INTRODUCTION

‘... population comes to appear above all else as the ultimate end of government. In contrast to sovereignty, government has as its purpose not the act of government itself, but the welfare of the population, the improvement of its condition, the increase of its wealth, longevity, health, and so on; and the means the government uses to attain these ends are themselves all, in some sense, immanent to the population; it is the population itself on which government will act either directly, through large-scale campaigns, or indirectly, through techniques that will make possible, without the full awareness of the people, the stimulation of birth rates, the directing of the flow of population into certain regions or activities, and so on.’ (Foucault, 1978 [2001]:216–17)

The etymology of ‘population’ charts the tearing away of people from place. The Oxford English Dictionary shows that in the late sixteenth and early seventeenth centuries, population referred to ‘a peopled or inhabited place’. The sense of population as ‘the degree in which a place is populated or inhabited’ continued until the mid to late nineteenth century, but this period also saw the proliferation of the term in different disciplines. ‘Populations’ came to refer to: plants, animals and other entities from the late nineteenth century; statistical samples from the early twentieth century; atoms or subatomic particles from the 1930s; star clusters from the 1940s; and inmates of a particular institution from the 1950s. Yet these incidences of transference are overshadowed by the demographic understandings that have colonised the terrain of the term, identifying population with, for instance, cycles, curves and pyramids. While there is an implicit
geography within these demographic terms, this is a geography that can be hard to map and negotiate given the abstract and generalising nature of much demographic thought.

Across various disciplines, de-territorialised concepts are being returned to their spatial roots. Svetlanya Boym has joined Fred Davis in identifying nostalgia as a place-bound phenomenon rather than the general condition of modernity, while cultural memory is increasingly being recognised as something that is indissociable from context and place (Davis, 1979; Boym, 2001; Hodgkin and Radstone, 2003). Population geographers have long excelled at re-cartographising the concept of population, drawing attention to its distribution and migrations, its national and local variations. The tools used to do this, and the disciplinary path followed, has led to recent concerns over the insularity of the subdiscipline and attempts to import and utilise theories from geography and beyond (Findlay and Graham, 1991; Jackson and White, 1995; Graham, 1999; McKendrick, 1999). However, the call to (re)theorise has recently been declaimed as weary and as one that acculturates a feeling of marginality amongst population geographers (Findlay, 2003). Allan Findlay suggests two lines of action: firstly, to show how central to social thinking the concept of population actually is, and secondly to deploy the traditional strengths of population geographers in a critical fashion. Amongst the more promising theorists, Findlay suggests that Foucault still retains the potential to benefit the subdiscipline.

This paper is a response to Findlay by a non-‘population geographer’, although it is one from a geographer with an ongoing interest in population. As someone who shares the interest, but not necessarily the methodology, of population geographers, I have been struck by how useful the writings of Michel Foucault could be for the subdiscipline. In this, I follow Chris Philo’s (2001) assertion that Foucault’s (1977) work should be of interest to population geographers. Here, prisons were posited as spaces of condensed population that were segregated and managed to produce the desired effects on their inmates. Philo (2001:483) argued that Foucault also referred to the wider effects of the ‘carceral archipelago’ which emerged in response to demographic and industrial change. Yet Philo concluded that it was the later works of Foucault on sexuality and, more specifically, biopolitics and ‘governmentality’ (governmental rationality) that should be of interest to population geographers. This paper is an attempt to unite the dialogues of Findlay and Philo and to provide some theoretical tools to facilitate debate.

A key part of this argument is the fact that the writings of population geographers could be of incredible use to scholars inside or outside the discipline with an interest in Foucault. Various authors have noted Foucault’s spatial focus, but the quote at the head of this section highlights Foucault’s overriding interest in issues of population. At the intersection of these interests lies a distinctive and fascinating population geography within Foucault’s writings, which is detectable in his empirical studies, his methodological tactics, and his very epistemological questioning of the nature and genealogy of ‘population’.

This article therefore seeks to guide the reader through the populated spaces of Foucault’s writings. It will begin with a summary of Foucault’s broader project, before moving on to discuss his explicit interest in population and space. The second section will trace Foucault’s increasing interest in bodies as regulated parts of a population, with the attendant focus on the politics of numbers and information that such regulation produced. The third section will seek to articulate the methods that population geographers could use to integrate Foucault into their research. This would include attentiveness to the scales of biopolitical processes and an awareness of the different analytical levels at which research must be carried out. Finally, this approach will be compared with the internal debate regarding how to (re)theorise population geography, suggesting that Foucault can help to scrutinise the objects, methods and outputs of the subdiscipline.

ARCHAEOLOGIES AND GENEALOGIES OF POWER

Before pinpointing the intersection of types of population and scales of space in Foucault’s writings, some scene-setting is required. Foucault’s writings were of incredible breadth and depth, and their influence has been profound and widespread (for accessible introductions to Foucault’s writings, see Foucault, 1980, 2000a, b, 2001;
Dreyfus and Rabinow, 1982; Driver, 1985; Dean, 1994; McNay, 1994; Hannah, 2000; Elden, 2001; Philo, 2004). Of the two phases of his writings, the ‘archaeological’ and the ‘genealogical’, geographers have tended to focus on the latter, dependent as this is on the prior work. The former archaeological work explored discursive formations and drew attention to the power relationships that informed the production of knowledge and, thereby, of ‘truth’ (Foucault, 1970, 1972, 1980). These writings have informed geographers’ considerations of the subjectivity of the fieldworker (Nast, 1994), the role of institutions in the production of knowledge (Driver, 1999), geographical subdisciplines (Philo, 1989b), and considerations of the role of taxonomy and classification (Halfacree, 2001).

