Time and Space

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For

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Spaces of Geographical Thought
Deconstructing Human Geography's Binaries

Sage

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Geography has occasionally sought to claim to be a spatial science, sometimes it has sought to define itself through 'areal differentiation', or the synthesis of different factors in a specific environs. Indeed, commonsensically, geography has tied its remit to definitions which put 'space' at the centre of geography. And yet if we ask a class of first year students what space is, the most constructive answer tends to be 'the final frontier'. In fact it is probably true that most students arrive at university with up to nine years studying geography, and yet rarely have they worked through explicit theorisations of space. It is taken as obvious, as self evident and not really in need of further examination. I mean once we have located things there hardly seems more to be said. Except if you do ask for a little more clarity, as to what space is, suddenly things begin to unravel. Our assurance in using the word space yet our lack of specificity about it reminds me of the discussion of time by St Augustine, Bishop of Hippo, in 397AD,

> 'What, then, is time? If no one asks me, I know what it is. If I wish to explain it to
> him who asks me, I do not know.'(397 [1955], book 11, chapter 14}

Both time and space are everyday terms which everyone commonsensically understands and thus are often undefined. This lack of definition is exacerbated by disciplinary divisions since geography has tended to define itself as spatial, and thus tended to regard time as not its province. Thus asking geography students about notions of space produces a variety of answers, whereas if I ask those geography students about time then they draw a blank. If time is considered problematic it is in the sense of finding an appropriate scale to match the process and phenomena studied – just as with spatial categories. The only question is how much of each gets looked at, rather than their actual nature. Recently I shall suggest, and other chapters in this volume show, there has been quite a bit of geographical attention to what space actually is, its relationship with scalar categories such as regions, localities or indeed with notions of place. I want to follow through these issues to unpack the 'space' side of the dichotomy as this essay progresses. In this way I want to disrupt the binary by illustrating that space is neither self-evident nor self sufficient but is rather often mutually and problematically defined by and with problematic concepts of time. And it is at this latter point that we have to concede geographers have not developed an extensive engagement.

So both space, with which geography identifies, and time seem to be so obvious as categories as to not need further scrutiny. Except I shall argue that they both carry so much baggage and so many different meanings, that both need careful attention. So in this chapter I suggest, first, that both space and time have multiple facets and definitions. Second, not only are they both complex in themselves but also they tend to be mutually defined (or undefined). Thus definitions of time often lean, explicitly or implicitly, on definitions of space and vice versa. I shall try and show that sometimes this is a process whereby time is likened to space (but rarely the other way round) and paradoxically space is defined as the opposite of time in a classic dualism. These analytic divisions then drive different ontologies and philosophical positions. Thus for instance Doreen Massey (1992; 1998) has argued that for radical politics the traditionally important category has been time, which is associated with the possibilities of progress and change. Typically this involved linking the dualism of space and time with another great philosophical dualism – being and becoming. Being is about enduring essences and entities whereas becoming is about process unfolding over time. Space is elided with Being, time with Becoming. The result, to paraphrase many, many reworkings of an essay by Foucault, is that time is seen as fecund and creative while space is seen as passive and inert. And yet over the last decade or two there has been something of an inversion of this, or to use Soja's (1989) sub-title – a reassertion of space in social theory.

Some have argued there is an epochal shift in concerns from time to space, that our concepts of relationships between space and time are being impacted by social changes. Thus we find the very often invoked quote from Michel Foucault that:

> 'The great obsession of the nineteenth century was, as we know, history: with its themes of development and of suspension, of crisis, and cycle, themes of the ever-accumulating past, with its great preponderance of dead men and the menacing glaciation of the world. […] The present epoch will perhaps be above all the epoch of space. We are in the epoch of simultaneity: we are in the epoch of juxtaposition, the epoch of the near and far, of the side-by-side, of the dispersed. We are at a moment. I believe, when our experience of the world is less that of a long life developing through time than that of a network that connects points and intersects with its own skein.' ('Of Other Spaces' 1967, reprinted in Foucault 1986, page 22)

This programmatic statement has come to be used, just as I use it here, as a masthead for an account that sees theory moving to engage with the spatial. This theoretical shift is argued to parallel social and material changes, in a world of globalised media and trade, where the effects of shifts in one market are felt instantly in another. Thus Fred Jameson depicts a world characterised by simultaneity, producing an aesthetic of pastiche which amounts to the eclectic assemblage of the forms of many eras. Put simply instead of linear process of one style or from succeeding another, or being seen as superior to it, they coexist at the same time (Jameson 1998). The architect Bernard Tschumi (1999, page 170; figure 1) graphs this simply, labelling space as 'synchronic time' – the coexistence of objects in the same time.

INSERT FIGURE 1 ROUND HERE

Jameson thus argues what is required is a new way of keeping our bearings – a 'cognitive mapping' to cope with this temporal coexistence. Jameson suggests then that in the current epoch the language of theory, and possibly its ontological concern shifts from temporal unfolding to spatial occlusion – instead of the consequences of actions being played out over history, the primary issue is one of their rapid diffusion over space, instead of time hiding the consequences it is space. Or in artistic movements "the organisation of space has become the primary aesthetic problem of mid-twentieth century culture, as the problem of time (in Bergson, Proust, and Joyce) was the primary aesthetic problem of the first decades of this century" (Daniel Bell cited in Harvey 1989, page 201). Figuring the zeitgeist of our age in this manner may be appealing but it clearly overstates any putative shift in concern. As Fred Jameson recently sardonically commented:

'After the end of history, what? No further beginnings being foreseen, it can only be the end of something else. But modernism had already ended some time ago and with it, presumably, time itself, as it was widely rumored that space was supposed to replace time in the general ontological scheme of things. At the very least time had become a non-person and people stopped writing about it.'(2003, page 695)

He goes on to pose a difficult question which is whether some of the theoretical concepts I am going to develop towards the end of the chapter can successfully patch together a dualism when it too often seems that 'Time and Space are at war in a Homeric combat' (page 698). O rather than a disciplinary celebration that social theory seems to have noticed geography, we need to unpack how space and time interact.

