

# Missing the point: globalization, deterritorialization and the space of the world

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This article provides a critique of a dominant strand of the literature on globalization – that which suggests it can be understood as deterritorialization. It argues that suggestions that we have moved away from territorial understandings of politics fail to conceptually elaborate the notion of territory itself. Drawing parallels between mathematics and politics in the seventeenth century, the paper claims that the notion of territory is dependent on a particular way of grasping space as calculable. This way of understanding space makes bounded territories possible, but also underlies new global configurations. In other words globalization is a reconfiguration of existing understandings rather than the radical break some suggest. The article concludes by making some comments on this reconfiguration, and suggesting that further historical and conceptual work on territory is necessary before it can be thought to be superseded.

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## Introduction

The title sounds provocative, I know. But the reason for it is precisely its excuse. The contention here is that many studies of globalization literally, and consequentially figuratively, miss the point. My concern is not with those studies that look at globalization in terms of the internationalization of trade, the homogenization of culture or the evaporation of the power of the nation-state. Instead, it is with how the concept of globalization has been thought geographically, that is spatially, both within and without the discipline of geography itself. At times this has even led to the suggestion that geography is less significant, or even that spatial considerations are not important at all. The French theorist Paul Virilio has gone so far as to argue that the acceleration of communication has led to a replacing of geographical space with time (1986 1999), and has suggested that 'deterritorialization is the question for the end of this century' (Virilio and Lotringer, 1983, 142). The

particular targets therefore are those studies which claim that globalization is a form of deterritorialization, or that concomitantly claim that we have moved beyond the Westphalian model of state politics.

This essay therefore investigates the interrelation of the four terms space, place, territory and deterritorialization. The key argument is that space and place should not be distinguished on the basis of scale, but that space emerges in Western thought through a particular way of grasping place. This way of grasping is as something extensible and calculable, extended in three dimensions and grounded on the geometric point. The claim made here is that territory is not merely a political way of conceiving land, but the political corollary of this emergent concept of space. Although it is integrally related to the state, in that both the modern state and the modern concept of territory emerge at the same historical juncture, this is not to say that territory is inherently tied to the state. The historical moment we call globalization demonstrates that

the calculable understanding of space has been extended to the globe, which means that even as the state becomes less the focus of attention territory remains of paramount importance. The essay therefore takes issue with understandings of globalization as deterritorialization, which claim that territory no longer occupies the foundational geographical place, claiming that they misconceive the very basis of this crucial term.

Although this essay does not intend to trace the historical origins of the term 'globalization', there is one issue worth noting. Globalization derives from the world 'global', of much older provenance, which is concerned with the 'whole world', something related to, covering or influencing the world taken as a whole. There is a double process going on here: first, the seizing or comprehending of the world as a whole; and second the way in which political, economic or cultural acts apply to that. In other words, globalization is in some sense dependent on what Lefebvre calls *mondialisation*, becoming worldly. Lefebvre suggests we must look for the conditions of possibility of this *mondialisation*, but this cannot be reduced to linear causality or mechanistic determinism (1978, 23; see Elden, 2004a, 231–5). As he cautions, 'each mode of production has its space; but the characteristics of space cannot be reduced to the general characteristics of the mode of production' (1978, 291). It is this question of condition of possibility that is at stake here. The argument is that beyond the straightforward we get to the point.

### **Deterritorialization, territory and the absence of theory**

As Papastergiadis shows (2000, 116–7), the notion of deterritorialization has a complicated intellectual heritage, something which is not always appreciated. As he notes,

the cultural dynamic of deterritorialization has decoupled previous links between space, stability and reproduction; it has situated the notion of community in multiple locations; it has split loyalties and fractured the practices that secure understanding and knowledge within the family and social unit. (Papastergiadis 2000, 117)

Drawing upon Deleuze and Guattari's (1986) use of the term in their assessment of Kafka, he notes how there it was used to show how Kafka's writings in German were disruptive because of his position outside of Germany itself. This use of

deterritorialization is rather different from its deployment in much of the literature. For Deleuze and Guattari (see also 1988 1994), the term is one of the relation between thought and territorial placing, between internal and external exile, and bears relation to notions of nomad thought, hybridity and diaspora. It has important resonances to territory taken more generally, but even in the more sophisticated readings of this problematic following them (for example, Albert 1999) it is difficult to see quite how. The exception is Hardt and Negri's *Empire* (2000), which I have discussed, along with this intellectual heritage, in detail elsewhere (Elden 2004b). For Papastergiadis 'the concept of deterritorialization has been a useful mode of understanding the fissures within language and cultural identity' (2000, 118). A similar use of Deleuze and Guattari is made by Appadurai (1996). Extreme caution should be shown in appropriating this as a model for globalization taken as whole. And yet this caution is signally lacking.