With his genealogical work, Foucault identified a contemporary taken-for-granted power relation, with specific impacts upon the body, and traced its multiple origins in order to expose the contingency of, and thus to denaturalise, the present. This presentist orientation informed his broader investigation of the mechanisms, techniques and technologies by which power came to be enforced in modern Europe. Foucault argued that the seventeenth to nineteenth centuries saw the waning of the power of the sovereign, whose law-enshrined right was to ‘take life or let live’. What emerged to replace, but not eradicate, sovereign power was biopower, power over life, or ‘...the right to make live and let die’ (Foucault, 1978 [2001]:241). In a sense, Foucault can be fitted into a much longer tradition of writers who have examined the effects of the agricultural and industrial revolutions in the breakdown of feudalism, freeing people from the land to aggregate in urban forms. Here the problems of economic, social and biological disorder made manifest the changing times and demanded remedial measures, of which two types emerged.

In response to the most immediate danger, and easiest to create, were those disciplinary institutions which dealt with the most obvious threats to the people of a town and state, as defined by contemporary discourse (Foucault, 1975–76 [2003]). From the seventeenth to eighteenth centuries, abnormal or deviant subjects were removed from society and placed in spaces in which they would supposedly be reformed, like the asylum, the prison, the lock hospital or the school (Philo, 1987, 1989a; Driver, 1993; Ogborn, 1998; Howell, 2000). Here, the insane, the criminal, the sexually diseased and the uneducated were not only enclosed but also created, marking the ‘functional inversion’ of institutions whose physical barriers were overcome by their epistemological effect (Foucault, 1977:210). While Stuart Elden has drawn attention to the origin of such spatial arts of distribution in the military camp and plague town, the value to population geographers of studying disciplinary institutions has been made clear by Chris Philo (Philo, 2001; see also Elden, 2001, 2003; Philo and Parr, 2000). Philo (1992:156–7) has also stressed that while Foucault’s writings provide a clear guide to understanding the geometrical division of space, he was also attuned to the substantive geographies of power relations with regard to specific places and populations.

The second response to the same demographic explosion and industrialisation only became clear at the end of the eighteenth century and was essentially entangled with the art of discipline (Sharp et al., 2000). The arts, and then sciences, of government sought ways to regulate the conduct of the inhabitants of a territory, but to do this through ruling ‘from a distance’ (Foucault, 1978 [2001]; Rose, 1999; Brown, 2000; Joyce, 2003). A governmentality refers to the ways in which a state attempts to regulate its people and territories (Foucault, 1978 [2001]). The tactics adopted can range from calculations at the level of the state down to hints and guides as to how an individual should act, within several domains. The regulation of the population is referred to as ‘biopolitics’ and was first achieved through diagnosing and dealing with a population that was conceived in the abstract, such as by birth rates, infant mortality and longevity. Other domains include the social and the economic, in which civic contentedness and economic productivity have to be secured. Population, society and economy are thus conceived as semi-autonomous spheres: displaying their own patterns yet dependent upon the decisions of the multitudes. The significance of the abstract nature of the discourses on these three domains is that governments seek to exercise influence not through the individual and intense technologies of discipline, but by the distant and calculative means of governmentality. Thus, in line with the birth of liberal discourses, modern European states sought to create the self-regulating subject...
who would vote conscientiously, invest responsibly and work diligently, while moving about and maintaining the modern city with suitable civic pride.

This image of a state, crafting people as if out of clay, is one that can emerge without a careful and critical reading of Foucault’s work. Historical study shows, of course, that people resisted, subverted and problematised these programmes, and were often aware of attempts to insidiously influence individual action. Such periods of reflexivity were not necessarily caused from without; tension between different governmental rationalities or techniques of power could also necessitate reform. For instance, biopolitical projects might prove uneconomic, or refusal to expend on urban reform might present the threat of over-wieldy employers or insurgent workers. Similarly, disciplinary logic, which seeks unlimited knowledge, might interfere with regulatory projects that seek to rule from a distance.

During periods of problematisation, governments were forced to either adapt their programmes or launch justifications for what they were doing. It is at these times that we often gain greatest insight into the mechanisms of government and the means used to resist them. These insights must focus on both discipline and governmentality, technologies that complement and dovetail with each other. The following population geographies in Foucault’s writings will highlight these intersections, which locate the individual between the corporeal and social body (Foucault, 1979). For as Foucault claimed, ‘Both technologies are obviously technologies of the body, but one is a technology in which the body is individualised as an organism endowed with capacities, while the other is a technology in which bodies are replaced by general biological processes’ (Foucault, 1975–76 [2003]:249).

The governmentality work links back to the power/knowledge focus through the concept of information and calculation. Data gathered in the domains of biopolitics, society and economy had effects on defining what constituted ‘truth’ through positing academic disciplines as the gatekeepers to knowledge. Demography, sociology, political-economy and other subjects emerged from a context which demanded information in order to guarantee the processes through which the state could be secured and the population made productive. As such, the disciplines were part of the post-Enlightenment project associated with totalising narratives, structuralist explanations, and modernisation programmes.

Foucault’s project sought to break down these narratives, to look at who they excluded, what they created and naturalised, and he sought to create a space to imagine alternative forms of practice. An emphasis on spatial differentiation, place-based affiliations, and acts of resistance, can enable a critical reading of population geographies. While ‘population’ allows the masses to be conceived in serial and abstract form, people have rarely escaped the shackles of place, or been slow to use the experience of place against the production of state-space. The third section will recommend the range of scales and analytical levels that can be deployed to realise the complexity of our population geographies. This will follow the charting in the next section of Foucault’s exploration of ‘population’ within the spaces of his writings.

