Political Geography 34 (2013) 35–51

Contents lists available at SciVerse ScienceDirect

Political Geography

journal homepage: www.elsevier.com/locate/polgeo

Secure the volume: Vertical geopolitics and the depth of power

Stuart Elden*

Department of Geography, Durham University, Science Road, Durham DH1 3LE, UK

Keywords:
Volume
Security
Verticality
Volumetric
Power
Geopolitics

A B S T R A C T

We all-too-often think of the spaces of geography as areas, not volumes. Territories are bordered, divided and demarcated, but not understood in terms of height and depth. 'Secure the area' is a common expression for the military and police, but what happens if another dimension is taken into account and we think what it means to 'secure the volume'? This article draws on the emergent literature on vertical geopolitics and Peter Sloterdijk's work on spheres, but also looks at what happens below the surface, with a particular focus on tunnels. Using Paul Virilio's work, and some examples from the West Bank and Israel's border with Lebanon, it demonstrates how we need to think volume—think about volume, through volume, with volume—rather than simply the vertical to make sense of the complexities of territory today.

Introduction

The phrase 'secure the area' is a common one in military and police situations. What happens if we take the vertical as a key question, taking the additional dimension into account, if security has to contend with *volume*? What would it mean to 'secure the volume'? How does thinking about volume – height and depth instead of surfaces, three dimensions instead of areas – change how we think about the politics of space? We all-too-often think of the spaces of geography as areas, not volumes. Territories are bordered, divided and demarcated, but not understood in terms of height and depth.

This article therefore builds on my claim that territory is a much more complicated and multi-faceted notion than it is usually understood to be. Standard political geographical definitions describe it as a 'bounded space' or the 'area controlled by a certain kind of power'. Previous work has challenged the former by suggesting that boundedness is a particular form made possible by a deeper and underlying determination of political space, as calculable (2005, 2010). This article challenges the latter definition – that it is simply an 'area controlled by a certain kind of power'. It first looks at work on verticality, then work on the subsoil, with a particular focus on tunnels. In sum, the aim is to take seriously, in a political register, what Jeremy Crampton has called the 'volumetric' (2010, 96), a term that is productive because of the dimension and calculable resonances it has. First, though, a brief rehearsal of the earlier argument concerning territory.

Territory is not merely a cognate of land, a political-economic term implying ownership, exchange and use value, distribution, partition, division. Nor is it sufficient, though it is necessary, to add a strategic, political dimension to the term, understanding the power relations in a narrow sense of contestation and struggle. This can be given the shorthand of the notion of terrain. Land and terrain are crucial elements, but not enough either alone or in combination. Rather, 'power' should be understood, following Michel Foucault, in a somewhat broader sense, as including, among other aspects, the legal and the technical.

The political–legal adds a crucial element into the understanding, because it raises the spatial element of notions of jurisdiction, authority, sovereignty, supremacy, superiority, administration and so on. Put crudely, we should ask where does the law apply, and where does it cease to apply. The political–technical, trading on work by Martin Heidegger and Foucault especially, understands the technical in a broad sense as an art or technique, but it looks at questions such as the relation between developments in mathematics, particularly geometry, in making possible the large-scale cartographic and land-surveying projects that contributed to the modern sense of territory. Political arithmetic, statistics and surveys all have important geographical elements—look for example at Matthew Hannah's work on the census in *Governmentality and the Mastery of Territory in Nineteenth Century America* and his more recent book *Dark Territory in the Information Age* (2000, 2010; see Legg, 2007; Mitchell, 2002).

Taking these four dimensions of the political into account—the economic, the strategic, the legal and the technical—does not provide a *better* definition of 'territory', in the sense of a fixed, ahistorical definition. But it gives a set of questions that might be

* Tel.: +44 (0)191 334 1945.
E-mail address: stuart.elden@durham.ac.uk.

0962-6298/$ – see front matter © 2013 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.polgeo.2012.12.009

asked in order to understand how territory has been understood, and practised, at different times and places. Territory is a process, not an outcome; not so far from what is increasingly being understood as an assemblage, continually made and remade. Territory can be understood as a political technology, or a bundle of political technologies, understanding both political and technology in a broad sense: techniques for measuring land and controlling terrain (see Elden, 2010, 2013a).

To suggest, then, that territory is a 'bounded space' under the control of a group of people invites the initial questions: what do we mean by bounded, and how is that possible; what do we mean by space, or what determination of space; and what power relations are at stake. It might be the beginning of the definitional work, but it is not the end. In other publications this way of approaching territory has been worked through in detail both politically and historically (2009a, 2013a). This article develops these arguments conceptually and politically, especially in terms of the problems that arise when space is reduced to a surface, a plane; when territory is reduced to an area.