We therefore find deterritorialization utilized to describe a cultural process, where the break between the social and the geographical heralds a new age of unplaced human interaction (Lull 1995; Appadurai 1996; Papastergiadis 2000); as related to regional and nationalist identities (Williams 2003); and environmental issues (Kuehls 1996; Castree 2003). Castree here importantly cautions against seeing this solely as deterritorialization, and discusses the 'dialectic of territorialization/deterritorialization, a mixture of spatial fixity and unfixity' (2003, 427). Following a similar logic, people like Anderson have talked of a 'new medievalism', where boundaries are overrun and sovereignty plural and overlapping (1996). We should be grateful the hyperbolic claims that we have entered a borderless world, with the end of the nation-state and of geography (Ohmae 1990 1995; O'Brien 1992) have been widely critiqued (see Amin and Thrift 1997; Yeung 1998; Kelly 1999; Ó Tuathail 2000; MacLeod 2001). We should be similarly grateful that for many this notion of deterritorialization requires us to recognize that geography remains of paramount importance, even if it needs to be understood in new, and more complicated ways. As Amin puts it

Thus I have distanced myself from the *territorial* idea of sequestered spatial logics – local, national, continental and global – pitted against each other. Instead, I have chosen to interpret globalisation in relational terms as the interdependence and intermingling of global, distant

and local layers, resulting in the greater hybridisation and perforation of social, economic and political life. (1997, 133)

Deterritorialization in its most useful sense therefore forces us to think anew on the notion of territory, and to recognize how its logic is both played out and challenged in a period of globalization (see Ó Tuathail 1998, 82; Cox 1997; Brenner 1999a 1999b). This goes beyond merely assuming territory as a given and examining to what extent things remain in place. Rather its position and status is itself in question (Ó Tuathail 2000, 139–40).

Globalization has been explicitly seen as deterritorialization by Scholte (2000a, 46), but despite the importance of this definition the term plays a relatively minor role in the book as a whole, and disappears from the forthcoming second edition entirely. Rather Scholte proposes a view of supraterritorialization, which 'entails a reconfiguration of geography, so that social space is no longer wholly mapped in terms of territorial places, territorial distances and territorial borders' (2000a, 96; see 2000b, 179). Important though this reconfiguration of geography undoubtedly is, I am reluctant to accept his straightforward understanding of territory, and would push the point further: work proposing an idea of deterritorialization requires an explicit theorization of what territory is, in order that we are not blinded to the parallels between then and now in the changing nature of spatial relations. In other words, what is it we have supposedly gone beyond or seen revised in significant ways? For such a crucial issue, territory is under-theorized to a remarkable degree.

The standard approach, in political science as much as geography and international relations, is to take it for an unproblematic given, which is then fought over, redistributed and redrawn, without any conceptual problematization. In other words, there are disputes over territory, but none over 'territory'. This is despite the stress on its importance in Max Weber's famous definition of the state:

The state is that human community, which within a certain area or territory [*Gebietes*] – this 'area' belongs to the feature – has a (successful) *monopoly of legitimate physical violence*. (1971, 510–11; 1994, 311, translation modified)

As is beginning to be realized (Brenner *et al.* 2002, 2), the territorial part of this – in distinction to community, legitimacy and violence – has been

largely neglected, both by Weber himself and social science in general. But as Michael Mann recognizes, the territorial aspect is not minor, but crucial: 'the state is, indeed a *place* – both a central place and a unified territorial reach' (1985, 198). For Mann this puts it in distinction to churches and companies. Jean Gottman, who has written some of the most productive works on this subject, proclaims that 'amazingly little has been published about the concept of territory, although much speech, ink, and blood have been spilled over territorial disputes' (1973, ix). How much has this changed in the last thirty years? For Gottman, it is all too easy to assume the modern, or legal sense of territory as a 'portion of geographical space under the jurisdiction of certain people' (1973, 5). Similarly Friedrich Kratochwil suggests that 'territoriality, like property, is not a simple concept, but comprises a variety of social arrangements that have to be examined in greater detail' (1986, 27–8).