THE POPULATED SPACES OF FOUCAULT’S TEXTS

From Disciplined to Regulated Bodies

This section seeks out the emergence of Foucault’s work on population, which migrated from an emphasis on health to one on government, but retained its geographical awareness. It will conclude with some comments on the political nature of numbers and the geographies they help to constitute. In a highly perceptive and critical article, Bruce Curtis has analysed the use (and abuse) of the term ‘population’ in Foucault’s writings (Curtis, 2002). In charting the emergence of the term population, Curtis shows that Foucault (1973) focused on both social medicine and, later, on political-economics and government. In terms of the first, Foucault suggested that eighteenth-century French hospitals observed patients and, in comparing results, manufactured a certain sense of population. Various texts refer to these wider effects of institutional developments. Chris Philo has shown that in The Birth of the Clinic (Foucault, 1973) three spatialisations were presented within the development of medicine: primary (spaces of configuration such
as tables of diseases), secondary (spaces of localisation in which diseases were mapped on to the body) and tertiary (social space, in which the diseased were localised) (Philo, 2000; see also Elden, 2003; Rose and Osbourne, 2004). While these social spaces lead to knowledge about the populations enclosed within, after the French Revolution there were attempts to democratise healthcare and spread practitioners throughout the population at large. Prisons also acted as spaces in which particular populations could be examined and studied (Philo, 2001).

In a lecture delivered in Rio entitled ‘The birth of social medicine’, Foucault traced the ways in which medical practices helped to socialise the individual body but, in doing so, also contributed towards a sense of the population (Foucault, 1974 [2001]). Evident in this work is the somewhat lax attention to detail in terms of regional or national difference and periodisation that Foucault was often reduced to in attempting to provide schematic descriptions of larger and more complex processes. It was claimed that early eighteenth century Germany saw the development of ‘state medicine’ after the mercantilism of the seventeenth century which had seen states assessing the ‘active strength of their populations’. While Germany focused on a ‘medical police’ to observe sickness and oversee healthcare, France focused on ‘urban medicine’ from the end of the eighteenth century. The city demanded economic regulation, but also the political neutralisation of the ‘labouring population’ as it homogenised yet dichotomised itself against the urban rich: contributing to what Foucault later termed the environmental ‘urban problem’ (Foucault, 1976[2001]:245). Refuse was cleared, circulation assured, and resources distributed, conceiving populations as inherently tied to their existential milieu. England dominated the third form, ‘occupational medicine’, in the mid-nineteenth century after the Poor Laws instituted discussions over welfare and the health of the population. The health of the poor was valued because they were a constituent part of the population, just as vaccinations benefited the population in total. From the local to the urban to the national, this process charts an increasing scale in which ‘population’ gradually attunes itself to the ‘nation’.

This was a theme continued in a 1976 piece entitled ‘The politics of health in the eighteenth century’, although without such an emphasis on the state (Foucault, 1976[2001]). This century saw not only the administrative organisation of medicine, but also the re-conception of the family as the source and instrument of medicalisation in service of the broader phenomenon of the ‘population’. While medicine was to an extent domesticated, hospitals emerged to deal with the ‘mass of the population with its biological characteristics’ (Foucault, 1976 [2001]:105).

In the Society Must be Defended lectures, Foucault (1975–76 [2003]) detailed a less medical and more biopolitical engagement between the state and its populations. Here was a government that became obsessed with statistics concerning birth rates, morbidity and endemics, supplanting the earlier fear of epidemics. Foucault described the regulatory mechanisms of biopolitics that aim to lower mortality rates, increase life expectancy and stimulate birth rates. While this can be done through general hygiene programmes, or more general policies regarding sexuality, it is also achieved through city planning, insurance schemes and education.

Curtis charts the shift in Foucault’s mid-1970s writings towards this more top-down concept of biopolitics, in which statistics were used by states to gather information about a population and materialise the way in which they were influenced. In an interview first published in 1977, Foucault claimed that the problem of population was exactly what he was working on at that time, in terms of its relation to demography, public health, hygiene and fertility (Foucault, 1980:124–5).

In the Security, Territory and Population lecture series of 1977–78 the subsumption of the ‘territory state’ within the ‘population state’ was assessed (Foucault, 2000b:67). The concept of population was here more clearly associated with the post-mercantilist assessment of national strength, and was linked to the police and political-economists, rather than with medicalisation. Statistics highlighted the population regularities that exposed the family as a sector of the population, not the main object of rule. The initial emphasis on the relationship between the population and its physical geography more generally came to lie on the home as a place for regulating population, the need for economic infrastructure, and the city as a necessarily safe civic space. The role of liberalism as a check to
governing the population too much was discussed in the lecture courses of 1978–9 entitled *The Birth of Biopolitics* (Foucault, 2000b:73; see also Gordon, 1991).

Curiously, Curtis pays little attention to the History of Sexuality volumes, in which population regulation was approached not from the perspective of environmental milieu or the home specifically, but of reproduction, disease and deviancy (Foucault, 1979, 1986a, b). Sexuality was framed in the intersection of discipline and biopolitics, something to be observed and surveyed and possibly remedied or treated in institutions, yet something which also impacts on the health of the population at large. Foucault looked at regulation through discursive norms which, if internalised, would regulate sexual conduct so as to benefit stable, domesticated families. Population was explicitly discussed as an economic and political problem, linking sex to national wellbeing and personal self-conduct (Foucault, 1979: 26). This work has been explicitly used by Caroline Hoy (2001) outside of Europe to investigate the demographic policies of contemporary China.

In the latter volumes Foucault began to move towards a less state-centred and discursively determinist view through stressing the technologies of the self. Here the emphasis is not on the genealogy of ‘population’ but on tracing the notion of self-conduct, pastoral care and the confession, all of which were later taken up by the state as tactics within governmental rationalities. These studies showed that people in antiquity learned to conduct themselves in specific ways in line with sexual norms, but also in ways that involved individual choice and conscious self-discipline.

As is clear from the range of contexts in which ‘population’ is used here, there are a variety of scales being deployed. From the population of an institution, in which action takes place on or in the body and in abstract administrative space, medical spaces produced an idea of the population from the individual up. In contrast, the governmentality work posits population as an emergent concept which impacted upon political rationality with the decline of the sovereign’s sole influence over the state. While the two notions are not incompatible, their intersection was not made sufficiently clear and is only being clarified with the ongoing publication of the 1970s lecture series. The concept of governmentality itself is trans-scalar. As Michael Brown and Paul Boyle have argued, while governmentality does refer to bureaucracy and surveillance, it is also about concepts such as society and population that only arise through the action of citizens and economic agents (Brown, 2000:92, writing with Paul Boyle). The state knowledge of governmentality seeks individual conduct as its final end. As Philo commented, quoting Mitchell Dean, governmentality refers to the space that crosses ethics and politics, uniting the self and government (Philo, 2004).