So my first step is to unpack a range of types of space and then outline a similar range of ideas of time. Thus at the very least we can suggest there is no simple binary between two terms, but relationships between different sets of terms, and thus often different relationships between specific different elements. What I then hope to suggest is that many of these specific and varying definitions are subtended by specific and varying dualisms – and to illustrate this I want to follow through two ways spatial models have been used to understand time. In the first, I will examine how one of the ontologies of space identified in the following section – abstract space – has been seen as at best informing problematic understandings of time and at worst rather obfuscating the whole notion of temporality. This example has been used to illustrate the problems of spatialising time, and lies at the heart of how space has often been regarded as secondary to history. I want to suggest that at the least we see this as a problem not maybe inherent in spatial notions but those particular spatial notions. The second example I then want to use takes a looser epistemology about space, that of landscape as convergence, to indicate a multiplicity of temporalities interacting. Here space is used to free up and pluralize what 'time' entails. My final move then is to look at categories that seek to link space and time – and here I want to focus upon a concept taken from the literary critic Mikhail Bakhtin – the chronotope.

Multiple Spaces

This section recaps some of the issue in chapter xx (Agnew) to highlight senses of space that have played an important role in relation to notions of time. If we start with most obvious sense of space it is that of location. And what do we mean at bottom by 'located'? A definition often might start,

and all too quickly all too often end, with co-ordinates, x and y, east-west and north-south as a form of Newtonian space. It tends to imply a sense of space as length, area or volume, that is infinitely divisible into units ($x_1, x_2, x_3, \ldots x_n, y_1, y_2, y_3 \ldots y_n$, and thus locations combining these). The implication then is that space is about difference in location, not type. That is we tend to assume two things. First, that objects are independent of location – a house at one end of a street might be the same as one at the other, and the only difference between them is position. This is not to say there is no difference, one need only think of the three key factors in house prices ('Location; location; location') to see that spatial position matters. But the type of difference is enumerative or quantitative. We can see this notion of space taken to its logical conclusion in the assumptions behind the spatial models of von Thunen or Christaller – an isotropic plain, where space is homogenous and quantifiable, where all other differences are stripped out. Such a concept of space has real consequences. Perhaps the most famous example is the mapping of the west of the USA where, beyond route 277 in Ohio, land was marked out for potential homesteads, settlements and townships from great sweeping meridians charted across the land with such regularity that it was compared to graph paper (Linklater 2002, page 178). It drained out all substantive content from space and replaced it with empty, exchangeable units of measurement. What this facilitated was the rapid commodification of land – with standard plot sizes and multiples of plot sizes, identified by unique location in the grid. Second, then this version of space sees territory as divisible and multipliable. In other words since the only difference between places is location, they can be ever more finely sub-divided into smaller components, or indeed added together to form larger units. The only change is quantity. As Lefebvre put it: 'This is a space, therefore, that is *homogeneous yet at the same time broken up into fragments'* (Lefebvre 1991, page 342).

There are numerous other ways of conceptualising space from which I am going to select three that highlight themes that emerge later. So we might firstly make an argument that this empty space is actually too solid, that it gives meaning to space before content. A relational, Leibnizian view of space instead sees it as only defined by the objects within it and their relationships one to the other. For instance, a Feudal society where a land grant might be measured in land sufficient to graze a herd of pigs (to take one form of measurement used in England's eleventh century Domesday book) has a very different notion of space than one where standard units of length and width define ownership. The differing senses of space and different epochs is not just a story about accuracy of measurement it is about differing societies relationship to space, as Lefebvre would say not just a matter of social relations and contradictions *in* space but *of* space (Lefebvre 1991, page 334). To put it another way societies do not just occur in a pregiven space where the only question is how much of it they occupy but they actually create space. Thus even if we think of the empty space created in

the surveying and dividing of the American West, this was a space produced in order to facilitate and enable its colonisation (and balanced the interests of state, farmers and land speculators). Its 'emptiness' and the lack of substantive meaning for any given place is created, it is a 'semantic void that abolishes former meanings' (Lefebvre 1991, page 307).

This abstract space can be counterposed to 'inhabited' personalised meaning given to places. As Michel de Certeau put it, confusingly inverting the terms, space is inhabited place (de Certeau 1984; de Certeau 1985). To coin a phrase, houses differ by more than location when one of them becomes our home. This division of place and space has been around for a long time, we can trace it certainly as far as Plato's notions of space as the formless, or receptacle or, as we shall see, meeting point (*chora*) and space as known and inhabited place (*topos*) (Grosz 1995). Given the discussion of the instabilities of this opposition elsewhere we might note that Derrida uses chora as meeting point between place and space (Eisenman 1997). I want to start thinking about precisely topos too. We might think of sacred space, as being what Lefebvre (Lefebvre 1991) would call an absolute space. It is not a matter of these being portable, but rather there is a specific investment in one location. These sites are precisely not interchangeable. This is the origin for the idea of *genius loci*, the spirit of place but more interestingly this is generally now taken to suggest that special quality of place, created through long term attachment and the convergence of many factors – the daily rhythms, personal histories and secular and/or religious rituals. The emphasis upon the convergence suggests this is about fusion into a new whole. It is not then about 'extensive boundaries', about defining place through the limits of spatial extension, but rather it is an intensive threshold, where there is an internal transformation, like a phase shift (de Landa 1998; de Landa 1999).