However central the notion of territory is to definitions of the state, it generally tends to be assumed as unproblematic. Theorists have largely neglected to define the term, taking it as obvious and not worthy of further investigation. One searches political dictionaries or introductory textbooks in vain for a conception of this notion: rather it is unhistorically accepted, conceptually assumed and philosophically unexamined. Its meaning is taken to be obvious and self-evident and can therefore be assumed in political analysis. Political science that does discuss this notion tends to concentrate on legal issues of secession or border disputes, or problems of refugees, nationalism and core–periphery relations rather than come to terms with the notion itself (for example, Bulpitt 1983; see on this point, Badie 2000). International relations as a discipline recognizes the importance of territory to its fundamental concerns but neglects to go beyond a general statement on the term. Part of the problem behind this is that realism took the state as the unit of examination, but as a black box and examined its relations with other states on that basis, whilst more recent and innovative approaches have disputed the emphasis on the state and moved their focus elsewhere. While there are exceptions (Walker 1993; Shapiro 1997, for example), Ruggie's lament that 'it is truly astonishing that the concept of territoriality has been so little studied by students of international politics' (1993, 174) remains true.

Where there is an attempt to police this particular concept, the stress is on the notion of boundedness.

The boundaries of territorial states are what gives them their internally turned focus: they have a strictly demarcated boundary – the lines drawn on maps – within which they have sovereignty – symbolized by the blobs of bright, contrasting colour that fill the void between these lines (see Akerman 1995, 152). As Paasi puts it, 'boundaries, along with their communication, comprise the basic element in the construction of territories and the practice of territoriality' (2003, 112). For Jönssen *et al.* 'a territory is defined as a cohesive section of the earth's surface that is distinguished from its surroundings by a boundary' (2000, 3). The boundaries are set by geographical or political circumstance, which becomes the object of enquiry. As Harvey notes, 'much of the philosophy of geography ... stems from a "container" view of space which is particularly associated with concepts of Newton and Kant' (Harvey 1969, 208). This has led to Giddens' (1985) famous definition of the state as a bordered power container. There are a large range of studies within political geography that could be said to fall into this category (see, for example, Prescott 1968; Johnston 1982; Newman and Paasi 1998). Even Peter Taylor's important work looks at the 'state as container' (1994) and the possibility of going 'beyond containers' (1995), essentially assuming the basis of the very issue in question. Agnew has discussed this in terms of the 'territorial trap', based on the threefold assumption that modern state sovereignty requires clearly bounded territories; the opposition between foreign and domestic affairs; and that the territorial state is the geographical 'container' of modern society (1995 1999). Although Cox has noted that 'in order to talk of territory one must talk of territoriality and vice versa', suggesting that 'territoriality refers to actions designed to exercise control over some area: the territory' (2002, 29), little sustained enquiry has followed this line (though see Sack 1983 1986; Malmberg 1980; Hall 1969).

And yet, what makes the demarcation of such boundaries possible? What if it were that condition of possibility which is the central aspect of the modern notion of territory? The argument here is that it is the understanding of political space that is fundamental, and the idea of boundaries a secondary aspect, dependent on the first. How might that affect our understanding of the period we are supposedly exiting, and the period we are moving toward? What is it that allows sovereign power to spread to and through every pore of the state's

being? Whilst I would not wish to claim that the state is the most important object of analysis, this does strike me as a regrettable situation. Well-worn phrases about the Westphalian state-system assume a chronological birth and suggest contemporary overcoming, without a theoretical understanding of what precisely is in question (Linklater 1998; Scholte forthcoming). Indeed, the principal dispute within a large subsection of the literature seems to be whether this dating is correct, or whether earlier evidence can be found, for example in the French invasion of Italy in 1494. But what was at stake here? Regardless of its chronological birth, its conceptual birth is crucially important.

