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Space: The Fundamental Stuff of Geography

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Definition

As with terms like 'society' and 'nature', space is not a common-sense external background to human action. Rather, it is the outcome of a series of highly problematic temporary settlements that divide and connect things up in to different kinds of collectives which are slowly provided with the means which render them durable and sustainable.

INTRODUCTION

'Space' is often regarded as the fundamental stuff of geography. Indeed, so fundamental that the well-known anthropologist Edward Hall once compared it to sex: 'It is there but we don't talk about it. And if we do, we certainly are not expected to get technical or serious about it' (cited in Barcan and Buchanan, 1999: 7). Indeed, it would be fairly easy to argue that most of the time most geographers do tend to get rather embarrassed when challenged to come out with ideas about what the supposed core of their subject is, and yet they continue to assert its importance. Rather like sex, they argue, without space we would not be here. So is all this just mass disciplinary hypocrisy? Not really. It is more about the extreme difficulty of describing certain aspects of the medium which is the discipline's message.

This brief introduction to the topic of space aims to tell you what space is and why we need to study it. It will do this as straightforwardly as possible, but it is important to point out that one of the problems that geographers have

with space is that something that appears as though it really ought to be quite straightforward very often isn't – after all, we all have trouble at times in getting from A to B!

Even nowadays, of course, some geographers still persist in believing that it ought to be possible to explain space in such simple terms that you should be able to understand what is going on straight off. But increasingly, this kind of simple-minded approach has come to be understood as more likely to be part of a desperate attempt to try to render down the wonderful complexity and sheer richness of the world in ways which mimic the predictable worlds of those privileged few who have the ability to make things show up in the way they want them to (Latour, 1997). In this piece, in contrast, while I will certainly attempt to write about space clearly, you should not think that this will be the end of the matter. You will need to read more and think more to really start to get a grip on the grip that space exerts on all our lives – and, as we shall see, the ways that we can alter that grip in order to make new kinds of spaces.

Space has been written about in lots of ways. There are, for example, books upon books which document the different kinds of conceptions of space that can be found in disciplines like philosophy or physics (e.g. Crang and Thrift, 2000). But, I want to keep well away from most of these accounts for now, though they will figure indirectly in quite a lot of what I have to say. Rather, I want to write about how modern geography thinks about space. That could cover pages and pages and so I will have to condense these thoughts into a manageable form. I will therefore make what some will regard as the outrageously simple claim that currently human geographers are chiefly writing about four different kinds of space.

However different the writings about these different kind of spaces may appear to be, they all share a common ambition: that is they abandon the idea of any pre-existing space in which things are passively embedded, like flies trapped in a web of co-ordinates – the so-called *absolute* view of space – for an idea of space as undergoing continual construction as a result of the agency of things encountering each other in more or less organized circulations. This is a *relational* view of space in which space is no longer viewed as a fixed and absolute container within which the world proceeds. Rather, space is seen as a co-production of those proceedings, as a process in process. To begin with, I will artificially separate these four spaces out but, as I will point out in the conclusion, the exciting thing about geography today is that we are learning how to put them together in combinations that are beginning to produce unexpected insights.

