

Governmentality, calculation, territory[†]

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Abstract. In this paper I discuss Foucault's two recently published courses, *Sécurité, Territoire, Population* and *Naissance de la Biopolitique*. Foucault notes that he has undertaken a genealogy of the modern state and its different apparatuses from the perspective of a history of governmental reason, taking into account society, economy, population, security, and liberty. In the "Governmentality" lecture—the fourth of the first course—Foucault says that the series of the title—that is, security, territory, population—becomes "security, population, government". In other words, territory is removed and government appended. And, yet, the issue of territory continually emerges only to be repeatedly marginalised, eclipsed, and underplayed. A key concern of the course is the politics of calculation which Foucault discusses through the development of political arithmetic, population statistics, and political economy. Explicitly challenging Foucault's readings of Machiavelli and the Peace of Westphalia, I argue that territorial strategies should themselves be read as calculative, with the same kinds of mechanisms brought to bear on populations applied here too. I therefore discuss how Foucault's discussions of political economy, the police, and calculation are useful in thinking the history of the concept of territory.

Introduction

In the course summary to his 1977–78 Collège de France lectures *Sécurité, Territoire, Population*, published shortly after their completion, Michel Foucault declared that he had been concerned with "the genesis of a political knowledge [*savoir*] that was to place at the centre of its concerns the notion of population and the mechanisms capable of ensuring its regulation" (2004a, page 373; 1997a, page 67). The shift to a concern with population is thus explicitly noted as the focus of the course (for an introduction of this issue see also 1997b, pages 218–219). In the "Governmentality" lecture (1991)—the fourth of this course—Foucault says that the series of the title—that is, security, territory, population—becomes "security, population, government": in other words, territory is removed and government inserted (2004a, page 91; 1991, page 87).⁽¹⁾

Indeed, in that very lecture he suggests that the title of the course should have been not "security, territory, population" but, rather, the "history of 'governmentality'" (2004a, page 111; 1991, page 102). This thematic is continued in the 1978–79 course *Naissance de la Biopolitique* (2004b, see pages 3, 5). Five months after the end of that course, in October 1979 at Stanford, Foucault talks of his work in broad overview as "the rudiments of something I've been working at for the last two years. It's the historical analysis of what we would call, using an obsolete term, the 'art of government'" (2000, page 324). It is for this reason, then, that the single lecture "Governmentality" has been so important in the reception and development of Foucault's work (see, for example,

[†] This paper was delivered at the "Rethinking Governmentality" Workshop at the University of Durham, 12 January 2005, and in somewhat different form at the 'Rethinking Foucault, Rethinking Political Economy' Conference at the University of Leicester on 17 March 2005.

⁽¹⁾ Although I reference the English translation of this lecture, I have modified it to accord with the French, which is based on the tapes. The English translation is of an Italian version published in 1979.

Barry et al, 1996; Burchell et al, 1991); that these two courses have been so eagerly anticipated; and that the German translation explicitly promotes them as two volumes of *Geschichte der Gouvernementalität* (2004c; 2004d).⁽²⁾

These courses now provide a great deal of context to the single lecture that has proved so influential, and, although the reading proposed here does present some of that information, the key aim of this piece is to ask ‘what happens to territory’? Why does ‘territory’ remain only in the course title, and why does ‘government’ get inserted? Why is the object of government explicitly population? As Foucault asks in the course summary, does this mean that there is “a transition from a ‘territorial state’ to a ‘population state’?” “Certainly not”, he counters, “what occurred was not a substitution but, rather, a shift of accent and the appearance of new objectives, and hence of new problems and new techniques.” To follow this, Foucault takes up the “notion of government” as his “leading thread” (2004a, page 373; 1997a, page 67). It is this shift of accent—rather than a substitution—that I want to look at here. Why is there a shift from a state of territory to one of population, or one perhaps from a state primarily concerned with territory to one concerned with population? Is this shift useful in terms of a historical narrative, or is it, rather, a shift in Foucault’s preoccupations (see Senellart, 2004, pages 394–395)?

This question of Foucault’s preoccupations is important, for, despite the summary and its ‘*sans doute pas*’, it seems evident that Foucault’s attention does move. The later lectures of *Sécurité, Territoire, Population* and almost all those of *Naissance de la Biopolitique* are without this emphasis on territory, which suggests not a shift of accent, but, rather, a substitution. We can find an anticipation of this in a 1977 interview on ‘*La Sécurité et l’État*’, which is largely a discussion of terrorism in the wake of Klaus Croissant’s extradition. Foucault suggests that the role of the state in its contract or pact of security with the people has shifted. It has moved from a territorial pact where it is the guarantor of frontiers—“you will be able to live in peace in your frontiers”—to a pact of population: “you will be guaranteed” (1994, volume 3, page 385). This guarantee is from uncertainty, accident, damage, risk, illness, lack of work, tidal wave, and antisocial behaviour (page 385). While, of course, the second list has a number of key resonances today—from the issue of insurance and the welfare state or the social model of Europe, to the wake of the Asian Tsunami and the antisocial behaviour orders of the Blair government—such a shift is highly dependent on the status of a state: some states definitely do still have to secure their territory, and some manifestly take little account of their population (see Luke, 1996).

Rather than pursue the contemporary issues, my reading here suggests that it is profitable to think about what mechanisms mark the development of the notion of population as the object of political rule. These mechanisms, these modes of governance, these ‘new techniques’ which go under the rubric of an art of government or the notion of governmentality, are forms of knowledge tied to particular practices, exercises of power. They are related to the development of the modern state and its practices, but also to knowledge of the state—statistics. How, then, do these ways of thinking, these forms of knowledge and their attendant practices affect territory?

⁽²⁾ As is demonstrated by their simultaneous publication in France, and by this German translation, *Sécurité, Territoire, Population* and *Naissance de la Biopolitique* are really two halves of an inquiry. These are unlike any other lecture courses published so far, in that they are not merely related, but a continuation. *Les Anormaux* (The abnormal) (1999) and *«Il faut défendre la société»* (Society Must Be defended) (1997b) look at similar relations in the treatment of the sexually anomalous and of races, and are both workings through of parts of the original plan of the *History of Sexuality*, but they are not so clearly intertwined as these. While this is equally the case with the 1982–83 and 1983–84 courses on the government of the self and others, and there is a definite progression to Foucault’s work throughout his lectures, we have here something different.