From area to volume

One of the key thinkers of the notion of volume is the German philosopher Peter Sloterdijk. The first work of his in English that engages with these questions is a short book translated as *Terror from the Air* (2009b), but whose German title *Luftbeben* (2002) would more accurately be rendered as 'Airquake' or 'Air Tremors'. What Sloterdijk is seeking to analyse here is how the air itself, the air we breathe, becomes targeted. In a way it parallels the critique Luce Irigaray made of Heidegger—too tied to the earth, forgetting the air (1983, 1999). The material in Sloterdijk's book was first published in German as a chapter in volume two of the monumental *Spheres* trilogy. In German this is a three-volume, 2600 page work (1998, 1999, 2004), the first volume of which has recently been translated into English (2011b). The 'Airquakes' chapter appeared in *Society and Space* in early 2009 (2009a), closely followed by the separate book (2009b).

Sloterdijk suggests that this work, taken as a whole, should be understood as the counterpart to Heidegger's *Being and Time*, as *Being and Space* (1998, 345; 2011b, 342) which he describes as "the great unwritten book of Western Philosophy" (1999, 59 n. 17). Sloterdijk takes the Heideggerian idea of being-in-the-world and analyses the 'in' the way Heidegger expressly denied (1967, 53–54), as a spatial term, as a question of location, of *where* we are (2005, 308; 2011a, 175–176; see 1998, 336–345; 2011b, 333–342). For Sloterdijk, being is always being-with, not the isolated individual, but relations between; and being-with is always to be in a world. This is a spatial determination of our existence, and he suggests that a sequence of spheres help to make sense of this. They range from the bubbles of the first volume, where the first sphere is that of the womb, to the globes of the second volume, working through the family home, architecture, the polis, and the nation. In the third volume he pluralises this, using the idea of foam to capture the idea of interlocked spheres (see Elden, 2012, 7–8; Klauser, 2010). What is striking about Sloterdijk's work is the way that he tries to think space so seriously as a volume, with three dimensions, rather than merely an area. In terms of the work on terror, his examples are multiple, he is trying to show how poison gas attacks in World War I, the Holocaust, gas chambers, aerial bombardment, etc. share similar logics of assault. He broadens his analysis to include analysis of radioactivity, meteorology, pneumatology (spiritual beings)—means by which commanding the air can terrorise the earth, what he calls 'atmoterrorism'. This relates to long-standing discussions of the bomber aeroplane, and missile attack (see Gregory, 2006, 2011a; Grosscup, 2006; Herz, 1959).

In a related enquiry, the French theorist Paul Virilio has discussed how aerial warfare in World War I opened up new senses of battle*space*, rather than just a battle*field*, which cinema was quick to develop in its own aesthetic. As he suggests, "Distance, depth, three-dimensionality – in just a few years of war, space became a training-ground for the dynamic offensive and for all the energies it harnessed" (1989, 35). In World War II civilian populations became targets in ways they had not been before, with an impact even in countries that had not been invaded such as Britain and Japan. Equally, the advent of submarine warfare took warfare below the surface. War was now fought in a three-dimensional space, a volume. In Virilio's words:

> The conquest of the third dimension by the aerial forces and the extension of the submarine offensive gave to the Second World War its 'volume'. What was only yesterday the privilege of sea powers became the privilege of the entire military establishment: the control of the sky completed the control of the sea's depths… Space was at last homogenized, absolute war became a reality, and the monolith was its monument (1994, 39–40).

These arguments influenced some comments in my book *Terror and Territory* (Elden, 2009a, xxii). There the argument was that while attacks from truck or car bombs, or suicide bombers were challenges to the security of a state, there were means of prevention that could be erected—walls and fences being two of the most common. A whole range of such building projects have been conducted since 2001 (see Brown, 2010). Attacks from the air are much harder to prevent, and attempts to secure vertical space can be found in the barrage balloons of World War II to the attempts of a missile shield in the Cold War. The suggestion was that it was "not coincidental that two of the most extreme responses of the United States and its allies in the 'war on terror' have been to aerial attack: to the airplanes of September 11, 2001, and to Hezbollah's Katyusha rockets launched against Israel in 2006" (Elden, 2009a, xxii). However it is crucial to underline that the state responses, as state-terror, were also characterised by aerial assault. The 'Shock and Awe' initial attack on Iraq, not to mention earlier operations such as Desert Fox; the destruction of Fallujah; and attacks by Israel on Beirut or Gaza; NATO in the Kosovo War and Russia in Chechnya are all state-terror from the air. NATO's intervention in Libya more recently might be understood in a similar way. All these operations use the vertical dimension to assert domination, they use aerial supremacy to terrify the civilian population on the ground. The book suggested that:

> Recognizing the vertical dimension of territory shows that territory is a volume rather than an area, and noting that lines on maps have only a limited height when translated into lines on the ground showcases a new level of vulnerability: a vulnerability to imagined senses of a protected territory, the body of the state (Elden, 2009a, xxii).

Vertical geopolitics

These arguments link to ongoing work by a range of thinkers on what Stephen Graham has called 'vertical geopolitics' (2004a). As Foucault suggests in his examination of the *Dogs* series of paintings by Paul Rebeyrolle, "In the world of prisons, as in the world of dogs… the vertical is not one of the dimensions of space, it is the dimension of power" (2007, 170).

> It dominates, rises up, threatens and flattens; an enormous pyramid of buildings, above and below; orders barked out from up high and down low; you are forbidden to sleep by day, to be up at night, stood up straight in front of the guards, to attention in front