FIRST SPACE: EMPIRICAL CONSTRUCTIONS

Talking of putting things together, let's start with the empirical construction of space. It takes only a few minutes of reflection to start listing down all the things that we rely on to keep our spaces going – houses, cars, mobiles, knives and forks, offices, bicycles, computers, clothes and dryers, cinemas, trains, televisions, garden paths – but because these things are usually so mundane we tend to overlook them. So we often forget just what an extraordinary achievement the fabric of our daily lives actually is. Indeed, it is only recently that geographers have started to think systematically about the humble texts, instruments and devices that make up so much of what we are.[1] Let's take just one example of the kind of space that we make every day: the space of measurement. We are so used to looking at road signs measured out in terms of metres and kilometres or consulting a map or looking up an address or working out how long a journey will take that we forget what an extraordinary historical achievement these very ordinary practices are. They didn't suddenly come into existence over night but were the subject of progressive standardizations and co-ordinations that have taken centuries to put in to place. And they required extraordinary investments too. They required the invention of specialized devices that could measure the same things at the same places, culminating in today's satellite-based global positioning system (GPS). They required a whole knowledge of measurement that itself had to be able to be transported around the world in devices, books and journals. They required, latterly, endless boring committees that were able to agree that the same measures would be measured in the same way in different places and then integrated with each other. And they demanded a good deal of brute force. After all, many of the ways space is measured out around the world were imposed by imperial conquest, not prettily negotiated. Nevertheless, it is important to realize the sheer load of human effort that has gone in to making measured space and the often near to insane enterprises that have made this space possible. Let us remember, with a certain amount of awe, the attempts to give birth to a new unit of measure, the metre, under the first French Republic (Guedj, 2001). Between 1792 and 1799 the astronomers Pierre Mechain and Jean-Baptiste Delambre travelled from one end of France to the other measuring the length of the Paris meridian in order to determine the exact length of the standard metre, which the National Assembly had decreed would be one ten millionth of the quarter meridian. The enterprise was an extraordinary one, involving the dragging of large pieces of equipment up hill and down dale, but it laid the basis for the whole decimal metric system which is now so familiar.[2]

What is remarkable about the present time is the way in which this empirical construction of space is currently taking another leap forward. In the late nineteenth century, there was a widespread standardization of time. Driven by the increasing speed of transport and communications and more exact time-keeping instruments, states agreed on a common standard of time (based on the Greenwich meridian) and on a set of time zones spanning the globe in each of which time would be agreed to be uniform. Now, in the twenty-first century, something very similar is taking place in space. Driven by the demands of modern logistics and new, more exact ways of registering space (most especially the combination of GPS, geographical information systems (GIS) and radio frequency identifier tags (RFID)) it will soon be possible to locate everything – yes, everything – using standards of measurement, some of which (as we have seen) were already being laid down in the eighteenth century. Through the standardization of space made possible by these technologies (and the large bureaucracies that employ them), each object and activity taking place on the globe will, at least in principle, be able to be exactly located. The result will be that we will live in a world of perpetual contact, in which it will be possible to track and trace most

objects and activities on a continuous basis, constantly adjusting time and space in real time, so producing what is now called micro- or hyperco-ordination (Katz and Aakhus, 2002). Numerous examples of hyperco-ordination already exist in the logistics industry, where it is necessary to continually adjust delivery schedules, but they are also becoming common in our daily lives, for example in the way in which we use mobile phone text messaging to continually adjust meetings with friends or satellite navigation systems to continually recalculate the route as we change our minds about where to go next.

SECOND SPACE: FLOW SPACE

The second way we need to think of space is as a series of carefully worked-up connections through which what we know as the world interacts. These connections consist of pathways which bind often quite unalike things together, usually on a routine, circulating basis. They can range all the way from the movements of office workers around offices to the movements that these office workers themselves order – of trade, of travel, even of arms. They can range all the way from the movements of a few already slightly drunk teenagers around the bars of Benidorm to the global flows of tourists of which they are a part. They can range all the way from the very restricted movements of prisoners let out of their cells only one hour in every 24 to the vast disciplinary apparatus of states dispensing laws and correction on an increasingly international scale. And so on. Trying to think about a world based on these flows of goods and people and information and money has occupied the attention of geographers to an increasing extent because their presence has become increasingly evident as the world has become increasingly knitted together by them, a tendency that sometimes goes by the name of globalization (see Chapter 19 on globalization and human geography).

The problem is that these pathways are difficult to represent conceptually. We can map them, we can list them, we can write about them, all key means by which the pathways themselves are able to achieve order. But how can we go a little further and create representational spaces which are still attached to these mundane means of achieving order but also pack an added analytical bite? For a long time in geography, the accepted way was to mimic a standard means by which the world is organized and draw boundaries around areas which were assumed to contain most of a particular kind of action and between which there was interaction. Once geographers had drawn lines round and labelled these large blocks, they then held them responsible for producing characteristic forces or powers. So, for example, we might say that this block of interaction was a capitalist space or an imperialist space, a neoliberal space or a dependent space, a city space or a community space, and that it had particular inherent qualities. Such a strategy of regionalization is obviously useful. It captures and holds still a particular aspect of the world and it is doubtful that we could ever do without it. But it is always an approximation and it has some serious disadvantages, most notably the tendency to assume that boundary equals cause, but also the tendency to freeze what is often a highly dynamic situation. So, geographers began to become more and more impatient with these kinds of representation, not so much because they were wrong but because they seemed to leave so much out of contention.