If we think back to our first list of binaries what is apparent is that notions of 'intensive threshold' or 'habituation' suggest place Becomes – it is not simply Being. It is made and remade, and, for that matter, undone. We might approach this then through a vocabulary that sees space as action not location. One way into this is through notions of dwelling, which following Heidegger we might see as the activity of being-in-the-world. Certainly we can begin to push the affective dimensions of space – its emotional resonance, such as senses of security, and its specificity. Thus Gaston Bachelard (1964) identifies spatial archetypes of security such as the den but also further territorial binaries of inside and outside. But more strongly there is the sense that this is not space containing objects but space that is created through actions and thus we might better talk of spacing. In Heidegger's analysis of a Greek temple he suggests it is not added to a given place but that rather 'the building precedes its site' (Wigley 1993, page 61). That is it is the temple that creates the sense of sacred space, it creates the ground for its people (Elden 2001, page 66). Taking the example of

Hölderlin's poetry on the great German rivers, Heidegger argues the rivers are not symbols of various places but create those places, they make the lands associated with them not just in a geomorphological sense but in the sense of a dwelt territory, and thus the poems are performing placing or are 'platial' as oppose to spatial (Elden 2001, page 36).

The reason for delving into Heidegger is that first, as we shall see he offers fruitful connections into issues of time – which is his main concern. Second, and of more immediate interest here, he moves us from seeing abstract space as 'objective' and place as 'subjective'. He pushes against this dualism by insisting on the objectivity of dwelling. He argues that that all understanding comes from Being in place, by being situated. His focus is neither subject nor object but situation (Jameson 1999, page 213). In other words there is no unplaced knowledge, no transcendent viewing point and no unplaced transcendent subject. While Heidegger's position can be dangerously conservative, he critiques abstract knowledge for depending upon modes of representation which distance us from an experiential engagement. This critique finds echoes with Lefebvre's well known triptych of representations of space, representational space and spatial practice (1991, page 40-6) - which can be glossed as abstract ideas of space, affective and finally lived space - has provided the framework for this section. We move from ideological notions of space, that clearly play a role in shaping societies, their structures and activities, through to the sense of the meaning and emotional resonance of places before finally thinking about the habitation of those places – not their representation through mediating schema but their direct interrelationship with people's activities and identities. It is revealing to look at how some the same issues of multiple meanings are replicated in discussions over time.

Multiple Times

If space is often taken as a common sense element and a shared datum which can anchor analyses the same can be said of time with added force since there is the added force of direction – time often being defined as different from space in that it is irreversible. It is this sense of flow that clearly underpins the notion of time as Becoming to space as Being, time as action and space as context. However, it is also the case that time is by no means self-evident. In fact to start with lived time we might say it more dominated by cycles than linear flows. 'Everyday life is above all a temporal term. As such it conveys the fact of repetition; it refers not to the singular or unique but to that which happens 'day after day' ' (Felski 2000, page 18). This is not a time of developmental logic and conscious planning. Cullen suggests the imperatives of routines mean that in quantitative terms, deliberative choices:

'are swamped by a dominant pattern of repetition and routine. We spend very little time each day either deliberating some future action or executing a previously deliberated one. Most of our time is devoted to living out a fairly sophisticated pattern of well ordered and nearly integrated routine.'(Cullen 1978, page 31)

In other words our daily lives have a temporality that is often not the linear flow of time's arrow but is composed of cycles. Getting up, going to work, eating meals, weekdays and week ends all occur with stupendous regularity when we look at western societies. On longer scales there are the cycles of birthdays and festivals. In other words ritual times, be they religious, personal, commercial or mixtures of all of these are often cyclical. Hall (1983) takes the example of the Quiche Maya who traditionally had both sacred and civil calendars of each of which had different numbers of different length months which interlocked to only repeat every 52 years. As opposed to Anglo European calendars where the cycle of routine overlays largely undifferentiated days here each has a proper name in the sacred calendar (Page 81). If we look at the Dreamtime of Australian Aboriginals we find it is one of continued recurrence and relevance – it is a mythic time marked by being out of our current time, that is not past but is continually present (Perkins 1998). And from the sacred we should not forget the opposite – profane times, such as the time of carnival or other leisure times where the normal order is overturned. So cyclical time can be important in a number of registers. Hall concludes we can identify at least 8 clusters of types of time divided around key oppositions thus some might be interpreted as physical (eg. ageing, the seasons) while other issues are cultural (eg. religion), some times might be defined as individual or collective, some are 'exogenous' (where appear they appear objective) and others are contextual (dependent on the beholder), to replay the objective and subjective dichotomy. Putting these together we end up with (1) sacred, (2) profane, (3) micro scale, (4) synchronised, (5) personal, (6) biological, (7) physical, (8) metaphysical types of times (Hall 1983, page 17).