The *dispositifs* of security

Foucault's concern through both *Sécurité, Territoire, Population* and *Naissance de la Biopolitique* is the issue of government. The "Situation de cours" by the editor Michel Senellart (2004) provides some indications of the political situation at the time that the course was written and political campaigns Foucault was involved in. It shows how the concerns of the lectures were, of course, not simply historical, in the sense of the past, but contemporary, present, and political (see also Gordon, 1991, page 6; see, more generally, Lemke, 1997; Senellart, 1995). In *Naissance de la Biopolitique* he notes that there are a range of ways in which government can be understood: as the government of children, of families, of a house, of souls, of communities (2004b, page 3). In these two courses the treatment of government is as it is exercised in political sovereignty, political rule. Other concerns are treated in the subsequent courses, such as the as yet unpublished 1979–80 course *Du Gouvernement du Vivants*. Indeed, in the first lecture of that course Foucault notes that the theme of government is a bit of a shift from his previous theme of knowledge–power, which he considers to be "rather tired and worn out".⁽³⁾

Sécurité, Territoire, Population begins with a brief analysis of power and rehearses Foucault's now familiar contrast between the treatment of lepers and plague victims which had also been analysed in the Rio lectures on medicine; *Les Anormaux*; and *Discipline and Punish* (2004a, pages 11–12). The point is to show how mechanisms shift from exclusion to inclusion, to sending the victims outside the bounds of the polity, to a mechanism for spatial partition that allows them to be contained within. He then gives three examples of apparatuses (*dispositifs*) of security—town planning, food shortages, vaccination campaigns—in order to demonstrate four general traits:

1. the spaces of security;
2. the aleatory—the chancy, the risky, the contingent;
3. normalisation as mechanism of security, which he argues is not the same as disciplinary normalisation;
4. the relation between technologies of security and population, as the moment of the emergence of the issue of population (2004a, page 13).

Town planning

Foucault's first example is of strategies for town planning as an example of issues of space (2004a, pages 13–14). Foucault contends that the spatial distribution (*répartition*) for sovereignty, discipline, and security is equally important but differently organised (page 14). The question of circulation, for example, emerges as a particular issue of concern and requires a rethinking of the territorial state and the commercial state (page 16).

Until sometime around the 17th century, Foucault claims that the town is a juridical and administrative place, but is still largely separated from the rest of the state—the wider spaces of its territory (2004a, pages 14, 66–67). The town is an enclosed and segregated space, and this is not just for military reasons. Foucault offers readings of the geometric plan of towns (page 15), and particularly the utopian schema proposed by Alexandre Le Maître in *Le Métropolitée* (page 16), where the relation between sovereignty and territory is one where the aim is "to connect the political effectiveness of sovereignty to a spatial distribution" (page 16). Foucault notes that a good sovereign is well placed in the interior of the territory, suggesting that a "well-policed territory in terms of its obedience to the sovereign is a territory which has a good spatial organisation [*disposition*]" (page 16).

⁽³⁾ Lecture of 9 January 1980, cited by Colin Gordon in e-mail of 20 March 2004 to foucault@lists.village.virginia.edu.

The second case of town planning is the construction of artificial towns in Northern Europe, on the model of the military camp, with geometric figures and architectural precision (2004a, pages 17–18). If Le Maître was striving to ‘capitalise’ a territory with a central town, here it is “a question of structuring [*d’architecturer*] a space. Discipline is of the order of construction (in a large sense)” (page 19). This is the town familiar from other better-known texts of Foucault’s, such as *Discipline and Punish*. “Discipline concentrates, centres, encloses” (page 46).

Inevitably, though, there is a tension between the strictly sovereign state and the maximal development of the economic (2004a, pages 16–17), which is a theme that Foucault explores later in the course in relation to the state’s role in the promotion of interstate competition. Alongside the development of capitalism, issues of the circulation of people and goods raise a challenge to straightforward ideas of the segregated town. Rather, the concern becomes one of replacing the city in a wider “space of circulation” (page 14). Foucault’s third case is that of 18th-century models for the management of towns, drawing on Pierre Lelièvre’s work on Nantes (1988). The key question here is circulation (Foucault, 2004a, page 19). Circulation is important in terms of health and hygiene—two themes that had been pursued in collaborative work Foucault had led at the Collège de France in previous years (see Elden, 2006)—and in addition to the issues of surveillance and commerce both within and between states (2004a, pages 19–20).

Foucault’s overall aim here is to show how “the sovereign of territory became an architect of a disciplinary space”, but, in turn, how the architect also became the regulator of a milieu where he or she did not so much fix the limits and frontiers, or the sites, but allowed circulation (2004a, page 31). These are the three—somewhat crudely epochal—spatial strategies at play in the town. Sovereignty; discipline; security which find their spatial form in territory and the capital; architecture, hierarchy, distribution; circulation, events, and the aleatory (2004a, page 22). Foucault had regularly claimed that discipline was a spatial strategy, but revealingly here he claims that the way in which these mechanisms of security operate is of a different spatial order. While discipline operates through the enclosure and circumscription of space, security requires the opening up and release of spaces, to enable circulation and passage. Although circulation and passage will require some regulation, this should be minimal. Discipline is centripetal, while security is centrifugal; discipline seeks to regulate everything while security seeks to regulate as little as possible, and, rather, to enable, as it is, indeed, *laissez faire*; discipline is isolating, working on measures of segmentation, while security seeks to incorporate, and to distribute more widely (2004a, pages 46–47).

Food scarcity and epidemics

Foucault’s next two examples are of food shortages and epidemics, and the strategies used to deal with them. The first example is not quite the same thing as a famine, and Foucault uses the term *la disette*, which is closer to a notion of dearth (2004a, page 32). It is related to pricing mechanisms, storage, and distribution, but also to the problem of dealing with the unexpected, the failed harvest. This raises the issue of the aleatory, something that would be developed in the late work of Louis Althusser as a different model for materialism (see Holden and Elden, 2005), and what Foucault calls the problem of the event (2004a, page 32).⁽⁴⁾ Foucault contends that the mechanisms utilised to deal with such issues—and he spends some time in an analysis of the Physiocrats—constitute a *dispositif* of security rather than a juridico-disciplinary system (page 39).

⁽⁴⁾ This may provide an interesting point of relation to the interest in the notion of the event in contemporary theory, in particular the work of Alain Badiou. Space precludes a fuller discussion here.

The second example is also an example of security, rather than of discipline. Foucault discusses epidemics, particularly that of variola (smallpox) and the mechanism of variolation (inoculation with the virus of smallpox), which has led to more contemporary vaccination campaigns (2004a, pages 60–61). In a sense what is taking place here is a process of normalisation, but Foucault again draws a line between normalisation in security and disciplinary normalisation. Indeed, one of the key aspects of his discussion in these opening lectures is to propose an opposition and draw a distinction between security and discipline, which have both different models of the management of spatial distributions, and different ways of dealing with the aleatory and the problem of normalisation (pages 57–59).