Nowadays, therefore, geographers tend to look for representations that can take more of the world in. One way of doing this has simply been to disaggregate these bounded spaces into smaller subordinate ones called 'scales', usually with some of the same qualities, but also with other qualities that operate only (or operate more strongly) at that scale (see Chapter 12 on scale and human geography). But it is questionable whether such a mode of proceeding does anything more than continuing the same method of drawing lines round and labelling blocks of interaction, though in slightly different form by allowing the possibility of the creation of new blocks, or the migration of powers from one block to another. So many geographers are now trying a different tack. Instead of trying to draw boundaries around flows, they are asking 'what if we regarded the world as made up of flows and tried to change our style of thought to accommodate that depiction' (Urry, 2000: 23)? It is no easy task to represent these 'spaces of flows' (Castells, 2000) but we can now see a whole series of approaches that are trying to start with movement and flow as origin rather than endpoint and which stress mutable, travelling identities over fixed notions of belonging (see Cresswell, 2006; Sheller and Urry, 2006). For example, there is so-called actor-network theory which tries to trace out circulations in which the actor is the 'network' itself; things moving together through networks have powers (including the power to make stable spaces) that they could never have when separated. There is the voluminous work on commodity chains which tries to map out the way that commodities are assembled along pathways that cross the world. There is work by feminist and postcolonial theorists which is searching for spatial figures which can convey the ambition to build different, more fluid kinds of space which can simultaneously engage periphery and centre, continually suggesting multiple routes of entry and exit. And a new more expansive vocabulary is coming in to being that can match these several ambitions: events as well as structures, lines of flight as well as lines, transformation and becoming as well as system and being – all means of freeing thought from the straitjacket of the container thinking of absolute space and replacing it with the process thought of relational space.

In turn, all kinds of new spaces of differentiation are being constructed, sometimes fleeting and sometimes concerted experiments in living different kinds of life which, rather than providing definitive answers, are a set of questions about what kinds of space can be in a world of flows. And the questions are, as Elizabeth Grosz (2001: 130) puts it, 'How then can space function differently from the ways in which it has always functioned? What are the possibilities of inhabiting otherwise? Of being extended otherwise? Of living relations of nearness and farness differently?' All around the world geographers are now both studying and taking part in the spatial *experiments* which can begin to answer these questions. These experiments range far and wide; all the way from the kinds of experiments that are associated with reworking what we mean by 'wild' or 'natural' to the kinds of experiments that are meant to perform everyday life differently to the kinds of experiments which are trying to map new meanings and practices of 'global' (Blunt and Wills, 2000; Abrams and Hall, 2006).

No one quite knows what they are doing. But that is the point of good experiments: they are risky because they leave room for the world to speak back.

THIRD SPACE: IMAGE SPACE

The third kind of space consists of what we might call pictures or, perhaps better, given all of the associations that the word conjures up, images (see Chapter 16 on landscape and human geography). In the past, mention of the image might well have conjured up the notion of a formal painting. But nowadays, images come in all shapes and sizes – from paintings to photographs, from portraits to postcards, from religious icons to pastoral landscapes, from collages to pastiches, from the simplest graphs to the most complex animations. What is certain is that images are a key element of space because it is so often through them that we register the spaces around us and imagine how they might turn up in the future. The point is even more important because increasingly we live in a world in which pictures of things like news events can be as or more important than the things themselves, or can be a large part of how a thing is constituted (as in the case of a brand or a media celebrity). Part of the reason for the pervasiveness of images is that we now live in a world populated by all kinds of screen which produce a continuous feed of images. These screens are now so pervasive that we hardly notice their existence (McCarthy, 2001). So we find television screens populating not just homes but also bars, airports, shops, malls, and waiting rooms, while computer screens can be found in dealing rooms, offices, studies and bedrooms and, increasingly, as public access screens, in airports and stations as well as in internet cafés. This extraordinary proliferation of screens over the last 50 years has produced an image realm of extraordinary richness which is changing how we do space.