While Foucault’s writings on scale are not at times clear, Curtis has shown that his use of other terms is also inconsistent. Foucault did not distinguish ‘population’ from the earlier concept of ‘populousness’ in which the sizes of different orders of hierarchized people were assessed (Curtis, 2002: 508). Although without the functional equivalence which Theodore Porter has stressed in later statistical formations (Porter, 1986), there was a concept of population in medieval thought, as Peter Biller has demonstrated in his *The Measure of Multitude* (Biller, 2000). If Foucault refers to populousness as population in his discussion of mercantilism and the early police, Curtis also argues that in his biopolitical discussions he uses the term population to refer to what is associated with the ‘social body’. (See Poovey, 1995, for a discussion of the social body, information collection, and the population.) Again, Curtis distinguishes the detailed, local knowledge collected in the seventeenth to eighteenth centuries from the national calculations associated with ‘population’, although this can be explained by the shift from dispositional arts of government to processural sciences of government that Foucault identified (1978 [2001]).

As such, in claiming that population was ‘discovered’, presumably rather than ‘created’, Curtis suggests that Foucault naturalised population rather than critically examining it. While Foucault’s taxonomic awareness and commitment to social constructionism casts doubt on this assertion, Curtis’s warnings remind us to question the categories and terms at use here and to place them persistently in context. This is an essential component in the literature on the politics of numbers to which Foucault has contributed.
The Politics of Numbers

In reviewing the ways of analysing numbers and politics, Rose (1991) has shown that studies have focused on both centres of calculation and the constitution of fictive realities for the operation of government. Yet he also stressed the centrality of Foucault’s writings to understanding the way in which calculations are used to gain information and knowledge about a population, and to transform territory into a domain of density and vitality. This process evokes the paradox of numbers: as they arise in politics they promise depoliticisation through their supposed objectivity. This work overlaps with that of Theodore Porter on the rise of statistical thinking (Porter, 1986). The emergence of statistics in the nineteenth century seemed to make a complex and intimidating world understandable and stable, a feature particularly appealing to liberal thinkers who were reassured by the stability of such realms beyond the individual and the state.

The numericisation of politics initiates the politicisation of numbers, which must be countered by questioning them for accuracy, adequateness, abuse, privacy and ethics. As such, numbers need not just be tools of rule, but can be mobilised against a state to demand justification, explanation or provision. This realisation is in line with Findlay’s call for critical population geographies of power and shows that, as Rose argued, ‘...numbers are thus not univocal tools of domination, but mobile and polyvocal resources’ (Rose, 1991:684). Barnes and Hannah (2001) repeated the call to question the power of numbers, problematising how they arose, by whom and when, how they are used and mobilised, and to what ends and interests? Numbers also rely upon people accepting their authority, establishing the norms that are the pervasive power at the heart of governmentalities.

A series of works by geographers have highlighted the politics of numbers and their spatial origins or effects. Hannah (2001) examined the failure of some groups to take up the duties of ‘statistical citizenship’ which could constitute them as political actors, objects of social policy or consumers. Hannah commented on the ‘conditions of governmentality’ that contributed to the under-representation of certain groups in the 2000 US Census, including distrust of the government, scepticism about confidentiality, and businesses concealing their labourers. As such, many of the ethnic minorities or poorer classes who could have benefited from visibility were erased through the statistical compensation of an estimated 90% undercount. Although without a Foucauldian emphasis, Ellis et al. (2004) have also shown that census statistics can lead to an overly negative emphasis on racial residential segregation in the US because they do not take into account the ‘diurnal shifts in racial segregation’ when people cross the race line in places of work.

Brown and Boyle have examined the ‘heteronormative’ (establishing heternosexuality as the normal and natural state) effects of British and US censuses (Brown, 2000:88–115, writing with Paul Boyle). They ask if state knowledge is essential to how people know and see themselves, does the lack of sexual categorisation make the census an example of closet governmentality? While census data on the number of men living singly, or even together, may hint at homosexual geographies within the striations of state knowledge, such tactics require pre-knowledge of the areas to be targeted and may well closet some while visualising others.

This dilemma between more objective and more subjective forms of knowledge was pursued in Brown and Colton’s (2001) work on ‘dying epistemologies’. Here they used US statistics on the location of death in Washington State to explore the very limits of this data. While quantitative methods described changing patterns, they could not explain them, nor could the categories that were used capture the complexity of event of death. This was a clash not of methods, but of epistemologies: between foundational and anti-foundational world-views; between an emphasis on reality and representation. However, while the approaches cannot be reconciled easily, there remains a political imperative to combine and explore the methodologies and an ethical need to combine the strengths of both approaches. This work follows Dixon and Jones’ (1998) comments on the compatibility of post-structuralism and spatial analysis. The latter was argued to be dependent on epistemological grids of stable objects and discrete events that became manifest in systems of land division, census collection and ownership. While such abstract space, or governmentalities, do exist and
thus must be studied, the aim must be to separate their necessity from their naturalness, unfixing their meanings and thus making them amenable to change and reform.

The questioning of numbers is, it seems, essential to detecting and critiquing the different scales and spaces in which populations are conceived and governed. Foucault’s approach works to span the individual and the state, but also to combine a quantitative attention to statistics and numbers with a qualitative awareness of the contingent nature of categories and the processes they claim to expose. The following sections suggest two ways of applying these theoretical realisations to actual research. The first is attentiveness to scale and the processes that interlink them, while the second is a combined analytical approach at these scales, which links the epistemic to the practical manifestations of power. Both approaches will be explored using examples from the literature on colonial India.