Just to add to the complexity we might chart the changing historical balance of linear and cyclical time. Analysts have often pointed to the association of women with reproductive labour, and suggested this has had a more cyclical character – whereas men accessing the public realm had access to a public time of historical progress. Historically the same pattern inflects class experience with linear time being associated with a progressive self-narrative of self-actualisation or accomplishment that we find emerging in the early modern period among the bourgeoisie – buttressed by congeries of new technologies. So here we find shifts from the book of hours, and prayer books suggesting devotional activities for each hour of each day, to personal reflective diaries that spin the self, and self-understanding in to a temporal narrative. It is often argued this

narrative is connected to a linear time that slowly diffuses through society (Maynes 1989; 1992). It is common in studies of literary and textualised version of time to suggest that the ability to grasp oneself in time is indeed to sense one's life as narrative (Currie 1999, page 45). The self then becomes a unity through having a narrative development between beginning and ending. Alternate accounts look to the rise of capitalism with the time of the ledger book triumphing over the mediaeval time, full of chimes ringing out calls to church or mosque (Goff Le 1980). If we have seen abstract space as making land a commodity, then we might follow Lewis Mumford in defining the clock as the key machine of industrial capitalism (Nowotny 1994, page 47). Each minute of the day becomes calculable and measurable – to be bought and sold between capital and labour. We have to be cautious about opposing cyclical and linear time, where for instance Hegel, and indeed Marx following him, identified Hindu India with cyclical time and thus with a lack of progress, and the British colonisers with forward looking dynamic modernity (Spivak 1991). More nuanced accounts look to monasteries themselves as incubators of new technologies of time as they invented orders and sequences of devotional activities dependent upon their timing through the day and year. Indeed religion itself has pushed the notion of the narrative self, as in Augustine, and the sense of time as a something to be spent wisely (Fenn 2001).

Even when we begin to think then of time as flow we immediately encounter paradoxes. Let us return to Augustine and his great narrative recomposition of the self in the Confessions. In book 11 where he explicitly thinks through the implications of this for time he first formulates a notion of the disappearing present - no sooner thought than it has gone. That is the present is not so much a day or an hour or even a second as the fine boundary line between the future and the past, which I will suggest we should think not so much as itself moving forwards as being the line through which the future flows into the past. As Henri Bergson put it the present is not so much '*that which is*, [but] … simply *what is being made*. Nothing *is* less than the present moment, if you understand by that the indivisible limit that divides the past from the future. When we think this present is going to be, it exists not yet, and when we think of it as existing, it is already past' (1991, pages 149-50). The present as the only realm in which we act thus appears to shrink away while the past and future quite clearly have a different ontological characters – the one not yet being, the other have ceased to be. Grappling with this Augustine reversed this conclusion – producing what we might call the 'big now' (Ricoeur 1988, page 30) instead of the disappearing present:

> 'But even now it is manifest and clear that there are neither times future nor times
> past. Thus it is not properly said that there are three times, past, present, and
> future. Perhaps it might be said rightly that there are three times: a time present of
> things past; a time present of things present; and a time present of things future.

For these three do coexist somehow in the soul, for otherwise I could not see them. The time present of things past is memory; the time present of things present is direct experience; the time present of things future is expectation.' (397 [1955], book 11, chapter 20)

In this way Augustine moves to ground temporality in human experience rather than an external measure. We reach forward to grasp the future while carrying with us our past – and thus we make both elements present. The term Augustine uses is 'distentio animi' for the stretching of the spirit to include our expectations and our memories. The mind expects, it is attentive and it remembers (Alliez 1996, page 131). Our own experience will tell us that this is not a uniform sense of time as there are occasions when time seems to crawl towards one anticipated event and hurtle away from another fondly remembered one (Flaherty 1999).

No moment is then fully self-contained, or as we shall see the present is then precisely not presence. As Augustine formulated it in his chapter 14 'If, then, time present--if it be time--comes into existence only because it passes into time past, how can we say that even this is, since the cause of its being is that it will cease to be? Thus, can we not truly say that time *is* only as it tends toward nonbeing?' Or to restate the significance of this 'The fragile hold of the present on reality … is itself encroached by the surrounding voracious non-existence of past and future' (Lloyd 1993, page 22). The insight of the extended present has been carried through into a range of temporal ontologies. In Husserl's phenomenology every instant is marked by protention and retention, carrying with it the traces of the past and the seeds of the future. This approach perhaps reaches its apogee with Martin Heidegger who looks at temporal Being as matter of three *ekstases* or modes of time; a being-alongside, that is simultaneity, a being-towards-death, that recognises the force of time's arrow for all humans, and 'thrownness', that is we find ourselves cast into the world in situations neither of our making nor choosing. What is more the depth and shape of these modes is shaped by our structure of Care and concern towards the world – in other words the time frame that we bring to bear from past and future varies according to the sort of tasks we are undertaking. The fundamental insight Heidegger then provides is that life and the subject are temporal. We do not develop some notion of the human subject and then insert it into grids of space and time. Rather the subject is formed through structures of temporality and spatiality. This sense then of a tripartite time where the present is so insubstantial and always slides past I want to contrast with the dominance of a form of abstract time, that sees the present as a definable instant.