This change can be linked to another way in which our thinking about image space is changing. In the past, particular kinds of image very often created spaces in their likeness. So, for example, a particular notion of spatial symmetry helped to produce the Palladian landscape while a particular kind of modernist sensibility helped to produce the kinds of strictly laid out and ascetically ordered landscapes still to be found lingering on in many urban housing estates. But the proliferation of images has made it increasingly difficult to read off images straightforwardly on to space like this. And it has also pointed to an aspect of images which has often been heretofore neglected; that they are the result of complex processes of mediation which themselves bear meaning. For example, Bruno Latour (1998) shows how a finished piece of work like a religious painting can involve all kinds of intermediaries, each of which can be bearers of spatial meaning – varnishes, dealers, patrons, assistants, maps, measuring devices, graphs, charts, angels, saints, monks, worshippers – and each of which has its own complicated intervening geographies. Such an example also shows that there is no direct reference to the world contained in an image, but rather a never-ending set of transformations – or what Latour calls 'cooking steps' – each of which can involve quite different ways of seeing and working on the image.

If there are now so many image spaces swirling through us in so many different ways, it is clear that they must compete for our attention. And it is this aspect of image space that I want to point to in concluding this section. For what is clear is that the issue of attention is probably the most pressing one now facing the geography of images (see also Chapter 4 on geography and the humanities tradition). Caught in a snowstorm of images, why do we attend to some images rather than others? In the nineteenth century, the matter of attention was a key element of debates on space. It was subsequently taken up by writers like Walter Benjamin and Georg Simmel, who argued that the constant barrage of images was causing people to grow a kind of mental carapace which would protect them from this continuous bombardment, a carapace which was showing up in cities as new and studied social styles (like cynicism and a blasé attitude) which constructed certain routinized kinds of attention. However, the growth of the mass media, such as the cinema, had also provided the opportunity for new kinds of moving images to come into existence, which to some extent undercut these social styles and produced new apprehensions of space.

In the twenty-first century, we can see this debate being replayed as geographers consider the ways in which new image forms are again providing new social and cultural pathologies, but also new opportunities, as we have seen in the case of the sheer pervasiveness of the screen and the images supplied by it. We can wrap all these new image forms up in one big package called 'postmodernism' (Harvey, 1989), making all the images add up to one vast capitalist spectacle, but better by far to do what geographers are doing now and try to look at all the cooking steps of different kinds of image and their geographies, testing each step for its various potentials to tell us something new about how we see the world. This is a much harder slog, of course, one which requires a lot of methodological expertise (Rose, 2001). It also makes it much more difficult to write in terms of one stable big picture like postmodernism, rather than multiple, shifting arrangements. But then perhaps that is not such a bad thing. After all, one of the continuing dangers of work on images is to read too much significance into them, rather than considering them as just another set of mundane tools and practices of seeing which allow us to see some things and not others and so construct some spaces and not others (Anderson, 2003).

FOURTH SPACE: PLACE SPACE

The final kind of space is space understood as place: I say 'understood' loosely since the nature of place is anything but fully understood (see Chapter 9 on place and human geography). One reason for this is precisely that place so often seems to be caught up with the idea of a natural register. Whether it be the quiet glories of Thoreau's Walden Pond or the noisy cultural authenticity of an urban enclave, somehow place is more 'real' than space, a stance born out of the intellectual certainties of humanism and the idea that certain spaces are somehow more 'human' than others; these are the places where bodies can more easily live out (or at least approximate) a particular Western idea of what human being should be being. But, other geographers are moving away from this kind of certainty both about what 'human' and 'being' might be. They are more interested in testing the limits of 'human' and 'being' through experiment and, in the

process, are starting to point to new kinds of space (see Chapter 4 on geography and the humanities tradition).