What we have on the one hand therefore is political science or theory with some kind of understanding of the state, but without a comprehension of its rootedness, its situation, its territory; on the other, political geography which purports to understand space and territory, but has an undeveloped sense of the explicitly political and historical aspects they might have. Both perspectives lack a sound knowledge of philosophical and mathematical developments in the conception of space (the two are not mutually exclusive, nor are they entirely congruent). Indeed, despite the much vaunted quantitative 'turn' in geography of the 1950s and 1960s, Prescott suggests that most issues around boundaries, frontiers and territory are unsuitable for a mathematical analysis (1972, 44). While his intention is quite clear, this neglects the important links between mathematics and the political in the constituting of those boundaries. Conceptions of geometry and conceptions of territory bear close examination and relation. What then do these geographies of globalization – and more broadly understandings of territory – have in common? They neglect the importance of calculation, they miss the point.

### The geometric point

The point is crucial to understanding the way in which we conceive of space. To explain this in the detail it deserves is beyond the scope of this piece, but let me outline some of the major developments. In Aristotle there is a very clear distinction between the unit, *monas*, and the point, *stigma*. This comes in the context of his discussion in the *Physics*, Books V–VI, about the mode of connection of being, and he makes a number of points that are useful to thinking about place in his thought (1936, 226b18–231b17).

For Aristotle, the key thing about the connectivity of units is that they are discrete, separate from each other. A sequence of numbers, for example, has a distance between each of them, we count one after the other, steps along the way. A line, in distinction, while it has points within it, cannot simply be reduced to a string of points. There is more to the line, because the connection of points is different from the sequence of numbers. Points, when they are connected, literally have the end of one as the beginning of the next, there is nothing between them – neither another point nor something else. In Aristotle's language this is a *synekhes*, a continuum. It is an *ephekses*, a succession, just as the series of numbers is, but one where instead of their being the potential for something to be between, it is characterized by *haptesthai*, touching. As Aristotle shows, *monas* and *stigma* cannot be the same, for their mode of connection is different.

From this we get a clear difference between arithmetic and geometry – arithmetic is concerned with the sequence of numbers, where no touching is necessary; geometry is concerned with the *stigma*, whose connection is characterized by the *synekhes*, the *continuum*. Arithmetic is concerned with succession where between the units, each *monas*, there is nothing of the same lineage of being; geometry is the continuum where the ends of one point, *stigma*, are the ends of the next. Therefore, and this is crucial, although points can be taken from a line, they do not constitute the line. There is more to a line than a multiplicity of points, and by extension, more to a surface than lines; to a volume than surfaces. Equally it is worth stressing that the Greeks had no word that equates to our modern notion of 'space'. Despite the regular use of the notion of 'Euclidean space', this is a term that finds no parallel in his writings (Euclid 1956), and is rather a modern invention. This distinction between arithmetic and geometry forms the foundation for much of the Middle Ages, though some of the work of late scholasticism renders it much more complicated (see Lang 1992). This is an important part of the story, but one for which there is no time here. Although I admit to a certain caution in privileging his place in Western Philosophy, it is to Descartes that I now turn.

Descartes is important for a range of reasons, one of the most obvious being his strict distinction between thought and the material world, between *res cogitans* and *res extensa*. For Descartes the important

issue is that *res cogitans* is indivisible, whereas *res extensa* is divisible (1964ff, vol. VII, 85–6). Indeed, the principal ontological determination of the world for Descartes is that it is extensible in three dimensions, dimensions which can be calculated mathematically, through geometry. Descartes sees geometry as equivalent to algebra; it is the symbolic version of the world. Extension, for Descartes, is both a physical property and a geometrical property. What this means is not only does geometry become a way of understanding and calculating the material world, but it also, because of the emphasis on extension and dimension, becomes a form of applied arithmetic. Whereas for Aristotle there was a strict distinction between the two, Descartes sees geometrical figures and, by extension, the world of which they are symbols, as numerically calculated. We find this explicitly in passages from his book *Geometry*, for example the opening line suggests that 'all problems in geometry can be simply reduced to such terms that a knowledge of the lengths of certain straight lines is sufficient for their construction' (1954, 2/3, translation modified). Later in the same work he suggests that 'in the method I use all problems which present themselves to geometers reduce to a single type, namely, to the question of finding the values of the roots of an equation' (1954, 216/217). In other words, geometrical problems can be reduced to problems of number, roots of equations or lengths of line. The continuum of geometry is therefore transformed into a sequence of numbers, a form of arithmetic, which infinitesimal calculus would take to its ultimate conclusion. Descartes' geometry, in distinction to Aristotle's geometry, is an *ephekses* rather than a *synekhes*. The notion of Cartesian coordinates is the most explicit recognition of this fact, but these are coordinates of a space, *spatium*, which emerges in its modern sense at this time (on this in more detail see Lachterman 1989; Klein 1992; Elden 2001).