Foucault's three examples of town planning, food scarcity, and epidemics—or “the road, grain, contagion” (2004a, page 65)—are thus outlined, interesting in themselves, but intended to be illustrative of his four themes (for earlier remarks see 1997b, pages 216–218): the spaces of security; the aleatory; normalisation; and the emergence of issue of population (2004a, page 13). It is clear that whatever Foucault says about territory he is not suggesting that security is aspatial. Rather, it operates on a different strategy that requires a sociospatial ordering of resources and the means for their distribution and circulation. Nonetheless, Foucault contends that the emergence of a notion of government shows that a new problematic has emerged: “No longer the surety of the prince and of his territory, but the security of the population” (page 67).

Population

The notion of population is important in this period, not only in political thought, but also in the procedures of government. Foucault argues that population moved from being the negative of depopulation—that is, repopulation following an epidemic, a war, or famine (*la disette*), where the aim is to “repopulate a territory that had become barren [*désert*]” (2004a, page 69)—to a term in itself. Population is key to other issues, such as agriculture, manufacture, and the productive force and other forces of the state (pages 70–71; on agriculture see also 2004b, pages 145–146). This is a shift to a new political technology: the ‘government of populations’. Populations are not simply the “sum of individuals inhabiting a territory” (2004a, page 72), but subject to variance on a number of factors including climate, materials, commerce and circulation of wealth, marriage laws, the treatment of girls, rights of primogeniture, the way children are brought up (pages 72–73), nature and geography (2004b, page 59). Foucault, therefore, suggests that his object of analysis is “the series: mechanisms of security—population—government and the opening of the field that is called politics” (2004a, page 78).

Three models of governmentality

It is at this point in the course that Foucault delivers the famous lecture on “Governmentality”: an overture of where his researches are going, rather than a culmination of analyses already undertaken. In part, Machiavelli is the focus, or more particularly the focus is on the way in which Machiavelli was received (for a fuller analysis see Holden and Elden, 2005). For Foucault, Machiavelli trades on a Middle Ages, 16th-century model, where “sovereignty is not exercised on things, but above all on a territory and consequently on the subjects who inhabit it” (Foucault, 2004a, page 99; 1991, page 93). In contrast, he then reads Guillaume de la Perrière's *Miroir Politique*, where he notes that “you will notice that the definition of government in no way refers to territory. One governs things” (2004a, page 99; 1991, page 93). This is a complex of men and things, of which the qualities of territory might be important, but not in themselves (2004a, page 99; 1991, page 93). The issue of the qualities of territory will be returned to below, but the key issue for Foucault is population and its various attributes.

De la Perrière is but one of Foucault's examples of the way in which governmental strategies develop in the second half of the 16th century. This is tied to the progressive development of the administrative apparatuses of the territorial monarchies, but also to the invention and refinement of 'statistics', "meaning the science of the state" (2004a, pages 104, 107; 1991, pages 96, 99). The calculative mechanisms between statistics are also crucial to the emergence of the new science of political economy which "arises out of the perception of new networks of continuous and multiple relations between population, territory and wealth" (2004a, page 109; 1991, page 101). Over time this can be traced as the transition from an art of government to political science and from sovereignty to techniques of government, both of which hinge on population and the birth of political economy (2004a, page 109; 1991, page 101).

Foucault is, however, careful to note that this is not a straightforward linear development, such as might be assumed from the passage from a society of sovereignty to a disciplinary society to a society of government. Rather, he proposes a triangle of sovereignty–discipline–government (governmental management), whose primary target is population, whose principle form of knowledge is political economy, and whose essential mechanism or technical means of operating are apparatuses of security (2004a, page 111; 1991, page 102). Conceiving of these three 'societies' not on a linear model, but, rather, as a space of political action, allows us to inject historical and geographical specificity into Foucault's narrative. As geographers have long realised, Foucault's work needs to be continually contextualised, particularly if we wish his ideas to travel.⁽⁵⁾ Different places and different times might be closer to one node or another, while we can recognise that this is a generally useful and transferable model of analysis. Indeed, this is precisely the reason why Foucault suggests that the course title "security, territory, population" is replaced with "history of 'governmentality'" (2004a, page 111; 1991, page 102).

At the very close of the "Governmentality" lecture, Foucault sketches out the transitions between "the great forms, the great economies of power in the West" that he is concerned with analysing in more historical detail.

"First of all, the state of justice, born in the feudal type of territorial regime which broadly corresponds to the society of laws—either customs or written laws—involving a whole reciprocal play of obligation and litigation; second, the administrative state, born in the frontier [*de type frontalier*] (and no longer feudal) territoriality of the fifteenth and sixteenth centuries and corresponding to a society of regulation and discipline; and finally a governmental state, essentially defined no longer in terms of its territoriality, of its surface area, but in terms of the mass: the mass of its population with its volume and density, and indeed also with the territory over which it is extended, although this figures here only as one among its component elements. This state of government which bears essentially on population and both refers itself to and makes use of the instrumentation of economic *savoir* could be seen as corresponding to a type of society controlled by *dispositifs* of security" (2004a, page 113; 1991, page 104).

This passage bears some close examination. Foucault is interested principally in the development between the second and third forms of these 'economies of power', but there is an important shift between the first and second forms which is seemingly underplayed. Foucault recognises that there are two types of state that accord a privilege to territoriality—the feudal and the frontier. This is a peculiarly French

⁽⁵⁾ As one of the anonymous referees notes, this was central to some of the more critical concerns in Philo (1992), and to the engagement with the geographers of *Hérodote* in the 1970s. The original interview, Foucault's questions back to the journal, and a range of responses are now collected in Crampton and Elden (2007).

conception, in that the French state or kingdom was better organised and internally ordered than most others in Europe during the 15th and 16th centuries. But even here it was only really in the second half of the 17th century, in the wake of the Peace of Westphalia and particularly the Treaty of the Pyrenees of 1659, that France started to fully order its putatively ‘natural boundaries’, in the phrase of Cardinal Richelieu (1961; see Sahlins, 1989). It is also important to note the language referring to the issue of population—mass, volume, density—which hints at a mathematical, calculative sense, but also the way in which this is *extended* over the territory, raising issues of spatial distribution as well as hinting at the mathematical determination of space as extension found in Descartes.

In undertaking this historical analysis, Foucault offers three models of governmentality, which he also calls the “governmentalisation of the state”:

1. the archaic model of the Christian pastoral,
2. diplomatic military techniques—perfected on a European scale after the Treaties of Westphalia,
3. the police (Foucault, 2004a, pages 111–112; 1991, page 104).