**POPULATION GEOGRAPHIES OF POWER**

The foregoing discussion has shown that population is at the heart of Foucault’s concerns, especially in his later works. Yet, to move on to Findlay’s second course of action, how could Foucault be used to ‘...evaluate the operations of effective government and to critique the geographies of power’ (Findlay, 2003:178)? Findlay suggested the continued use of quantitative statistics, but in ways that held decision-makers to account, that questioned categories and taxonomies, and assessed the models of population being deployed. To extract tools for achieving these ends from Foucault’s writings, I suggest that the emphasis must shift from a bibliographical and chronological account of his use of population, to his work on scale and the analysis of biopolitics that is implicit within his work. I present these not, of course, as levels which every population geography project should investigate, but as avenues of thought that might encourage connections to be made between different forms and contents, different political programmes and technologies, than might be immediately obvious. To conclude this paper I will return to the debate on (re)theorising population geography, and suggest that attention to the scales of biopolitics and levels of analysis presents an accessible route to integrating theory and research.

**Scales of (Colonial) Biopolitics**

Curtis showed that Foucault considered population at a variety of scales. Populations experientially exist from the internal conversations one has with oneself about how to act, to urban regulation and conduct, to national policies, to epistemologically abstract knowledge formations and imaginations. At each of these scales, particular geographies emerge. These geographies can include the organisation of the home, the comportment and performance of a walker in the street, the sexual spaces of a community, the drilling of subterranean water channels, citywide administration, the policing of national boundaries, or the genocide of a community considered ‘bad stock’. Each scale informs the other, each geography has infinite possible networks of cause and effect. The failure to realise these connections allows technologies and strategies of government to appear natural and power-neutral. The following levels are some of the many scales over and through which biopolitical programmes cross and can be traced.

To give these categories some weight I will provide examples from my own research area of colonial India. Europeans have studied the subcontinent for as long as it has been traded with (and before), with understandings of the colonial state going through various different forms. Of the more critical slant, the East India Company and the Government of India, respectively before and after 1858, have been criticised as more violent and disciplinary than European states. In terms of institutional populations, India is posed as a space of experimentation and as a laboratory of modernity, whether in terms of prisons (Sen, 2000), dealing with venereal diseases (Ballhatchet, 1980) or the multi-caste, multi-ethnic armed forces. In terms of urban planning and destruction, slum clearance and infrastructural works were possible on a scale difficult to pursue in Europe, whether due to retribution for an uprising (Gupta, 1981; Oldenburg, 1984) or for urban health (Dossal, 1991). Urban populations were also catalogued and surveyed using policing measures that were checked in Europe, not just in terms of fingerprinting and investigation, but of executive orders that allowed movement.
in the urban sphere to be restricted in times of crisis.

However, one can also study the colonies, and India especially, as places of particular types of biopolitics. Liberal governmentality was only one form of rationality; other suggested versions include classical- and neo-liberalism (Gordon, 1991), and authoritarian liberalism (Dean, 1999), although colonialism in India is treated as a translation and darker side of liberal governmentality, rather than a different rationality altogether (Mehta, 1999; Scott, 1995; Valverde, 1996). Without the obligations and duties associated with the liberal European metropole, the power relations behind population management were often more visible in the colonies and thus, although translated and specific, can suggest ways of critiquing other population governments. The potential for critique can also spring from historical accounts of resistance to population management. This critique can be performed at the following scales:

(1) **Subjectification**: the process by which one conceives of oneself as a subject, positioned in various discourses, for instance, of gender, sexuality, age, class, physical ability, but also of citizens’ responsibilities, the need to account and calculate, or the urge to reproduce or exercise. How is one encouraged to regulate behaviour? What is forbidden or discouraged? Why are these regulations necessary in the first place? How are they campaigned against?

Prakash (1999) has shown that biopolitical programmes in the colonies would always be qualified because colonial subjects were considered less rational and developed than Europeans (see also Said, 1978). This supposedly made them less able to make calculations about the future and thus support a stable population level, a productive economy, or civilised society. Pandey (1990) has shown that, by the 1930s, both colonial and nationalist figures were referring to Indians in terms of ‘community’ that reinforced essentialist notions of religious subjectivity, which had already been established through the discourse on caste (Dirks, 2001). These trends were repeated, in India and Europe, in considerations of gender and class, in which women and workers were judged less worthy of the burden of liberty than the male middle or upper classes. Stoler (1995, 2002) has suggested that the identity politics of the colonial sphere impacted back on classes and gender categories in Europe more generally. Gandhi’s nationalist project had at its core a rejection of the colonial portrayal of Indian subjectivity, portraying Indians as strong and independent, without having to conform to European notions of masculinity, maturity or bravery (Nandy, 1983).

(2) **Information Collection and Territorialisation**: the ways through which governments collect information about their territory and form spatial boundaries. How arbitrary are these boundaries? How is data collected about people and places? Matthew Hannah has worked extensively on such issues, examining the creation of American territory in the nineteenth century and resistance to census proposals in twentieth century Germany (Hannah, 2000, 2004).

In terms of information collection, the Indian census did not just concern population statistics but was also a tool of domination and policy formation (Barrier, 1981). Concepts and categories deployed in the census, and the penalties or provisions that went with them, helped to create the social reality they purportedly described (Cohn, 1990; Appadurai, 1993), although the relevance of the census has recently been challenged (Hodges, 2004). Attempts to collect information and chart territories often faced tensions between the mass diversity of data in the field and the simplified abstractions of survey sheets and forms (Pant, 1987; see also Saumarez Smith, 1985, for an early application of the governmentality work to the Indian colonial census), while attempts to map the subcontinent were faced with sabotage and non-cooperation (Edney, 1997).