### The political point

It is no surprise that Descartes' philosophical-mathematical justification for comprehending the world in terms of number, with the centrality of the point, ultimately each the same as any other, comes in the midst of the seventeenth century's scientific revolution, with key figures like Galileo preceding him, and others like Newton and Leibniz following in his wake (for a geographical

perspective on this, see Livingstone 1990). However, this development is not confined to scientific, philosophic and mathematical advances, but is partnered by shifts in political theory and practice. The two central political developments were the discovery and subsequent colonization of the new world and the redrawing of the map of political power in Europe, particularly through the slow death of the Holy Roman Empire.

In terms of the new world we can see this in practice in a range of places, from the gridlines of latitude and longitude used by Thomas Jefferson and others to divide the individual states of the United States (Pattison 1970; Sack 1986, 127–68; Cohen 1999; Linklater 2003) to the European powers' division of the continent of Africa (see Pakenham 1991; for some caution, see Stone 1988; more generally Badie 2000). So-called 'natural' boundaries are avoided for the conceptual elegance of the straight line or arc. Many striking instances can be found, perhaps none more so than the town Four Corners, the only place in the USA where four states (Utah, Colorado, New Mexico and Arizona) meet at a single point. More politically important, and the precedent for many of the later examples, is the Treaty of Tordesillas in 1494, which divided Spanish and Portuguese claims to the world.

A boundary or straight line be determined and drawn north and south, from pole to pole, on the said ocean sea [the Atlantic], from the Arctic to the Antarctic pole. This boundary or line shall be drawn straight, as aforesaid, at a distance of three hundred and seventy leagues west of the Cape Verde Islands, being calculated by degrees, or by any other manner as may be considered the best and readiest, provided the distance shall be no greater than above said. (Treaty of Tordesillas 1494, Clause 1)

The dividing line allowed the King of Portugal lands to the east, the King and Queen of Castile those to the west. As Storey explains, broadly the aim was to allow Portugal Africa and Spain the Americas, but it was later discovered part of South America was actually to the east, hence the creation of Portuguese colonies there, known as Brazil (2001, 16–7; see Sack 1986, 131–2). This demonstrates that latitude was a much more successful marker, until more reliable clocks allowed exact measurement of longitude. What is important about Tordesillas is that it suggests a model which the actual techniques only later caught up with. As Brotton (1997) shows, many of the maps of the

world in the early period were concerned with precisely this demarcation.

The Holy Roman Empire was conceived as Christendom, the secular version of the kingdom of God. The Emperor, crowned by the Pope in the first instance, was intended to have power over the principalities, kingdoms and cities within a large swathe of central Europe. Two important diplomatic events challenged the supremacy of the Emperor. First, the final compact of the Diet of Augsburg in 1555, which had proclaimed *cuius regio eius religio*, to whom the region the religion. What this meant was that the individual rulers, rather than the Emperor, were allowed to set the religion of their land. For an Empire supposedly taking its lead from Rome and the Catholic Church, this dealt a serious blow to orthodoxy. The secular equivalent of this was the principle of *Rex in regno suo est Imperator regni sui* – the territorial ruler's standing in their areas was the same as the Emperor in his (Ruggie 1993, 157).

However, as Osiander (2001, 270–2; see 1994, 12, 40) notes, the Augsburg principle was hard to uphold in practice and was essentially abandoned at the second key diplomatic event, the Treaty of Westphalia. Instead here, the religion of each part of the empire was frozen according to its situation in 1624. What the Treaty of Westphalia (or rather the treaties – the one at Münster and the one at Osnabrück) did do was to give the estates of the empire the 'free exercise of territorial right' (Treaty of Westphalia Osnabrück 1648, Article VIII, Clause 1; Münster, Clause 64, see 67). In a valuable attempt to subvert IR orthodoxies about the birth of sovereignty and the European state-system in 1648 (such as Gross 1948), Osiander has cautioned against translating this as 'territorial sovereignty', suggesting that the German term *Landeshoheit* is actually 'territorial jurisdiction', and that what makes it interesting 'is precisely that which makes it different from sovereignty' (2001, 272).