It is, therefore, at the beginning of the lecture following “Governmentality” that the true historical analysis promised begins: starting here in *Sécurité, Territoire, Population* but continuing in *Naissance de la Biopolitique*, and presumably in subsequent, and as yet unpublished, courses. Before I discuss these three models, it is worth noting two further things. First, the notion of governmentalisation implies a process, a mode of transition and becoming rather than a state of being. This allows us to recognise the further temporal aspect to Foucault’s analysis. Second, Foucault’s analysis is largely confined to Western Europe, and often just to France. The geographical specificity is, therefore, almost entirely lacking.

Pastoral power

Although it will have profound implications for the Western model, the notion of the pastoral has Eastern origins in Egypt, Assyria, and Mesopotamia, but especially in Hebrew understandings of the relation between god and man, where the power is over the flock rather than over the land (Foucault, 2004a, pages 128–129; 2000, page 300). The power of the shepherd “is exercised not so much over a fixed territory as over a multitude in movement toward a goal” (2004a, page 373, see also pages 129, 133; 1997a, page 68). Crucially—and this is the point of Foucault’s lecture *Omnes et Singulatim* from October 1979—this power is exercised over each individual as much as over the flock as a whole (2000, page 298). *Omnes et Singulatim*—all and each—a mechanism that is at once totalising and individualising (see Gordon, 1991, page 3).

In distinction to the Greek god who is a “territorial god; a god *intra muros*”, within the walls of the *polis*, tied to Greek myths of autochthony, the “Hebrew god is a god who marches, displaces, wanders” (Foucault, 2004a, page 129). Foucault contends that the Hebrew model is almost entirely separate from the Greek *polis* or Roman *imperium* as a model for political power (2004a, page 133), although elements of the pastoral model can be found in some Greek texts, notably Plato’s *Statesman* and some minor references in the *Critias*, *Republic*, and the *Laws* (pages 133, 142f). Although these analyses anticipate Foucault’s later return to Greek and Roman texts with considerably more nuance, and though there are some interesting asides on the range of other literature, including Homer’s *Iliad* and *Odyssey*, and *Beowulf* (2004a, pages 140–141; 2000, page 304), he suggests there is something quite different in the idea of the pastor–sovereign or shepherd–magistrate in Greek texts and the model imported from the East.

Foucault notes that Paul Veyne's work is important here (Foucault, 2004a, page 245; Veyne, 1976), as he contends that the pastoral model was introduced into the West via Christianity, particularly the Christian Church, and through the way that the Western Roman Empire becomes Christian.⁽⁶⁾ Foucault notes that the paradox is that these 'religious' civilisations are both the most creative, conquering, arrogant, and bloody (2004a, pages 133–134). More interesting, it seems to me, is why Foucault is so concerned with the Christian model, and particularly with the transitions in models of government in the 15th and 16th centuries. The answer is, in part, biographical: the second volume of the *History of Sexuality* was intended to be on confession and on the Christian distinction between the body and the flesh, and, indeed, Foucault had been reading much literature on this topic in anticipation of such a study. The figures he would have treated there—such as Gregory the Great, John Chrysostom, Saint Cyprian, Jean Cassian, Saint Jerome, Saint Benedict—are analysed here (2004a, pages 169–170), and are returned to in the 1979–80 course *Du Gouvernement du Vivants*. As Daniel Defert notes in his chronology in *Dits et Écrits* (in Foucault, 1994, volume 1, page 53), in January 1978 (at the beginning of *Sécurité, Territoire, Population*) Foucault was working on this second volume. Confession becomes important because of its aim of the government of souls, what Gregory of Nazianzus called the *oikonomia psuchon*, the economy or household of souls (2004a, page 196). The pastorate thus forges the link to new ways to govern children, family, the domain, and the principality.

And yet, just as in the initial sketches presented in *Les Anormaux* lectures from 1974 (1999, pages 155–180), his claims here are sometimes rather vague and general (for a fuller discussion, see Elden, 2005a). Part of the problem is that he tries to cover a huge range of time: from the 2nd and 3rd centuries after Christ through to the 18th. He recognises the changes over this millennia and a half, and explicitly claims that they do not rest on the same invariant and fixed structural basis (Foucault, 2004a, page 152). Indeed, he notes that it is “not a question here, of course, of doing the history of this pastorate” (page 153), although he suggests that this is a story that has not adequately been told. While there are histories of “ecclesiastical institutions, doctrines, beliefs, religious representations ... religious practices such as how people confess and take communion” (pages 153–154), there has been much less attention to the techniques employed, the history of their development, application, successive refining, and so on.

The pastorate is described as the art of arts, the science of sciences—“*techné technon, epistémè epistémôn*” (2004a, page 154)—an “ensemble of techniques and procedures” (page 196). Foucault uses this to trace a schism in the Church that goes beyond theology: the “Western sovereign is Caesar and not Christ; the Eastern Pasteur is not Caesar, but Christ” (page 159). The shift from the “pastoral of souls to political government of men” (page 231) is thus a complicated story in political thought, related to the English Glorious Revolution, and to the Counter-Reformation in Europe more generally. Governmental practices build on the conduct of the self, of children, and of the family, and we can see clearly here how this relates to the later work on technologies of self. “With the sixteenth century we enter into the age of conducts, the age of direction, the age of governments” (page 236).

In summary, then, Foucault contends that we have a shift in political rationalities from *ratio pastoralis* to *ratio gubernatorial* to *ratio status* (2004a, pages 238, 243): pastoral reason, governmental reason, reason of state (*raison d'État*). And yet this is not the only story to be told about the transitions in models of rationality. In a tantalising digression, Foucault links the French notions of *raison* and *rationalité* to the Latin *ratio* (page 293), and hints at the wider transformation of the scientific

⁽⁶⁾ For a valuable note from Senellart on the Foucault–Veyne relation see Foucault (2004a, page 256, note 22), and Defert in Foucault (1994, volume 1, page 53).

revolution in relation to Kepler, Galileo, and Descartes. There are, therefore, two principle referential *savoirs* and techniques of this period: *principia naturae* and *ratio status*—principles of nature and reason of state (page 243). Although Foucault is unsure this divide between nature and the state is entirely tenable, the linkage is important, for reasons that will be discussed below. But it is important for reasons other than those Foucault draws from a reading of Giovanni Botero's *The Reason of State*, from 1589 (1956). Foucault contends that Botero's work defines "the state as strong [*ferme*] domination over people." Foucault adds that there is "no territorial definition of the state, it is not a territory, it is not a province or a kingdom, it is only people and a strong domination" (2004a, page 243). The reason that I think we can draw a somewhat different conclusion to Foucault is precisely through a reading of what he suggests this leads to: the Peace of Westphalia. The reason Foucault is so important to that conclusion is in the potential he opens up for a comparative analysis of the late-16th-century shifts in two main domains—politics and science.