Whatever the case, all of those working on place seem to agree that place consists of particular rhythms of being that confirm and naturalize the existence of certain spaces. Often, they will use phrases like 'everyday life' to indicate the way that people, through following daily rhythms of being, just continue to expect the world to keep on turning up and, in doing so, help precisely to achieve that effect (Lefebvre, 2004). The problem is that rhythms of being can vary so enormously that such phrases often provide only the most tenuous hold on what happens. This problem of variation does not just exist because there are so many different rhythms of being, but also because when the minutiae of everyday interaction is closely looked at what we see is not just routines but also all kinds of creative improvisations which are not routine at all (though they may have the effect of allowing that routine to continue). So, in everyday life, what is striking is how people are able to use events over which they often have very little control to open up little spaces in which they can assert themselves, however faintly. Using talk, gesture, and more general bodily movement, they can open up pockets of interaction over which they can have control and which give them a feel for place (Laurier and Philo, 2006). Clearly, an important part of this process is that spatial awareness that we call place. For places not only offer resources of many different kinds (for example, spatial layouts which may allow certain kinds of interaction rather than others), but they also provide cues to memory and behaviour. In a very real sense, places are a part of the interaction.

One thing that does seem to be widely agreed is that place is involved with embodiment. It is difficult to think of places outside the body. Think, for example, of a country walk and place consists not just of eye surveying prospect but also the push and pull of walking up hill and down dale, the sound of birds and the wind in the trees, the touch of wall and branch, the smell of trampled grass and manure. Or think of a walk in the city and place consists not just of eye making contact with other people or advertising signs or buildings, but also the sound of traffic noise and conversation, the touch of ticket machine and hand rail, the smell of exhaust fumes and cooking food. Once we start to think of place in this kind of way, we also start to take notice of all kinds of things which previously were hidden from us. So, for example, there is now a thriving study of how sound (and especially music) conjures up place associations (Leyshon et al., 2000). And other senses, such as touch and smell, are also beginning to receive their due too.[3]

But there is a big problem here. What do we mean by 'body'? And this is where we get to the most intriguing prospect of all. For though it is possible to think of *the* body as flesh surrounded by an envelope of skin, all the current thinking suggests that this container thinking is too simple. It probably makes much more sense to think of the individual body as a part of something much more complex, as a link in a larger spatial dance with other 'dividual' parts of bodies and things and places which is constantly reacting to encounters and evolving out of them, not individual awareness but dividual 'a-where-ness'. And this larger dance is held together in particular by the play of 'affects' like love and hate, sympathy and antipathy, jealousy and despair, hope and disappointment, and so on.

Affect is often thought of as just a posh word for emotion but it is meant to point to something which is non-individual, an impersonal force resulting from the encounter, an ordering of the relations between bodies which results in an increase or decrease in the potential to act. Place (understood as a part of this complex process of embodiment) is a crucial actor in producing affects because, in particular, it can change the composition of an encounter by changing the affective connections that are made (Thrift, 2005). Thus, as we all know, certain places can and do bring us to life in certain ways, whereas others do the opposite. It is this expressive quality of place which has recently lead to the emphasis on performance in geography. For, through experiments with particular kinds of performance (from art to dance to drama), it may be possible to show some of this affective play and use the understandings (or should it be stancings) of place thereby gained to make places which can help to produce the same sense of empowerment and general creative potential that we currently most often identify with situations like standing on the top of a hill on a windy day drinking in the atmosphere or being moved by a great new piece of music. In other words, geographers working on place have started to join in a kind of politics which is intent on freeing up more of the potentials of place - and installing some quite new ones.

CONCLUSIONS: JOINED-UP SPACING

What is fascinating about the present time is that geographers are now attempting to fit these four kinds of space together, partly because models for doing this are erupting in the social sciences and humanities in a way that they never did before. In the past, many theoretical models of space that had an ambition to connect spaces of various kinds simply simulated the command and control models of the dominant systems around them. So, for example, many early Marxist models of capitalist space produced spatial connection by nesting some kinds of 'little' space in other 'big' spaces, declaring the 'little' spaces to be 'unique' and the big spaces to be 'general'. But nowadays this simple 'size' distinction does not hold. We are no longer sure what is big or little or what is general or unique. Instead, as we have seen in the case of each of the four spaces that we have examined, the hunt is on to think about space in quite different ways, ways which can prompt new 'a-where-nesses' (Massey, 2005, Thrift, 2006).