The treaty was not originally written in German, but Latin, in which the term was '*iuris territorialis*' ('territorial right'), or '*iure territorii et superioritatis*' (Treaty of Westphalia Osnabrück 1648, Article V, Clause 30), 'territorial right and superiority'. The French equivalent was *supériorité territoriale* (Pagès 1939, 244; see Dickmann 1972, 129, 133). It is important to note that whether this is right, jurisdiction or indeed sovereignty, it is held over territory. This is central to understanding the importance of Westphalia (see Mirabelli 1929; Braubach 1948;

Kremer 1989; Wyduckal 1998). Quoting an eighteenth-century German jurist, Osiander notes that the autonomy of the estates – free cities and principalities – was limited through the laws of the empire and the constitutional arrangements. What he underplays is that internally, that is ‘in their lands and territories’ (Moser 1745, 492, cited in Osiander 2001, 272), they were empowered politically. In his conclusion he attempts to suggest that today ‘there is a clear *de facto* trend in international politics away from classical sovereignty and toward something closer to *landeshoheit*, territorial jurisdiction under an external legal regime shared by the actors’ (2001, 283). This is both important – because it shows us that the emergence of territory at Westphalia was not tied to some absolute notion of sovereignty, as is often supposed – and potentially misleading – as it underplays the importance of territory as a concept in itself, distinct from sovereignty.

Although this was the period of Hobbes, Spinoza and Locke, it is in the political writings of Leibniz that this notion is most fully explored. Leibniz had been asked by the Duke of Hanover to clarify the position of the rulers within the Empire. Leibniz does this by distinguishing between majesty, as the power to demand obedience and loyalty, without being commanded themselves, and sovereignty, which he sees as being stressed in the treaties of Westphalia, as concerned with territory. By defining sovereign as ‘he who is master of a territory’, Leibniz is removing the notion of absolutism and suggesting that whatever the position of deference abroad, internally they are ‘master at home and cannot be disturbed except by arms’ (1969, vol. VI, 347). There are, Leibniz suggests, ‘degrees of *seigneurie*, lordship’ (1969, vol. VI, 368). This helpfully outlines the post-Westphalia position of the Empire – external authority but internal non-interference in the estates (see Herz 1957; Riley 1988, 26–8 1996). Indeed, although the above quotes are from a later French dialogue entitled *Entrétiens de Philarete et d’Eugène*, the original Latin place where Leibniz discusses this should make us cautious about accepting Osiander’s claims straightforwardly. The piece is entitled ‘De Jure Suprematus ac Legationis Principum Germaniae’, published under the pseudonym of ‘Caesarinus Fürstenerius’ – a joke name which stresses the equivalence of the Emperor and the Prince, or ‘Prince as Emperor’. Here Leibniz makes some crucial points that are worth quoting at some length.

Hence there arises what the German jurists call territorial superiority [*superioritatem territorialem* – i.e. *Landeshoheit*], or the right of territory [*territorii jus*]. But ... the lord of the jurisdiction and the lord of the territory are two different things ... He who considers these things with care will see that territorial superiority consists in the highest right of forcing or coercing ... this right, in turn, belongs not only to the princes of the Empire, but also to the counts. For a long time there was doubt concerning the free cities, but recently, especially by the peace of Münster [*Pace imprimis Monasteriensis*], the question seems to have been settled. And what we call territorial superiority seems to be identical to what the French call *la souveraineté*, in a slightly looser sense. (1983–4, vol. II, 54–5; 1988, 115–6, translation modified; see 1983–4, vol. II, 394–401; 1969, 368–9)

Leibniz goes on to stress that this does not mean that their power is absolute, but that there can be a higher authority to appeal to. Equally, as the examples of Switzerland and the United Provinces show, ‘several territories, moreover, can unite in one body, retaining their singular territorial superiority’ (1983–4, vol. II, 57; 1988, 117, translation modified). According to Herz, Leibniz therefore saw himself as ‘the first to have found the valid definition of sovereignty’ (1957, 478), but this is a notion explicitly tied to territory.