The Peace of Westphalia and the advent of the police

Why does the Peace of Westphalia of 1648, which ended the Thirty Years War, hold such a pivotal place in the discussion of Western political history? For the story international relations likes to tell, this was the moment that states emerged, or, at least, that the state system came into being. The principle of noninterference in the internal affairs of the state is also dated from the two treaties that made up the peace. If the reality of the settlement is, of course, somewhat more complicated, and its importance is dramatically overstated, it is undoubtedly an important event (see Elden, 2005b; Osiander, 2001; Teschke, 2003). For Foucault the treaties are important not merely as a result of the notion of reason of state, but also because of to whom reason of state was applied as a result of the religious break. The power of the Pope in European affairs was much reduced, and, as Foucault notes, Pius V declared *ratio status* as *ratio diaboli* (Foucault, 2004a, page 247).

In Foucault's analysis the crucial issue is that of the relations between states and their commercial interrelation (2004a, page 299). He particularly draws on the text from Bogislav Philipp von Chemnitz, who under the pseudonym of Hippolite a Lapidé wrote a text for the negotiations at Westphalia (von Chemnitz, 1646). The key issue in the text is the relation between the Empire as a whole and the individual principalities and free cities that constituted it. In other words, it is an issue of the administration of the Empire (Foucault, 2004a, page 245). This text, *Dissertatio de ratione status in Imperio nostro Romano-Germanico*, was translated into French as "The interests of the German princes" in 1712. What is interesting, contends Foucault, is that the interests of the princes were reasons of state—the principalities took on the characteristics of states, with various clauses in the treaties allowing them to have standing armies, raise taxes, and enter into alliances without the consent of the Emperor. Von Chemnitz explicitly drew parallels between the shift in political thought and the shift in mathematics, such as in the work of Galileo. Reason of state is the mechanism by which states function (2004a, page 246), the means to "establish, conserve, and augment a republic" (page 296). This was the rationale of Cardinal Richelieu and later of Cardinal Mazarin in France (page 247), and can be seen throughout a period which stretches from Westphalia to the Seven Years War in the middle of the 18th century, or even to the Revolutionary Wars (2004b, page 8).

The legacy of Westphalia can thus be seen in two related domains. The first is the domain of diplomatic strategies, resting upon alliances and armed apparatus, which seek to preserve a European balance of power, one of the guiding principles of the treaties of Westphalia (Foucault, 2004a, page 375; 1997a, page 69). This political

technology Foucault describes as a diplomatico-military *dispositif* (2004a, page 304; 2004b, pages 8, 54). The second domain is the *dispositif* of the police “in the use of the term in this era” (2004a, pages 304, 320). This is, as is well known, much more than the uniformed form for the prevention and detection of crime; it is rather, “the set of means necessary to make the forces of the State increase from within” (2004a, page 375; 1997a, page 69); “an apparatus which is put in place to make reason of state function” (2004a, page 284).

Sustaining the balance of power in Europe, which Foucault suggests was central to the instructions given to diplomats and ambassadors at Westphalia (2004a, pages 272, 300–301, 305, 306–307), led to a number of necessary changes in Europe, including new marking of frontiers, new division of states, regulating the relations between Germanic states and the empire, and the demarcation of zones of influence for France, Sweden, and Austria (page 305). Foucault argues that there was an attendant shift in strategic priorities, which were no longer tied to accumulation of territory but tied to a growth of state forces, not to matrimonial alliances or dynasties but to the state’s forces in political and provisional alliances (2004a, page 303; see 2004b, page 11). In this we can see a transformation in the modality of rule as well as in its object, what Foucault calls a new theoretical stratum (*strate*), a new element of political reason, the force, or strength, of states. The principal object of this new politics is the utilisation and calculation of forces. Foucault suggests this is when “politics, political science encounters the problem of the dynamic”, a term we should think in relation to the Greek sense of power, or capacity (2004a, page 303).

As Foucault puts it in the course summary:

“And more than the problems of a sovereign’s legitimacy over a territory, what will appear important is the knowledge [*connaissance*] and development of the forces of a State: in a space (European and worldwide [*mondial*] at once) of competition between states, very different from that in which dynastic rivals confront each other, the major problem is that of a dynamic of the forces and the rational techniques which enable one to intervene there” (2004a, pages 374–375; 1997b, page 69).

Although Foucault does no more than hint of the importance of Leibniz here, he recognises that his contribution is more than merely as a philosopher or scientist. Leibniz is a “general theoretician of force as much from the historical-political point of view as from that of physical science” (Foucault, 2004a, page 304). What is interesting, as a reading of Leibniz’s philosophical and political writings (1988; 1989) together reveals, is that he is concerned with the problematic of balance, not as a problem of stasis but as one of dynamics (see Senellart’s note in Foucault, 2004a, page 315, note 14; see also Costabel, 1973; Robinet, 1993). As his work for the Duke of Hanover shows, calculation is not merely a means to address a physical property, but a political strategy (see Elden, 2005b, page 14).

In the first half of the 17th century the idea of Europe at this stage does not include Russia, and only fairly ambiguously includes England, which is related to neither having a role at Westphalia. Indeed, Foucault claims that “Europe is the means of forgetting (Germany) the Empire” (2004a, page 312), a formulation which has parallels to the 20th-century European project after the Second World War. While not suggesting that there are no distinctions between states, Foucault notes that the transition following Westphalia is there is no longer a hierarchical system, with the different states more or less subordinate with the empire at the top, but now, in crude terms, each sovereign is emperor in his own kingdom (2004a, pages 305–306). Indeed, one of the most important texts of Leibniz on this issue, entitled *De Jure Suprematus ac Legationis Principum Germaniae*, was published under the satirical pseudonym of

'*Caesarinus Fürstenerius*', 'Prince as emperor', stressing the equivalence of the emperor and the prince. More generally, the aspiration of a universal peace following the treaties is reinforced by three instruments: war, diplomacy, and permanent armies. War is intended to be used judiciously, with a clear sense of why it is being fought, and used strategically to reinforce the balance of power. Diplomacy is to become an instrument or tool, with the negotiations in Westphalia as a model, with a congress of all states involved, and with a system of permanent ambassadors. Europe is seen as a juridico-political entity in itself, with a system of diplomatic and political security; but this is underpinned by the third instrument, each state having a permanent military apparatus of professional soldiers with an infrastructure of fortresses and transport, and sustained tactical reflection (pages 308–313).