(3) **Geopolitical Imaginations**: the ways in which data are processed and presented and the effect on political spaces of identification. For instance, how are the capacities and duties of a city packaged into an imperative for civic pride and behaviour (Joyce, 2003)? How are national health statistics used within nationalist discourses? How do subnational groups
form counter-imaginations? How is the home re-imagined as a part of the nation and in relation to the state (Blunt and Varley, 2004; Duncan and Lambert, 2004)?

Attempts were made to create India as a modern medical space, what Arnold termed the ‘colonisation of the body’ (Arnold, 1993; see also Harrison, 1994), in order to ensure the healthiest and most productive population. Other biopolitical interventions took place through the regulation of prostitution, although this was a regulation which, again, privileged the health of the British Armed Forces and was reluctant to interfere with widespread prostitution due to cost and the fear of upsetting social and religious sensibilities (Levine, 2003). The colonial initiative to forge India as a modern medical space met the stubborn resistance of Ayurvedic and other local medicinal traditions, while the image of a religious ‘Mother India’ resisted attempts, even by Mahatma Gandhi and Jawaharlal Nehru, to forge a secular nation state.

(4) **State Technologies:** the ways by which the state attempts to influence population patterns, whether of reproduction, health, productivity or migration. Liberalism, as an art of government, seeks to balance intervention to guarantee self-regulating subjects with state withdrawal to ensure that subjects can make decisions on their own. How is this balance achieved, and how do people react when it is not? How does urban infrastructure facilitate, and eventually demand, the habits that are deigned to be healthy (Osborne, 1996).

Chakrabarty’s (2002) work on the state and public hygiene has been followed by Partha Chatterjee’s suggestion that some contemporary uses of population categories in India have colonial origins (Chatterjee, 2001). Chatterjee (2004) charts the way the urban poor negotiate the marginal spaces they occupy through ‘paralegal’ negotiations with the government. Slum dwellers, for example, have used intermediaries to barter for aid and rights without claiming to be law-abiding citizens, but simply as members of a population group defined by the governmentality of the contemporary state. The failures of the state to benefit the local population were constantly critiqued by the nationalist movement in the colonial period. Prakash has also shown that nationalists made claims not just on constitutional sovereignty, but also on the practical mechanisms of government, such as the drains, the roads and the railways, recognising that these biopolitical and economic technologies were an essential part of practical government (Prakash, 1999). At the local level, municipal reform was often vigorously opposed, and practices towards the urban poor critiqued (Gooptu, 2001). In terms of internal tensions, biopolitical reforms were often costly and could provoke political backlashes, leading to their sideling in times of financial crisis or nationalist criticism (Dossal, 1991).

(5) **International Comparisons:** the degree to which policies vary between states. To what extent does culture infuse supposedly objective categories and practices? How are international networks used to discuss and undermine state programmes?

The population policies in colonial India were often compared with those at home to stress the immorality of what was being done there. Criticisms were made of the regulation of prostitution (Phillips, 2002) and the acts of retribution following the ‘Mutiny’ of 1857 (Thompson, 1925), while Gandhi himself compared his experiences of Britain to those of India and claimed his mission was to free the British as much as the Indians from the chains of colonial rule.

**Governmental Analytics of Population Geography**

In addition to presenting novel scales to examine, Foucault’s work also presents a powerful analytical framework to examine them with. As described above, governmentality refers to an historical process in which a type of power, ‘government’, attained pre-eminence over other types, such as that of ‘sovereignty’ and ‘discipline’, resulting in the formation of governmental apparatuses, knowledge and, ultimately, administrative states. Yet in addition to a form of power, governmentality also refers to the resultant internal framework of governmental institutions, procedures, reflections and tactics which
target the population through knowledge of the political economy and the use of apparatuses of security (Foucault, 1978 [2001]; much of the following discussion is based on Dean, 1999). As such, the literature based on Foucault’s writings presents a series of tools to analyse the operation of power relations at the scales outlined above. These terms will be summarised and explored through some of my own research on postcolonial Delhi.

Within the governmentality literature, ‘government’ refers to the conduct of conduct, those attempts to shape, guide or affect personal action without the use of physical force. This can be a self–self or private interrelationship, an individual’s relationship with a community or with political sovereignty. Governmental rationalities, or governmentalities, refer to the various mentalities that suggest how one could govern oneself or others and which make this activity thinkable and practicable. A relatively coherent way of performing a certain function can be referred to as a regime of practice, and coherent forms of conducting self or others in line with a governmental rationality can thus be referred to as regimes of government. Because they are directly related to conducting a changing realm of objects and subjects, a regime of government must inevitably come under self-review, referred to as ‘programmes’ by Dean (1999:22) and the ‘problematics of rule’ by Rose (1996), during which those ‘who would exercise rule posed themselves the question of the reasons, justifications, means and ends of rule, and the problems, goals or ambitions that should animate it’ (Rose, 1996:26). Rose is guilty of associating problematisations with internal debate rather than outside resistance, but Dean does mention the problematisations by which regimes of government are brought into question externally (Dean, 1999:26), while Dean and Hindess hinted that problematisations could be both internal and external to, for example, the state (Dean and Hindess, 1998:28).

The works of Rose (1996), Dean (1999) and Hindess (Dean and Hindess, 1998) identify certain dimensions which are co-present in regimes of government and that give clues to the governmental rationality which informs the practical attempts to conduct personal conduct. There is sufficient overlap in these three authors’ work to identify five dimensions to regimes of government that can form the basis of an ‘analytics of governmentality’ which attempts to identify forms of government and programmes of regime change. A stable correlation across these dimensions suggests a taken-for-granted regime of practices that can be problematised and placed under a programme of review.

I have been using this approach in my own work to look for correlations across various governmental programmes in colonial Delhi. The construction of India’s new capital city between 1911–31 led to an increase in pressure on New and Old Delhi (Legg, forthcoming). The cities had to be made safer, cleaner and more aesthetic, and these ordering practices can be traced across various realms, from residential accommodation to police regulations, the regulation of prostitution to the improvement of the urban landscape. The latter is of particular interest here due to the explicit reference to population issues, although these were implicit in the other realms, and will be analytically explored in brief below. After independence and the partition of ‘India’ and East and West Pakistan in 1947, hundreds of thousands of migrants arrived in Delhi and had to be accommodated. This prompted a debate on urban government and infrastructural reform that was not totally dissimilar to that in the colonial period.