Time as Space (part 1)

Very often time is deployed as though it were a series of salami slices or beads upon a string, a series of 'nows' that follow one after another in a sequence. The model for this is clearly that of abstract space, where to our spatial coordinates we add temporal ones in an infinite and empty series (t_1, t_2, t_3, … t_n). As Hall puts it taken for granted Anglo-European 'time is an empty container waiting to be filled' (Hall 1983, page 84). Perhaps the classic example of this treating of space and time as an external container is time-geography. Here time is added as another axis to the conventional map in order to produce an action space, a container of possibilities. An intriguing pattern then emerges of activity prisms (the scope for movement between fixed points in space-time) which lead to coupling constraints (how different people's activities can be coordinated) in a delicate and fascinating choreography of people's paths through space time. Thus while the great pioneer of time geography, Thorsten Hågerstrand sympathised with some phenomenology of time, he argued resolutely that 'external' and objective time were the key dimensions (1982, page 324). In this vision then people may move quicker or slower, but they share a set of time-space dimensions. However Grosz argues this means that :

> 'Even today the equation of temporal relations with the continuum of numbers assume that time is isomorphic with space, and that space and time exist as a continuum, a unified totality. Time is capable of representation only through its subordination to space and spatial models.' (1995, page 95)

However in utilising precisely the concepts of abstract space to depict time it presents very much a sequence of moments. For all that it plots the paths and trajectories of actors we might say it succumbs to the cinematic illusion about time. Thus if we turn back to the early twentieth century philosopher Henri Bergson we find him arguing that this approach misses precisely the sense of flow in time as it

> 'masks the perception of real movement ... your succession of points are at bottom, only so many imaginary halts. You substitute the path for the journey, and because the journey is subtended by the path, you think the two should coincide. But how should progress coincide with a thing, a movement with an immobility?' (1991, pages 189-90)

In other words we lose precisely that sense of expectation and retention, or being towards the future and thrownness. Or to take the gloss on his ideas from Gilles Deleuze, time and space are qualitatively, ontologically different and thus using one to describe the other creates a compound concept that is inherently chaotic because:

> 'movement is distinct from the space covered. Space covered is past, movement is the present the act of covering. The space covered is divisible, indeed infinitely divisible, whilst movement is indivisible, or cannot be divided without changing

qualitatively each time it is divided. This already presupposes a more complex idea:

the spaces covered all belong to a single, identical, homogeneous space while the

movements are heterogeneous, irreducible among themselves.' (1986, page 1)

I think this analysis is correct as far as it goes. Time is not reducible to this sense of space. But these are moves that define time as vibrant difference and space as repetition – by opposing time as flow, or in Bergson's terms 'durée', to space as coordinates. It is an important critique of a dominant form of a 'universal time [that] appears to be no more than a hypothetical projection, a time of generalized equivalence, a 'flattened' capitalistic time' (Guattari 1992, page 15). The critique's fundamental point then is to see time as about phase shifts, shifts of kind rather than just a movement in temporal location. The sense of time as just a series of instants and points denies this sense of qualitative difference – producing what Castoriadis calls 'identitiary time' since all the instants are ontologically identical:

'In this identitiary time exists the identitiary present and, reciprocally, identitiary time is

but the innumerable (and numbered) repetition of identitiary presents, always identical

as such and different only by their place'. (1987, page 201)

This is forms the basis of what he calls 'public time'. The sense of time here then we might label as 'chrono-time', to signify the procession of empty sequences. Far from being the 'real time', or objective time, if past and future are implicated in each other then moments are not discrete objects but have a temporal unfolding and this is a post hoc representation of duration (Lloyd 1993, page 98). Instead of our stories being fictional spins over the unyielding sequence of time, it suggest that '[t]he reality of our temporal experience is that it is organised and structured; it is the "mere sequence" that has turned out to be fictional' (Carr 1986, page 25). If we follow the idea of a phase shift between the past, future, and present, as an intensive boundary not an extensive one we could interpret both past and future, though inaccessible, as real, but as a virtual order rather than an actual one. We have then a more complex patterns of oppositions – the virtual (that which might be) is the antonym of the actual (that which is), but both are ontologically real. This shift in understanding suggest that while space preserves elements time devours them:

'Duration or the continuous progress of the past which gnaws into the future and

swells as it advances. And as the past grow without ceasing, so also there are no

limits to its preservation. Memory... is not a faculty of putting away recollections

in a drawer, or of inscribing them in a register... In its entirety, probably, it [the

past] follows us at every instant... leaning over the present which is about to join

it, pressing against the portal of consciousness that would fain leave it outside.'

(Bergson 1991, page 7)

Here he suggests that each instant of the present brings with it a vast virtual order (figure 2) of memories stretching out from around our present action and called forth by our orientation in the world. Depending upon the issue upon which we are focused a different range of these memories is brought to bear – more narrowly or widely focused. However, they all still suffuse each specific instant. He argues for the reality and persistence of the past <u>without</u> committing it to being the same kind of thing as space. The present and past coexist in a virtual order:

> "We have great difficulty in understanding a survival of the past in itself because we believe that the past is no longer, that it has ceased to be. We have thus confused Being with being-present. Nevertheless the present *is not*; rather it is pure becoming, always outside itself. It *is* not, but it acts. Its proper element is not being but the active or useful. The past, on the other hand, has ceased to act or be useful. But it has not ceased to be. Useless, inactive, impassive it IS, in the full sense of the word: It is identical with being in itself." (Deleuze 1991, page 55 emphasis in original)

In a reverse of how we often think of time, the past does not recede but "literally moves towards the present" and exerts a pressure to be admitted (1991:70).