The other great mechanism of security is the "political *dispositif* of the police" (2004a, page 314). These are the mechanisms or techniques by which a community or association is regulated by public authority. Republics and polices go together, and families and monasteries are not police because they lack that public aspect. The police is a public thing, a *res publica*, the ensemble of means by which the forces of the state can grow in maintaining the good order of the state, reliant on calculation and technique. As is familiar from his other writings, Foucault draws on Turquet de Mayerne's *La monarchie aristodémocratique* from 1611 and Hohenthal's *Liber de politia* of 1776. "Police is what assures the splendour of the state", it is "all that gives ornament, form and splendour to the city" (page 326). Essentially "the art of governing and using the police, for Turquet de Mayerne, is the same thing" (page 326). Foucault finds similar claims in von Justi's work *Grundsätze der Policey-Wissenschaft* from 1756, of which he claims that "the good use of the forces of the state, that is the object of the police" (page 321). The first task is to assess the landed property (territory) of the state, how it is inhabited and who inhabits it, and then goods and chattels, and the conduct of individuals (Foucault, 2000, page 322). "Von Justi combines 'statistics' (the description of states) with the art of government. *Polizeiwissenschaft* is at once an art of government and a method for the analysis of population living on a territory" (page 323).

There are many objectives for the police in maintaining the functioning of a polity. Foucault outlines the various divisions proposed in the texts under consideration, and, while there are numerous variations, common themes include: the number of citizens and how these reflect as a measure of a country's power; enabling the people to live (issues such as food, agriculture, and markets); the question of health, in terms of both medicine and also public health, and the administration of a healthy city; overseeing the activity of people, including religion, mores, public order, and providing mechanisms for the deserving poor; the general upkeep of the city including buildings, public squares, and roads; and circulation, in the broad sense of the circulation of goods, people, roads, rivers, and canals (2004a, pages 330–333, 342). The three apparatuses of security discussed at the beginning of the course thus are all clearly related to the problematic of the police. Indeed, at various places in the analysis Foucault explicitly relates these, suggesting that the problem of grain is a matter for the police, and a matter of political economy (pages 346f), and that "the space of circulation is therefore a privileged object for the police" (page 333).

The use of the police to the balance of power is not unrelated. One of the aims of the police is how it can enable the forces of the state to grow and maintain good order. Within the new interstate competition, the police helps to make the state competitive, and, because commerce and monetary circulation between states becomes so important, the coupling of population–wealth is a "privileged object of the new government ... one of the conditions of formation of political economy" (2004a, page 375; 1997a, page 69).

The key objective of concern, therefore, is both population and the continuation of the population. The police, therefore, “is the ensemble of interventions and the means which assure living” that can be useful to the constitution of the state and the increase of its forces (2004a, page 334). The key word, the key concern, is political economy (page 335; see 2004b, pages 15f). In addition the state system gave the collection of states the right to watch over the use of the police in each of these states, precisely in order to preserve the balance of power.

Foucault argues that statistics is a common instrument to both the balance of power and the police, because both are concerned with the forces and resources of states, and all the measures of population. “Statistics is made necessary by the police; but it is also equally made possible by the police”; “statistics is the knowledge of the state over the state, understood as knowledge of the self [*savoir de soi*] of the state, but equally knowledge of other states” (2004a, page 323; 2004b, page 16). Statistics is thus the hinge between the two technological ensembles, although this obviously takes different forms in different states.

The mechanisms of calculation and the problem of territory

In the final lecture of *Sécurité, Territoire, Population*, Foucault suggests that population is to be understood not as an absolute value but as a relative value (2004a, page 353). His concern from here is how the notion of police develops into a more modern political economy, which will be the central theme of the *Naissance de la Biopolitique* course. The issue of biopolitics—first explored in the 1974 lectures given in Rio as well as the last lecture of «*Il faut défendre la société*» (1997b) and the first volume of the *History of Sexuality*—is tied to the development of measures and statistical techniques. Biopolitics is the means by which the group of living beings understood as a population is measured in order to be governed, and tied to the political rationality of liberalism (2004b, page 323; 1997a, page 73; see also 2004a, page 73; on biopower generally see Lazzarato, 2002). It is calculation (*calcul*) rather than an earlier notion of ‘wisdom’ (*sagesse*) which is the model for these rationalities: “calculation of forces, relations, wealth, elements of force” (2004b, page 315). These calculative modes are tied explicitly to advances in rationality more generally, as modes of rationalising and regulating the art of governing (2004, pages 316–317, see page 5). He explicitly links these new developments back to the *dispositifs* of security outlined at the beginning of the 1977–78 course (2004a, page 361). The theme throughout the 1978–79 course is thus the use made of the mechanisms of calculation, suggesting, for example, that the new principle for the “fabrication of liberty” is calculation (2004b, pages 66–67).

Naissance de la Biopolitique, however, contains little on territory, and like *Sécurité, Territoire, Population* the key theme is population. Aside from the discussions above, territorial issues are raised in the study of the police in different countries (2004a, pages 324–326), but these are rather brief and crude generalisations, examining the distinction between the fragmented territory of Germany and unified territory of France. Similarly, Foucault hints at the procedure of the urbanisation of territory as a model for the police, with the aim to make the territory as a whole a sort of great city, to order it like a city. The administration conducted by the police is over space, territory, and population. To police and to urbanise, to town plan—*policer et urbaniser*—are “the same thing” (2004a, page 344, see page 354). The point here though is not that contemporary neoliberalism needs to be understood in terms of its spaces, although it undoubtedly benefits from such an analysis (see Brenner and Theodore, 2002). Rather, it is that the period Foucault is analysing as the emergent moment for population simultaneously sees the appearance of the category of territory in its modern sense.

This is not the shift Foucault sees. In his analysis Machiavelli is one of the last examples of the earlier territorial model, where the relation between the prince and his territory was key, with the people inhabiting that territory a secondary concern. In the state of security, however, the governed, the population, become key, with the procedures for their governance the mechanisms under discussion. On this reading the Peace of Westphalia is not territorial, but is, rather, symptomatic of the shift to what goes on within the interior of the territory concerning the “general mass [*mass*] constituted by individuals” (2004a, page 364). *Polizeiwissenschaft*—the police sciences—is developed as a governmental response to this problem. In these terms civil society, population, and the nation should not be seen in opposition to the state, because they are the elements from which the state is born. Foucault, therefore, contends that the modern state, the “history of reason of state, the history of governmental *ratio*, the history of governmental reason and history of counter-conducts”, cannot be straightforwardly disassociated (page 365).⁽⁷⁾

Foucault admits that he has not done “the genealogy of the state itself or the history of the state”, but, rather, looked at a certain number of issues that can be brought to bear on particular problems (2004a, page 282). The state, for Foucault, is a practice, which cannot be disassociated from the ensemble of practices and becomes a manner of governing (2004a, page 282). Foucault claims that he has undertaken a genealogy of the modern state and its different apparatuses from the perspective of a history of governmental reason: society, economy, population, security, liberty (page 362). This has led him to look at the “economy, management of the population, law with the judicial apparatus, respect for liberties, police apparatus, diplomatic apparatus, military apparatus” (page 362).