And this relates to the most important point that I want to make. This is that all of these ways of thinking space are attempts to rethink what constitutes *power* if we can no longer think of power as simply command and control (Allen, 2002). So new thinking about the empirical construction of space involves considering the prolonged hard grind of actually putting viable pathways together, especially when, as nowadays, they can stretch around the world and back. New thinking about unblocking space involves the difficult task of redescribing the world as flow and continuous transformation. New thinking about image space involves reconsidering how images are circulated and kept stable when that circulation involves large numbers of intermediaries. And new thinking about place space involves trying to understand the gaps in the rhythms of everyday life

through which new performances are able to pass. What we are seeing are new spaces being imagined into being by reworking the spatial technologies that we hold dear and what is clear is that these acts of imagination are all profoundly political acts: what we often think of as 'abstract' conceptions of space are a part of the fabric of our being and transforming how we think about those conceptions means transforming 'ourselves'.

SUMMARY

- Space arises out of the hard and continuous work of building up and maintaining collectives by bringing different things (bodies, animals and plants, manufactured objects, landscapes) into alignment. All kinds of different spaces can and therefore do exist which may or may not relate to each other.
- For the purpose of simplification, it is possible to identify four different kinds of these constructed spaces: empirical, flow, image and place.
- Empirical space refers to the process whereby the mundane fabric of daily life is constructed.
- Flow space refers to the process whereby routine pathways of interaction are set up around which boundaries are often drawn.
- Image space refers to the process whereby the proliferation of images has produced new apprehensions of space.
- Place refers to the process whereby spaces are ordered in ways that open up affective and other embodied potentials.

Further Reading

Space has been written about in lots of ways. One book which documents some of the different conceptions of space that are drawn upon by different disciplines is Crang and Thrift's (2000) ***Thinking Space***. Different takes on the nature of space within the discipline are evident in Anderson et al.'s (2003) ***The Cultural Geography Handbook***, Gregory's (1994) ***Geographical Imaginations***, Harvey's (1989) ***The Condition of Postmodernity***, Hubbard et al.'s (2004) ***Key Thinkers on Space and Place***, Massey's (2005) ***For Space*** Thrift's ***Spatial Formations*** (1996) and ***Non-representational Theory*** (2007).

Note: Full details of the above can be found in the reference list below.

NOTES

1 This is a little bit unfair. The exceptions to this rule include work by those who have been interested in the history of cartography and navigation, such as the late Eva Taylor (see Taylor, 1930).
2 I could have chosen many other examples, such as the history of the surveying of Britain or the mapping of Switzerland (Gugerli, 1998) or India.
3 This move also underlines how often space is bodied in various ways. And, if space is bodied, then it will, for example, be actively gendered. Therefore, to return to the beginning of this chapter, space has numerous sexual dimensions (see Pile and Nast, 2000).

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6

Space: Making Room for Space in Physical Geography

Martin Kent

Definition

Geographers are poor at defining space. The *Oxford English Dictionary* defines space in two ways: (1) 'A continuous extension viewed with or without reference to the existence of objects within it'; and (2) 'The interval between points or objects viewed as having one, two or three dimensions'. The geographer's prime interest is in the objects within the space and their relative position, which involves the description, explanation and prediction of the distribution of phenomena. The relationships between objects in space is at the core of geography.

INTRODUCTION

The importance of the concept of space in geography has always been controversial (Gatrell, 1983; Unwin, 1992; Holt-Jensen, 1999) and whether geography and geographers should primarily focus on, or at the very least give some recognition to, the importance of space remains a fundamental question for the discipline. This chapter examines the concept of space in the context of physical geography (see Chapter 5 of this volume for a human geography perspective on space). The chapter begins with the suggestion that physical geographers have neglected the vital spatial dimension of their subject over the past few decades and explores the possible reasons for this. The spatial units and approaches to mapping that are recognized by the major subdisciplines are then examined and, in turn, the relatively poor spatial synthesis across physical geography is