The scale of study here is mostly that of technological state intervention, although this must have correlates with issues of subjectivity, geopolitical imaginations and information collection. Using the following analytical categories allows broader conditioning dimensions to be considered, while also encouraging consideration of the temporal continuity of rationalities beyond chronological or institutional divides, such as Indian independence in 1947:

(1) **Episteme:** distinctive ways of thinking and questioning; the use of certain vocabularies and procedures for the production of truth; the taken-for-granted assumptions of a regime. Which forms of thought, calculation or rationality are deployed? How does thought seek to transform practices? How do practices of governing give rise to specific forms of truth?

When it became obvious in the 1930s that Delhi was becoming over-congested, a report was commissioned to investigate the causes and possible solutions. The report high-
lighted a series of epistemological assumptions that underwrote many of the contemporary population policies. Statistical calculations based on census data were privileged, without questioning whether the categories such as ‘class’ were useful in Delhi’s context, or whether the survey data was up-to-date. The proposed solutions reified ‘population’ as something which could be redistributed without attention to socio-cultural or economic restructuring. This modernist epistemology was embraced by the socialist government of the post-1947 era and informed the calculations of the Delhi Development Authority.

(2) **Identities**: the epistemological conception of the people to be governed; their statuses and capacities; the shaping of agency and direction of desire. What forms of conduct are expected? What duties or rights do people have? How are problematisations of conduct made?

The calculations made about the Delhi people did not presume subjects that were fully capable of self-discipline or self-conduct. The people were often depicted through the landscapes of crowded markets, unsanitary lanes and crowded slums. The policies adopted involved very little public education or participatory programmes, but instead involved the construction of cheap housing without any sense of aesthetic tailoring or social consideration of local needs. Such tendencies were also apparent in statements that objectified the population as fanatical crowds during riots, or as the immoral, lustful women of the *lal* (red) bazaars. The independent period saw pleas made for plans that would involve local people in municipal administration, although the tasks facing the government often lead to policies that were centrally planned and enforced.

(3) **Visibility**: ways of seeing and representing reality; the practical knowledge of specialists and policy-makers; plans, maps and diagrams. How are some objects highlighted while others are obfuscated? What relations are suggested between subjects and space? How is risk mapped and what are the suggested remedies?

Mapping was one of the most popular means of visualising problems in Delhi and sketching their solutions. The population density of the old city was mapped by census ward and produced as part of the congestion report. The policy recommendation was to ‘level out the intensity map’ which accurately embodied the geographical motive behind the population policy. Other maps included those distributing police around the city as part of the Communal Riot Scheme, and maps demarcating status areas of accommodation in the New Capital. These maps were retroactive and productive in that they served as directors of action rather than as descriptors of a present state. The post-independence period saw a debate over how to deal with the migrant settlements and slum areas of the old city. While local organisations attempted to understand the structure and make-up of the slums, the central policy was one of charting new colonies to the south and evacuating the old city which was reclassified as a slum.

(4) **Techne**: techniques and technologies of government; ways of intervening in reality through strategies and procedures in relation to the materials and forces to hand and the resistances or oppositions encountered. Through which mechanism, procedure or tactic is rule accomplished? How are local contingencies incorporated and exploited?

The Delhi Improvement Trust was established to put into effect the recommendations of the report. The achievements of the Trust, as against its objectives, speak of a colonial machinery that prioritised landscape aesthetics (adding greenery to the ceremonial core of the city) and small profitable projects over larger, more expensive schemes that could have dealt effectively with the problem. The Trust also favoured blocking further development and procuring lands for future development rather than activating projects itself. The need for immediate action after 1947 meant that the Trust survived into the 1950s and necessarily bequeathed some of its tendencies to its successor body, the Delhi Development Authority.

(5) **Ethos**: the moral form which distributes tasks in relation to ideals or principles of
government; the orientation invested in practices. Like the other categories above, the ethos is most amenable to study when a programme is going through the process of problematisation or programmatic review. Indeed, as Mitch Rose has argued, in looking for acts of resistance, the challenge is not to break down monumental edifices of power, but to show how these supposed edifices are always in the act of breaking down themselves (Rose, 2002). Who benefits from a regime of government? Where and with whom are values invested?

The ethos of colonial Delhi’s landscape improvement has been hinted at by the descriptions above, but can best be captured through debates in the administration. The Trust was burdened with extra duties at the last minute which diverted much of its funds to New Delhi, while the Government ensured that the land it gave the Trust to work with always returned a base income. The central Government also insisted that each scheme of the Trust made a profit while the land separating the two cities, Old and New Delhi, was outlawed for development in spite of the desperate poverty nearby. It was the colonial ethos that was most forcefully rejected by the independent government, which funded massive urban expansion. Yet the other dimensions of colonial governmentality, which related to how one saw and worked upon the landscape, proved much more stubborn and difficult to erase.

In terms of ‘theory’, an analytical approach as outlined above suggests channels through which the different elements of Foucault’s work can be tied together. Work on the nature of the subject (identities) or the construction of time-space specific truths (episteme) is here related directly to the mappings and technologies of government through the idea of a regime unified by a specific political rationality. The identification of categories of visualising a population is thus encouraged to be the first stage in relating these categories to assumptions about an individual in line with a wider epistemological milieu. This also urges consideration of the practical realisation of this taxonomy, whether through housing provision, tax relief, child benefit or civic investment, for example. Here, potentially daunting concepts of ‘archaeological orders’ or ‘genealogical dispositifs’ are integrated into the everyday, while the mundane can be situated in a framework that structures and contextualises apparently specific and unique case studies.