In these lectures he therefore offers a theory not so much of the state as of governmental reason (2004b, page 93): the macroanalysis after the microphysics of power he had pursued in earlier works (Senellart, 2004, pages 397–398; see Foucault, 2004b, page 192; Gordon, 1991, page 4). Foucault suggests that the issue of whether there is a theory of the state in Marx is for Marxists to decide. But what is lacking, he contends, is a theory of government. Similarly, Locke was offering not a theory of the state, but a theory of government, and therefore he claims that the last theory of the state can be found in Hobbes (Foucault, 2004b, pages 92–93). Even the Panopticon was a form of government (page 69). But this analysis is valuable in that we can understand different types of states—administrative states, welfare states, bureaucratic states, fascist states, totalitarian states—through their governmental practices (pages 193; 196–197), an analysis that is broadened beyond the state in the subsequent course on the government of souls, conscience, and confession and the final two courses on “The government of self and others”.

Foucault’s reading could, of course, be challenged in a number of ways. In a broadly conceived sketch such as we find in a lecture course, there will inevitably be points of historical inaccuracy. But my concerns are with the periodisation itself. Indeed, it is notable that Machiavelli actually does not really talk about territory, but, instead, relies on an unproblematic sense of terrain or land in a quasi-military sense. Foucault’s reading of Machiavelli’s concern as territory (Foucault, 2004a, page 67) relies on a narrow, statist sense of territory, as do remarks elsewhere in the course. A careful reading of what Foucault says in the “Governmentality” lecture concerning Machiavelli and de la Perrière is, however, instructive. Foucault declares that “territory is the fundamental element both in Machiavellian principality and in the

⁽⁷⁾ In the course summary of *Naissance de la Biopolitique*, Foucault suggests that the state–civil-society couplet is not a historical universal but a “form of schematisation characteristic of a particular technology of government” (2004b, page 325; 1997a, page 75).

juridical sovereignty of the sovereign as defined by the theoreticians and philosophers of right.” The fertility of the land, the population density, average wealth, and diligence of the inhabitants are important, “but all these elements are mere variables by comparison with territory itself, which is the very foundation of principality and sovereignty.” In distinction, the tradition of which de la Perrière is the exemplar is concerned with men, the population, but “in their relations, their links” with other things. These other things include measures of the population such as “wealth, resources, means of subsistence”, but also, crucially for the argument here, “the territory of course, within its frontiers, with its specific qualities, climate, irrigation, fertility, etc” (2004a, pages 99–100; 1991, page 93).

In the first case the key element is, Foucault contends, the territory itself. The other elements of the territory and the relation between it and the population are ‘mere variables’. It is the territory which is the ground, the foundation. In the second case, it is the relations that the population has that are central: not the population in itself but the population in its relations, by which things can be ordered and controlled. In this case the ‘mere variables’ take on a central role. Indeed, as Matthew Hannah (2000) has shown, most forms of statistical knowledge of population require distribution, which shows territory as a fundamental base. If Foucault is thus overdrawing this comparison, it does seem that he is onto something quite important in understanding what precisely the development in the political technique around the 17th century was. This is that the variables, the measures, become part of the means of political rule, a central theme within the mechanisms of government. The relational approach takes territory not as some static terrain but as a vibrant entity, with ‘its specific qualities’ which too can be measured, and the territory itself is—in a phrase omitted from the original publication of this lecture—“within its frontiers”.

These two points—qualities and frontiers—are worthy of a little more detail. In terms of the qualities it is notable that a number of the mechanisms and techniques Foucault outlines in relation to population are simultaneously applied to the territory itself. Foucault usefully outlines the way in which the necessary knowledge of the sovereign became the “*connaissance* of things more than *connaissance* of the law”; hence, this is the era of statistics, because statistics is “etymologically, the knowledge [*connaissance*] of the state, the knowledge of forces and resources which characterise a state at a given moment” (2004a, page 280). Although Foucault notes that ‘statistics’ as a term was first coined in 1749 (page 291, note 61) he makes reference to earlier models in Francis Bacon—who is explicitly contrasted with Machiavelli—on the “calculation of government” (page 278), and discusses William Petty of the late 17th century as the founder of political arithmetic (pages 280, 291, note 60; see Petty, 1690). In the work of other writers, including the Physiocrats, Adam Smith, and Kant, we find a “new form of political calculation on an international scale” (2004b, page 60).

For the Physiocrats, as Foucault declared in the course summary, “the population is not simply the sum of subjects who inhabit a territory, a sum that would be the result of each person’s desire to have children or of laws that would promote or discourage births—it is a variable dependent on a number of factors” (2004a, page 375; 1997a, pages 69–70). These factors include the “tax system; activity of circulation; and the distribution of profit.” But this goes beyond merely a cataloguing, since “this dependence can be rationally analysed, in such a way that the population appears as ‘naturally’ dependent on multiple factors that may be artificially alterable” (pages 375–376; 1997a, page 70) Indeed, the Physiocrats believe that the sovereign must derive the axioms of the market in the same way that the geometer does his concerns. The sovereign must become “the geometer of the economic domain” (2004b, page 297).

Foucault argues that this was often developed in smaller states as a means of understanding their relative situation—such as Ireland occupied by England, and the smaller Germanic states (2004a, page 280). Statistics was initially seen as *arcane imperii*, the secrets of power which were not to be divulged (page 281), although they moved to a more normal and widespread state practice. Measures they were concerned with include economic measures, taxes, and imports, which constitute an “ensemble of technical knowledges which characterise the reality of the state itself” (page 280). Alongside “knowledge of the population, measures of its quantity, mortality and birth-rate, estimation of different categories of individuals in the state and their wealth”, there are “estimates of the virtual resources available to a state; mines, forests etc” (page 280). Qualities become something that can be quantified, with the extension of techniques in how to measure, which was part of the wider scientific development of this period.⁽⁸⁾

The notion of the qualities of territory provides an important opening toward future work, which some writers on governmentality have already begun (for example, Braun, 2000; Hannah, 2000). As Braun notes,

“Few commentators, however, have taken up Foucault’s suggestion that one of the unique aspects of modern forms of political rationality was that the problem of population and its improvement necessarily brought the state *directly into contact with its territory*—and more precisely, with the *qualities* of this territory” (2000, page 12).