In the Europe of this time we can see a range of techniques for mapping and charting start to emerge. Escolar suggests that the techniques of a rejuvenated cartography were used for ‘bureaucratic and administrative management and territorial control of state power in the states of Western Europe’ in the sixteenth century (2002, 33). This is unsurprising, given the importance of territory to rulers. As Harley notes, ‘the state became – and has remained – a principal patron of cartographic activity in many countries’ (2001, 59). Virilio puts it even more strongly: ‘Geometry is the necessary foundation for a calculated expansion of state power in space and time’ (1975, 120). The use of satellite eclipses for demarcating boundaries, particularly in France with the work of the Cassini family, Vauban’s work on mathematics and war, and the establishment of the first modern boundary in Europe through the Pyrenees in 1659 are all examples here (see Virilio 1986; Sahlins 1989). Escolar summarizes this usefully:

The surveying and instrumental representation of the territory of the state associated with administrative and scientific cartography in the seventeenth and eighteenth centuries were made possible by the development of

cartographic techniques during the Renaissance . . . on the one hand, and, on the other, the transformation of conspicuous state power into geographical jurisdiction. (2002, 35–6)

In an illuminating study of the relation between Cartesian thought and new models of urban planning, Akkerman notes that ‘with the renunciation of the old urban and architectural styles, medieval *mental* structures came tumbling down as well’ (2001, 157). We can, I think, see something very similar in the new political models of space at the level of the kingdom or the continent. However, Akkerman tends to see this development as rather one sided, a crude materialism where

laying the foundation of modern science, the paradigm of the *geometrically* perfect world had emerged from a geometrically perfect town: it is in this image that Descartes, as well as his contemporaries, were led to perceive the universe and everything in it. (2001, 161)

Rather, as some of his later comments suggest (2001, 162), the relation between the ideas and the practice is constantly shifting, with developments in Scholasticism affecting urban and political practices, which in turn impact on philosophies of the time.

What this means is that the notion of territory is both a historical development and has a particular conceptual basis. Territory in the modern sense requires a level of cartographic ability that was simply lacking in earlier periods, an ability that is closely related to advances in geometry. Despite some similarities, it does not make sense to think about the Greek *polis* and its land in terms of the modern notions of state and territory (for a discussion and references, see Elden 2003). Rome, with the transition from monarchy to republic to empire provides a number of pointers along the way, but again straightforward equation with the modern concepts is misleading. As is generally recognized, the Middle Ages, despite the importance of property in land, did not have a developed sense of territory. As Camille notes, ‘there was no such thing as “space” for medieval people . . . our modern abstract notion of space . . . is a postmedieval category’ (2000, 9; see Zumthor 1993). It is only really in the Renaissance, with the birth of the Italian city-states of the late fifteenth century, that clear indications of the direction to be taken start to emerge. To trace this in detail would require examination both of political and diplomatic developments, and of the work of theorists such as Machiavelli, Jean Bodin and Hobbes, as well as the less obvious

figures of Leibniz, Spinoza and Grotius, but also the conceptual and mathematical developments in the work of Galileo, Descartes and Newton. And, as Sack and Paasi have noted, abstract, metrical space was mirrored by capitalism’s increased production and consumption (Sack 1986, 84–5, 218; Paasi 2003, 114). This point is both crucial and in danger of being missed.

Essentially the argument here is that the emergence of a notion of space rests upon a shift in mathematical and philosophical understanding, related particularly to geometry. This development is partnered by a change in conceptions of the state and its territory. The modern notion of measure, which finds its most explicit exponent in Descartes, sees beings as calculable, as quantitatively measurable, as extended; for Descartes calculation is the fundamental determination of the world. Put crudely, to be is to be calculable. As Sack notes,

to think of territory as emptiable and fillable is easier when a society possesses writing and especially a metrical geometry to represent space independently of events . . . the coordinate system of the modern map is ideally suited. (1986, 63)

This calculative mode of thinking is related to the measuring and ordering of land, but also to ‘the development of political arithmetic in seventeenth-century Europe, which entailed the cataloguing of the physical and human resources of the state’ (Pacione 1985, 1). Indeed, the rise of statistics – the description of *states* – dates from this time. Calculation is therefore key to the constitution of the modern state.