INSERT FIGURE 2 round here

This seems an important step forwards yet Bergsonian durée while not being a linear sequence can give the impression of being a smoothly flowing time. We need to emphasise the notion of attention to the world, as in Heidegger that orchestrates the recall of memories and the production of possible futures. This sense of time is perhaps best summed up as opportunity, not just about action but acting at the right time. To give this sense of time a name we might use 'the Greek *kairos*: what we might call the temporal opportunities of everyday life' (Maffesoli 1998, pages 108, 110). This is the sense of uniqueness of each moment, of its specific and irreproducible nature. To use an analogy then 'If chronological time is like worldwide suburbia, kairological time is the genius loci, the spirit of that particular moment' (Griffiths 1999, page 22). We might thus consider whether for each place with its genius loci there is not also a genius tempori. We might then think about these two types of time – chronological and kairological and their interaction with space as chora and topos (Figure 3). The models of times-pace in time geography tend to be chrono-chora, what Deleuze terms 'anywhere-whenevers' (1989), of abstractly identical time-space units, and we can see Bergsonian influences in formulating a kairo-chora relationship. What is less often discussed are chrono-topos models and kairo-topos sense of time-space (Rämö 1999). It is to these latter two that I wish to turn in the next sections.

INSERT FIG 3 ROUND HERE

These different senses of time have a dialectical relationship in the arts. Just as 1913 saw the Eiffel tower broadcast the hour 'pips' abolishing local times in France, it also saw the publication of Proust's '*A la recherché du temps perdu*' and 'time, which in one sense had never been so public, so monolithic, had in another sense, with Proust, never been so private, so unique, so local to the psyche's own hour' where it was 'all madelaines and murmuring memories of the time of the mind'. Far from being linear, it reflects the concern and attention of the mind where one day gets 287 pages, another year does not even merit a mention, so much that Proust concludes his mammoth account that it is through time that humans occupy 'a place, a very considerable place compared with the restricted one which is allotted to them in space, a place on the contrary prolonged past measure – for simultaneously, like giants plunged into the years, they touch epochs that are immensely far apart, separated by the slow accretion of many, many days – in the dimension of Time' (Griffiths 1999, page 19). This sense of distension and connection then meant Proust had to deny he had written the literary version of Bergson's theory, a 'romans bergsonien' (Gross 1985, page 376). He gives a different inflection than flow and narrative extending and unifying a subject. 'Proust's whole concept of memory was founded on the notion that we are not continuous but altogether discontinuous selves' (Gross 1985:378). Whereas the phenomenological accounts point to two equal streams of time and consciousness in a perfect parallelism, here we have time disrupting the subject where, after Rousseau 'Things always happen too early, understanding always comes too late' (Bielik-Robson 2000, page 72). Instead of a simply ever expanding virtual cone of memory, 'The eternity which Proust opens to view is convoluted time, not boundless time. His true interest is in the passage of time in its most real - that is space-bound - form' (Benjamin 1973, page 206). While 'Bergson denounces and rejects the metamorphosis of time into space, Proust not only accommodates himself to it but installs himself in it, carries it to extremes and makes it finally one of the principles of his art' (Poulet 1977, page 4). But in Proust space is figured in a rather different way, acting to bound and contain an archipelago of incidents, or as Poulet (1977:90) puts it forming a dispersed set of 'closed vases', that are left by the withdrawal of life. Space is far from homogeneous or inert.

Time as Space (part 2)

Let us then think about time using some different conceptions of space. I want to start by thinking of space as 'topos' and using that as a model for time. This approach underlies the recent work of Barbara Adam and her concept of 'Timescape' (Adam 1990; Adam 1995). The term is a deliberate

utilisation of the notion of temporal landscape to talk about how events and actions are located in time. Using landscape allows her to evoke the multiple dimensions of time, and the way they interact to form particular constellations. She outlines five temporal dimensions (figure 4). First there is 'temporality' as duration or brevity, in other words how long a specific event or action lasts. Second is the 'time frame' of how actions relates to each other – whether they occur simultaneously or in a sequence. Third, is the 'time point' by which she points to the frequency and sequence of the action itself – is it intended to recur, to be cyclical, if so how frequently. Fourth is 'tempo' which is about effects and connections, with causality and consequences worked out over time. Fifth is the notion of 'timing', like kairological time, the ability of people to take opportunities or indeed to miss them, or to find them precluded.

INSERT FIGURE 4 ROUND HERE

The multiple aspects of any given event thus expand beyond simply future-present-past. Adam highlights for instance the dimension of synchronising action – where things must occur int eh right sequence and alongside each other as another way of understanding the multiple linkages of events in time rather than just as sequence or linear flow. Adam notes that despite the hegemony of abstract clock time, these other senses of temporality continue so that for instance 'embodied time is lived and experienced alongside, despite of, and in conflict with the culturally constituted social relations of time' (Adam 2003, page 61). She suggests we can see historical patterns of the five C's. The creation of time to human design (C1), through technologies like clocks and diaries, but also novels and narratives, then the commodification of time (C2) as it becomes the criteria of pay and the measure of productivity, the compression of time (C3), as we increasingly look at real-time networks where effects at a distance occur (nearly) simultaneously, and thence the control of time (C4) and finally the colonization of time (C5), both in the sense of the intensification of routines into a 24/7 society but also our ability to discount costs into the future. Using timescape allows us to register that all of these elements are in changing patterns, with alignments and conflicts between different elements. It is just too glib to talk about the dominance of space over time, when instead there are much more complex patterns of different sorts of space and time interacting.

> 'Cause and effect, linearity, spatiality, invariability, stability, clarity and precision
> are *not* being replaced but have alongside and superimposed contrasting temporal
> principles such as instantaneity, simultaneity, networked connections,
> ephemerality, volatility, uncertainty as well as temporal multiplicity and
> complexity. Emerging alternative and contradictory temporal principles constitute

today a lived reality for a significant number of people across the world' (Adam 2003, page 74).