There is not the space here to pursue this in detail, but it is worth noting that Foucault’s own analysis in the lecture courses under discussion here provides only some minor indications toward this work. Foucault says little, for instance, about the numerous governmental practices of colonial empires but there are some interesting remarks on the discovery of America, and brief comments on the American Revolution and on the constitution of colonial empires (see 2004a, pages 303f; 2004b, page 44, pages 57–58). America provides an excellent example of the mechanisms of calculation brought to bear on the discovery, demarcation, and mapping of the continent, exemplified by the rectangular land survey of the grid lines of latitude and longitude used to divide the individual states of the United States by Thomas Jefferson and others (see Cohen, 1999; Johnston, 1975; Pattison, 1970; Sack, 1986, pages 127–168). Edward Gunter’s writings and technical instruments that made much of this possible have been explored in an important recent work (Linklater, 2003). Jefferson’s work, more broadly, from the plans for weights and measures, through a new currency, to the attempt to derive issues of race mathematically, provides much material for analysis (see Ellis, 1997; Wills, 2002).

Even in his own native France, Foucault ignores the way in which the legacy of Westphalia was related to a series of practices of mapping and regulating the French state within its newly defined boundaries—especially after the Treaty of Pyrenees noted above. The work of the engineer Sébastien le Prestre de Vauban in fortifying the northeast frontier, alongside his work on a range of topics using statistics, is one aspect worth studying (see Duffy, 1985; Le Prestre de Vauban, 1933); the four-generational project of Jean-Dominique Cassini and his son, grandson, and great-grandson on the measuring and mapping of France through astronomy and surveying at the Paris Observatory is another (see Cassini, 1693; Godlewska, 1999).⁽⁹⁾ Generally there is much to be said about how the political economy and developments in cartography

⁽⁸⁾ As one of the referees of this paper usefully points out, this relates to claims made by Cosgrove (1985) about the related developments of humanism and science in the Renaissance. My own claims about this are developed in other writings. On the territorial aspect, see particularly Elden (2005b).

⁽⁹⁾ Foucault briefly mentions Le Prestre de Vauban (Foucault, 1997b, page 152).

were mutually reinforcing disciplines, both dependent on advances in geometry and mathematics more generally (see, for example, Dockès, 1969; Hadden, 1994; Swetz, 1987).

Towards the beginning of the 18th century, John Harrison was constructing his series of marine chronometers for the accurate measurement of longitude at sea, which was, of course, a direct challenge to the use of astronomy. Although Foucault does not discuss Harrison, he does note the development of a 'Law of the Sea' alongside advances in maritime navigation (2004b, page 58). This "new form of planetary rationalism, this appearance of a new calculation of the dimensions of the world" (page 58, see page 57) is tied to the advances of the worldwide market and the importance of free maritime circulation'. What is interesting here is how the issue of circulation—supposedly so important in the supersession of the territorial model within states—becomes the reason behind the ordering of the "seas as a space of free competition" (2004b, page 58; on this issue generally see Steinberg, 2001). Indeed, in an anticipation of some analyses of globalisation—but which is actually very close to some of Marx's remarks in the *Grundrisse* (1973)—Foucault suggests that:

"The analysis of the market proves that on the entire surface of the globe, ultimately, the multiplication of profits will be done by the spontaneous synthesis of individual selfishness [*la synthèse spontanée des égoïsmes*]. There is no localization, no territoriality, there is no singular amalgamation [*regroupement singulier*] in the total space of the market" (2004b, page 305).⁽¹⁰⁾

Foucault's thinking of space has been rightly powerful for geographers, for reasons including his developed sense of a spatial imaginary and his analysis of concrete spatial practices (for longer discussions see Crampton and Elden, 2007; Elden, 2001; Legg, 2005; Philo, 1992). It is, however, possible to note a shift in his emphasis between the first and subsequent volumes of the *History of Sexuality* in terms of his interest in spatial issues. While there has been much interest in governmentality from geographers, some of whom have taken up Foucault's ideas in revealing and important ways, what is striking is how territory itself is marginalised in Foucault's own telling of the story. The analysis and reading here have attempted to show how that is the case. And yet, in the opening up of this issue of the qualities of territory and the importance of frontiers—not, I would contend, in themselves, but again in terms of their qualities—Foucault is providing an important way to understand the relation between governmental practices and territory.

Foucault made a valuable link between *raison*, *rationalité*, *ratio* as political practices (2004a, page 293) and the rationality of the natural sciences in, for example, Kepler, Galileo, and Descartes. The emergence of 'governmental reason' is related to a "certain way of thinking, reasoning, calculating ... what is called, in that era, politics" (pages 293–294) and to "reflecting, reasoning, calculating" (2004b, page 6) more generally. This is obviously a longer story than is possible to tell here, but it is revealing to trace the way in which they interrelate. As Foucault claims, politics in this sense was to "the art of governing as *mathesis* was, in the same epoch, to science and nature" (2004a, page 294). Politics can be understood as *mathesis*—what is learnable, what is perceivable, the basis for later understanding of the mathematical—as the "rational form of the art of governing" (page 295; see Elden, 2002, pages 135–138).

⁽¹⁰⁾ Of Marx's remarks, see especially the claim that "capital must on one side strive to tear down every spatial barrier to intercourse, i.e. to exchange, and conquer the whole earth for its market, it strives on the other side to annihilate this space with time, i.e. to reduce to a minimum the time spent in motion from one place to another" (1973, page 539).

Speaking of the end of the Thirty Years War, Foucault's colleague Pasquale Pasquino suggested that the Holy Roman Empire—the formless 'monster' in the eyes of police theorists—begins to have regulation applied to it.

"This no man's land is beginning to be perceived as an open space traversed by men and things. Squares, markets, roads, bridges, rivers: these are the critical points in the territory which police will mark out and control" (1991, page 111, see also page 113).

We can therefore read the strategies applied to territory—in terms of its mapping, ordering, measuring, and demarcation, and the way it is normalised, circulation allowed, and internally regulated—as themselves calculative. The same kinds of mechanisms that Foucault looks at in relation to population are used to understand and control territory. Foucault's discussions of political economy, the police, and calculation are therefore useful in thinking the history of the concept of territory. To return to the formulations at the outset of *Sécurité, Territoire, Population*, there is neither a shift of accent nor a substitution, but, rather, in the era of security both territory and population are understood in a transformed sense. Indeed, we could make the claim that the categories of 'population' and 'territory' themselves only really emerge at this political juncture. Just as the people become understood as both discrete individuals and their aggregated whole, the land they inhabit is also something that is understood in terms of its geometric, rational properties, or 'qualities'. Territory is more than merely land, but a rendering of the emergent concept of 'space' as a political category: owned, distributed, mapped, calculated, bordered, and controlled. Foucault's notion of the politics of calculation is therefore crucial, but not as something which only manifests itself in population, but, rather, in territory too. The same kinds of mechanisms can be found in both, at root grounded in the relation between governmentality and calculation.

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