### **Territory, abstract space and globalization**

Territory then is partly about boundaries and the impermeability of these boundaries, but also about a political usage of the emergent concept of space, particularly as it emerges in the late Middle Ages, the Renaissance and the early modern period. Space, as it comes to be known, is bounded and exclusive, where something can share the same place but not the same space, but more crucially is something calculated, extended in three dimensions. It is because mapping then becomes that much more exact that demarcation, exclusion and control become possible. Space and place, in this understanding, are not distinguished on the basis of scale (space is out there, place is in here), but on the basis of calculation. An attempt to think space and

place in non-scalar terms has been attempted by Taylor (1999; see Amin 2002, 388–9), where he sees space as the abstract, and place as the substantive, but this too neglects, or perhaps underplays, the importance of the mathematical. The concept of space – abstract and mathematical – is superimposed over already existing places, be they land, home or country. The abstract space of maps and mathematics is a grid imposed over the top, the territory of modern states becomes possible.

If there is a shift today beyond this, it is that the space is no longer that of a single country (or later, nation), but that of the world as a whole. The abstract space is extended to the globe, which is understood as a geometrical object. Conceived in this way it can be divided, or ordered as a whole. Ideas of transworld simultaneity or instantaneity – that things ‘extend anywhere across the planet at the same time’, or ‘in no time’ respectively – add, Scholte argues, another dimension to territorial geography, hence the idea of supraterritoriality (Scholte forthcoming). But this does not escape the ‘logic’ of territory, rather it demonstrates the importance of the temporal to understandings of spatiality, a parameter of *t* added to those of *x*, *y* and *z*. Each of these four dimensions is rendered calculable. Time is ‘nothing but rapidity, instantaneity and simultaneity [*Schnelligkeit, Augenblicklichkeit und Gleichzeitigkeit*]’ as Heidegger recognized in 1935 lectures (1953, 28–9). Time [*Zeit*] is rendered the same [*Gleich*], each moment a point on a time-series, with these moments increasingly close together in an acceleration of speeds. Even discussion of the shift from a space of places to a space of flows (Castells 1989 1996, 405–59) requires some form of connectivity (see Amin and Thrift 1997). The network society is the connection of points as much as the state-system of modern Europe, and by extension the world, ever was. Globalization – ontologically – rests upon exactly the same idea of homogeneous, calculable space. It is, effectively, a continuation of Cartesian thought by other means. What may have happened is that the abstract space we have imposed over the world is taken more and more as real in itself, rather than as a reflection of something below it, something that it seeks to represent.

Modern conceptions of territory are founded upon a particular ontological determination of space, which therefore requires us to rethink the geographies of globalization. The emergence of a particular way of grasping space in the fifteenth to

seventeenth century is still the overriding geographical determination of our world. That this is played out in different, and to an extent, more extreme ways does not diminish the importance of its holding sway. The processes associated with globalization do not, therefore, ‘mark a new ontology of place/space relations’ (Amin 2002, 385), although we do need to think carefully about the playing out of these relations. It is in these relations, with the dialectic of deterritorialization/reterritorialization, that the change can be seen (see Elden 2004b). Brenner has outlined the dangers of what he calls ‘global territorialist approaches’, where nothing changes except the scale, where global space is represented

in a state-centric manner, as a pre-given territorial container within which globalization unfolds, rather than analyzing the historical production, reconfiguration, and transformation of this space. (1999a, 59)

While I have considerable sympathy for this work, the concentration here on what makes this space possible – and therefore allows it to be produced, reconfigured and transformed – both distances me from those he wishes to critique, and goes further than Brenner himself.

In this understanding, territory does not cease to be important, rather it is no longer bound within a single state. Late capitalism extends the mathematical, calculative understanding of territory to the entire globe. The politics of measure continues, as we continue to take the measure of the political. It is worth underlining that ontology is not concerned with ‘what is’, but with *how* ‘what is’ *is*. Since the seventeenth century, the predominant ontological understanding of the world has been its calculability. If we are to make progress in understanding the geographies of globalization in relation to their territorial, deterritorialized and reterritorialized aspects, it behoves us to understand what their conditions of possibility are. The point is where to begin.

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