Alternately we might think of the kairo-topos or what, slightly confusingly for the terms I am using, Mikhail Bakhtin called a chronotope (Holquist 1990; Kneale and Holloway 2000). That is the unity of a specific sense of time with a specific kind of space. So I want to pick up on a writer who played with the relationship of space and time and their representation and think of James Joyce's *Ulysses*.

This text remains one of the great works of modernism and stream of consciousness style. Ostensibly the story of the peregrinations of one salesman for one day, written as though recording each thought and action as they connect to another, it plays with the conventions of time space and language. It was a shocking new work, not just for scatological and sexual references, but its linguistic novelty - reputedly it contains the longest unpunctuated sentence in English literature - while it also plays with notions of unfolding plot and time. The structure of the work is the encounters of Leopold Bloom over one day – from waking to a late and rather drunken somnolence. These frankly banal wanderings are sectioned and chaptered by headings lifted from Homer's *Odyssey*. Clearly a set of parallels are being drawn, and for our purposes here we can focus in on the particular aspects highlighted by Umberto Eco – where he suggests Joyce presents a 'chaosmography' (Eco 1989). Eco highlights the paradox of order and chaos, suggesting that the orderly cosmology of the Odyssey is deliberately set against the chaotic flux of the modern city. Thus through a series of inversions and paradoxes the book highlights both continuities and rifts. Most obviously, the text appeals to a mythic time, but then sets heroic Odysseus, one of the first human narrative heroes who struggles to shape his own destiny, against the bathetic figure of Bloom striving to stay afloat in modern society. It is never entirely clear 'whether this parallel [Homeric] plot is an ironic , mocking memory of a heroic past world that emphasizes the emptiness of modern life, or whether it provides a source of enrichment, a promise of wholeness and atonement to come' and how we reconcile the tension 'of an irretrievable past and a paralyzed present' (Rickard 1999, pages 14, 82).

So the first temporality is that of the unmoving and eternal that embraces and swallows contemporary narratives. However, the time of the original Odyssey is that of a life journey, departing home, prevailing through travails and travels in a spatial story over twenty years. Ulysses takes the departure from home, though in this case it echoes the three lost Trojan stories and far from the constant wife maintaining the masculine home, it depicts inconstancy and insecurity for the hero. It also compresses all the wanderings and magical far off places into a single day in the city – time-space compression indeed. It marks out this hyper-intense day through the flood of

intertextual referents that Bloom negotiates –with news bills and papers bringing the world to him. The effect is one of chaos, not just as spatially distant events crowd in to the city, but also where the notion of building a narrative life project, a coherent self through binding past and future dissolves. The book thus appears to collapse time into simultaneities rather than offer temporal development (Tschumi 1999, page 170) The single day could be any day in a cycle of repetition, it is unchanging and yet unique. There is no resolution and Joyce leaves us with an unfinished event not gathered into a narrative whole (Schleiffer 2000, page 78). So there is fragmentation and yet an overarching frame of reference. The intertextual effects go beyond the Homeric backcloth, since Joyce's method of composing involved an endless burrowing through newspaper reports and snippets about the city and society, and the final text is almost a collage of unsigned quotes and sources. The effect is to decentre the subject and the present which is seen then not as a self-present moment but one that is endlessly responding to the baggage of history – as when Stephen Daedalus sums up the Anglo-Irish conflict by saying 'apparently history is to blame'. More exactly for the sense of the 'big now' it suggests this is not an interior story but a dialogue with the world which reflects 'that each one who enters imagines himself to be the first to enter whereas he is always the last terms of a preceding series even if the first term of a succeeding one, each imaging himself to be the first, last, only and alone, whereas he is neither first nor last nor only nor alone in a series originating in and repeated to infinity.' (Joyce Ulysses 1961, page 731 cited in Schleiffer 2000, page 149).

The fragmented self is articulated through an urban space where Stephen Daedalus and Leopold Bloom 'do not go, like Proust's Marcel, in search of lost time: memory is coextensive with their perceptions, manifesting itself in a thousand elusive forms'(Rickard 1999, p129). The city carries the proleptic force of memory as much as any agent and it interjects involuntary memories. It is not then the individual suturing a trajectory over time, but also the city interjecting and disrupting that account. Here 'space functions in fiction through and as temporality, as a narrative event or events' where it represents a network of relationships bet they unfolded or not, or in Raymond Williams words, the 'forces of action have become internal, and in a way there is no longer a city, there is only a man walking through not the history of the city but the loss of city' (Johnson 2000, page 200). The past pushes its way in o the protagonists times not as in the sense of Bergson's structures of attention or Heidegger's care, but through the spaces and arrangement of the city. The minute reconstruction of the city in the text is not about totalising command of the urban scene. So though Joyce wrote to his literary agent Frank Budgen that 'I want to give a picture of Dublin so complete that if the city one day suddenly disappeared from the earth it could be reconstructed out of my book' (Johnson 2000, page 199), he presents a city rising up in fragments, not laid out in either historical or spatial order: ''Other novelists are ... much more likely to present the city in

reconstructable form. Joyce offers no architectural information, only places to bump elbows, or to lean them, to see out the corner of an eye, to recognize by a familiar smell. The city rises in bits, not in masses.' (Ellman cited in Rickard 1999, page 142). This urban scene then works by bringing multiples spaces and times together into a paradoxical relationship

Concluding remarks

The relationship between time and space I have tried to suggest is complicated by a number of factors. First, the very commonsensical facticity of the two has often meant they are not examined. However, the second issue is that they have often fed from each other in binary oppositions. Third, I have tried to show that the binary pairs to be of one specific kind of time against one specific kind of space. The first move to disrupt the binary opposition is thus to recognise the plurality of forms of both space and time. I have in the last two examples tried to suggest how some less common combinations of notions of space and time can produce different understandings. Later in that celebrated and much quoted passage by Foucault on the epoch of space he too says 'space itself has a history in Western experience, and it is not possible to disregard the fatal intersection of time with space'.

