken advantage of and fallen victim to the process of discursive displacement, as the concepts of place, region and space, the topographical, the chorographical and the geographical, have undergone a continuous process of reshuffling.

In the last half century the development of new technologies for communication and representation has seemed to demand a reconceptualization of the spatial organization of the world. One very common way of thinking about these changes has been in terms of a family of concepts, of time–space compression, of the collapse of space and time, and of the global village (Abler et al., 1971; Brunn and Leinbach, 1991; Janelle, 1969; McLuhan and Powers, 1989). Here the suggestion is that more rapid means of communication and transportation are in a sense shrinking the world. In doing so they are bringing people closer together. This is at once causing the destruction of what has long counted as the local, and the construction of new forms of the local. Motivated by two powerful metaphors, of the process of time–space compression and of the consequent global village, this image has been widely accepted.

A second, and in some ways related model, has been advanced in the wake of the development of the Internet and the World Wide Web. On this model, the Internet (or the web) constitutes a fundamentally different form of social existence, and hence geographical existence. It is a new kind of place, and ought for that reason to exist outside traditional, place-based legal structures (Barlow, 1996; Johnson and Post, 1996; Lessig, 1996). As Lessig put the matter:

Cyberspace is a place. People live there. They experience all the sorts of things that they experience in real space, there. For some, they experience more. They experience this not as isolated individuals, playing some high tech computer game; they experience it in groups, in communities, among strangers, among people they come to know, and sometimes like. (1996: 1403)

And third, there is an increasingly large literature that attempts to integrate these developments into a comprehensive model, one that sees the world as in some important way driven by economics, and that believes it possible to integrate the economic with the political, technological and cultural — and in doing so, to make sense of what appears to be a new, or at least an altered, form of spatial organization. Here a central issue has been the way in which an economy based upon flows, of capital and information, can at the same time engender the creation of a certain geographical fixity, which in turn provides the basis for those flows (Brenner, 1998; Castells, 1977; 1991; 1997; Lefebvre, 1991; Smith, 1996). And there has been some agreement that an adequate answer needs to rethink the ways in which scholars have conceptualized the scale of geographical elements in the world, from the body through the household, to the urban, regional, national and global.

There are a number of things to be said about this literature, but I would like to focus on only one, the commitment to various sorts of conceptions of space and place involved there. Explicitly, there is a rejection of what is often termed the "container" view of space as an absolute. There is at the same time an implicit — and sometimes explicit — appeal to the relational conception of space advocated by Leibniz. And third, there is an attempt to problematize the regional. Here new regions may emerge at smaller scales, at the scale of the local for example, in the context of economic and technological changes.

At the same time, in each case, of the global village, the web and the new geography of scale, there is a consistent appeal to a particular form of spatial imagery. In the case of the global village, a community created through sets of relations is treated metaphorically as a village, as the sort of community that traditionally was spatially encompassed. Much the same is true of the web, viewed as cyberspace, a new form of place that is 'out there', but that is spoken of as an object. And in the new geographies of scale the focus is inevitably on the
superimposition and interpenetration of social spaces' (Brenner, 1998: 478) where spaces are spoken of, again, as objects. In each case, in the process of attempting to problematize conventionally conceived regions the authors allow the image of the region to re-emerge. And again, in each case, the rejection of absolute space in favour of relational space is undercut, just in the ways that discourse about the objects in question - the global village, the web or the world economy - is carried on in spatialized terms, terms that suggest that those objects themselves must somehow be in some larger, encompassing space.

I make these comments not to suggest that the authors in question have somehow failed in their analyses. Indeed, quite to the contrary, I wish to suggest that these ways of conceptualizing space and place, this discursive displacement, is very much an inevitable element of the project in which each is engaged. As we have seen, it is quite possible to envision forms of discourse that do not appeal to the image of the region as a container, or that do not imagine the possibility of an abstracted relational space, or that cannot conceive of a non-narrativized place. But the long accretion of sets of practices and institutions that have envisioned space first in modernist, absolute terms and then in regional terms, and that recast the world in those terms, has rendered it difficult indeed to envision the world in other terms, or more accurately, to recognize those many instances in which the world is envisioned in those terms.

If in Hesiod's time the world was rife with symbols, such that the snail could be seen as a sign of a sort of work to be done, and the place of the Pleiades a sign of another, it is now difficult to discuss such signs without slipping into a discourse of calendars and cardinal directions. And this is just the problem faced by the student of new technologies, and particularly those imagined to be as revolutionary as some that are abroad today: whereas those technologies may indeed be associated with a refiguring of the relationships among place, region and space, the ease of slipping from one form of discourse to another makes understanding the potential forms of such change all the more difficult.

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