These last two examples suggest certainly, as Heidegger put it, 'Time is not a thing' (Schleiffer 2000). It is not simply the rate or duration of events occurring in time but the shaping of the temporal framework in which those events occur. Furthermore our understanding of that time cannot stand outside time or space. As Derrida suggests 'In a sense, it is always too late to talk about time' (in Jameson 2003, page 697) because we and our ideas are always in its flow. We might follow Jameson to suggest we are perhaps always in the wrong place to speak of space. What seems to happen in many theories is that one of space or time is held constant, and thus producing rather distorted visions of time-space. Thus when time is conceived as difference it tends to be through a foil of space conceived as repetition of the same. When space appears as the preserver of past action, time is the destroyer. My aim then in this chapter has been fourfold. At the most basic level to illustrate that the meaning, and possibly the substance, of both time and space are plural. Second, feeding from this, any binaries tend to be using the characteristics of one definition of space or time against which to define the other term, and any such definition is thus hopelessly over-determined. Third, the two terms cannot really be separated so all action occurs in time-spaces. And finally this inseparability is not just a matter of bolting two conceptually discrete elements together, but the rather that the two are not separable conceptually. Or perhaps, to say that separating them into just

two terms is obfuscatory. I have tried to illustrate how geography has related time and space through the heuristic grid of chronos/kairos and chora/topos, with chrono-chora dominant. It is clear that simple binaries of time and space do not hold, but rather unravel and spawn yet more divisions. In our rethinkings of space and place I suggest we cannot simply ignore temporality and add it later. Rather geographers need to think through time-spaces of various sorts and how they impact on their work.
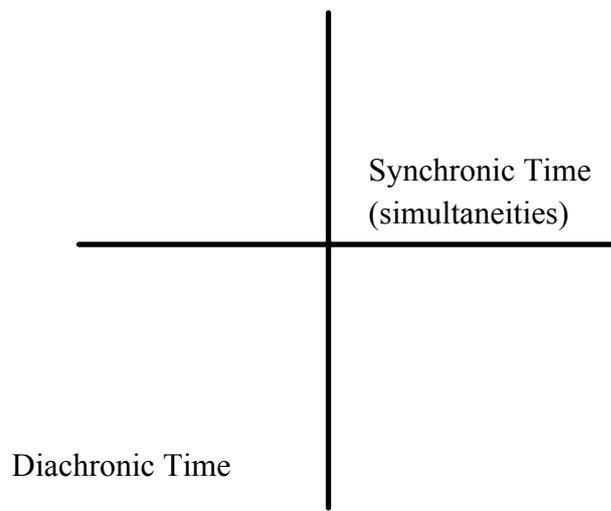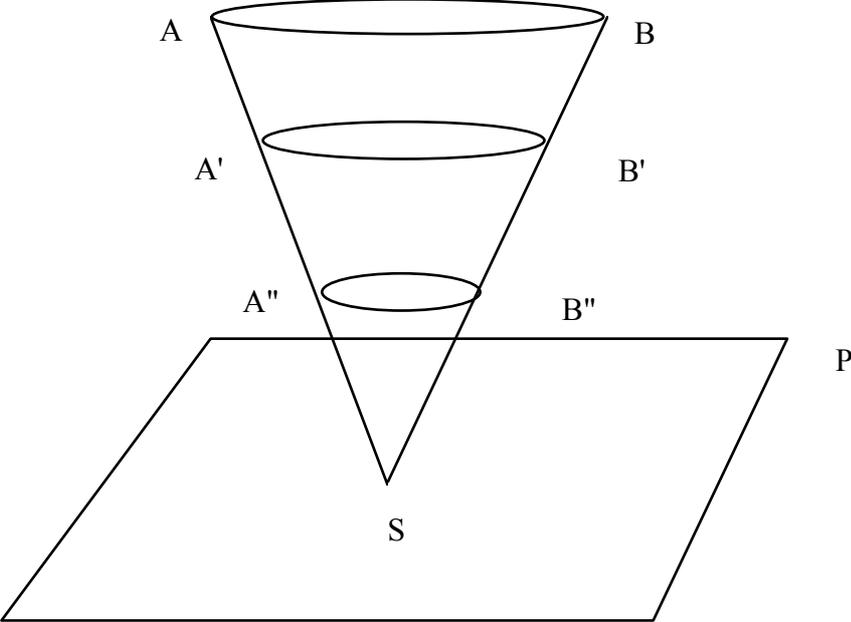
Figure 1

Synchronic Time
(simultaneities)

Diachronic Time

Figure 2

(from Bergson 1991, page 162)

Figure 3

		Time	
		Chronos	Kairos
Space	Chora		
	Topos		

Figure 4

TIMESCAPE = TIME, SPACE & MATTER		
Temporality	Past	Duration ⇔Instantaneity
Time frame	Present	Sequence ⇔Simultaneity
Time point	Future	Repetition ⇔Rhythm ⇔Beat
Tempo		Cause ⇔Effect ⇔Time lag
Timing		Reason ⇔Action ⇔Symptom

(Adam 2002)

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