This analytical approach is also pregnant with political potential. The emphasis on problematisation and resistance, although not always readily apparent in Foucault’s writings and only emphatically emphasised in some of his later works (see Foucault, 1982 [2001]), helps erase the image of omnipotent power and the state as an all-knowing and calculative ‘cold monster’ (Foucault, 1978 [2001]:220). The inter-linkages within the analytical framework encourage explanation rather than description, although the social and economic context must always be borne in mind as well as the cultural or epistemological setting. The analysis of the re-distributive ethos incorporates the element of ‘othering’ that was the focus of Foucault’s disciplinary work. This was still present in the governmentality papers in terms of the construction of the ideal self-regulating subject, which necessarily stigmatised certain classes, sexualities, genders and disabili- ties and, when taken to extremes, could lead to social engineering or eugenicist projects of extreme violence, both epistemic and physical.

TOWARDS THEORETICALLY ATTUNED RESEARCH QUESTIONS

A (Re)theorised Population Geography?

The above case studies provide examples of the various politicised scales and different analytical levels at which populations have been governed in colonial India. It now remains to integrate these examples with the calls for change from within population geography. Throughout the (re)theorising population geography debate it will be shown that reforms and questions have been posed at three levels of enquiry. These concern the ‘objects’ of enquiry (what is measured and why), the ‘methods’ of enquiry (the type of data-set and analysis), and lastly the ‘output’ of enquiry (how the results are used in policy as tools of governmentality). The history of debate on these three levels will be summarised and, in conclusion, linked to the foregoing strengths of a more Foucauldian population geography.
The call to theorise population geography has taken various forms, dating back (at least) to Findlay and Graham’s suggestion in 1991 that integration with other geographical subdisciplines and an engagement with theory was the most pertinent challenge (Findlay and Graham, 1991). It was the latter of these calls that was taken up in the hugely influential article on (re)theorising population geography by Jackson and White (1995). While this paper no doubt picked up on currents of thought that pre-dated it, as the most cited article of the *International Journal of Population Geography’s* history (Boyle *et al.*, 2003) and the bedrock for many future discussions, it is worthy of close scrutiny. I would suggest that there were two strands of recommendations in the paper, one addressing theory and one addressing power/politics, of which the former has been taken up to the detriment of the latter and of the subdiscipline.

Jackson and White (1995) suggested that the commitment to an empiricist epistemology had kept theory in population geography at a low level. This effectively meant a preoccupation with the immediate causes of population events, a fixation on data, and a failure to criticise the essentialism or constraints of data categories. The direct solution they proposed was an engagement with social theories, such as social constructionism, critical realism, and works on the politics of position. A re-theorised population geography could, thus, work to examine its own positionality, to challenge the objectivity of supposedly rigid data categories, and to integrate ethnographic methodologies and biological contexts. This is work that has been carried out ever since, to great effect, as Silvey (2004) asserts is the case with current migration studies, although Graham (2004) has warned against an excessive focus on migration studies by population geographers.

Throughout Jackson and White’s article there was also a second proposed route of action. This route would challenge empiricism through analysing the political ideology underlying categorisation and the consequences of labelling; that is, the objects of enquiry. This involves questioning not only what ‘population’ is and when it was discovered, but also critically examining what ‘sex’, ‘age’, and ‘race’, for example, mean in different places and times. Following Brown and Colton (2001:413), this means challenging ‘logocentrism’, the fixing of meaning and concepts, and seeking out ‘pharmakon’, those phenomena that resist categorisation. But beyond a Derridean deconstruction of categories, Foucault’s work also encourages a framing of demographic events, such as birth, death and marriage, not just in biography, but also in social, cultural and political context. This can expose why measurements are taken at a certain time and place, who benefits, and who does not. This element has perhaps been missing from the subsequent debate, while ‘theory’ has been introduced in a manner which has not always made itself applicable to researchers with a non-theoretical background.

The integration of theory has taken various forms. Firstly, it has lead to a greater sensitivity to the ‘lived’ nature of the subject matter. For example, Sporton (1999) has shown that fertility is as much about who raises the children and maintains the family as it is about biological reproduction and sex. Similarly, the subject of study must be conceived of as a sexed and gendered body, a body that is self-regulated and makes decisions about pregnancy or contraception. However, there are just as many actions that can be attributed to the engraved and non-conscious routinisation of daily life, although these routines are canalised by local and national structures. Caitríona Ní Laoire has also edited a recent collection of sensitive papers on the geographies of diaspora that utilise various theoretical approaches to explore the lived nature of these movements and longings (Ní Laoire, 2003).

Another inflection of the call to theorise has addressed the method of enquiry through exploring the potential of multi-methods research. This could challenge the complicity of methods in solidifying and naturalising the objects of research addressed above. McKendrick (1999) has argued that methodology itself is epistemologically positioned, and that a mixing of quantitative and qualitative methods could highlight this positionality and suggest ways of triangulating around it. Graham (1999) affirmed this suggestion, showing that while data availability may set the methodology, certain disciplines have preconceptions about what data are. Indeed, Findlay and Li (1999) argued that epistemology must not dictate method, that is, positivism-being-statistics and humanism-being-ethnography. Primacy of understanding must
remain the object, no matter what the methodology required.

Despite these advances, in the year 2000 Elspeth Graham still felt the frustration of population geography being too methodological and insufficiently theoretical (Graham, 2000). Even if all practice of demography was ‘theoretical’, how should one address this? If theory means placing a case study in a general framework to make it intelligible, then population geography should engage with several levels of theory. While demographic transition theory generalises to make claims about modernisation, it says little about the actual causes of change. Graham claims that population geography has been resistant to another level of theory that addresses the characteristics of societies, cultures and economies, and thus denies the generalising tendencies of modernisation theory. Similarly, at the level of philosophical theory, Graham detects a failure to engage. For example, in terms of transition theory, what is ‘improvement’ and who defines what is ‘good’? Can all causes of non-European change be attributed to processes originating in Europe? Should progress, in terms of increasing life expectancy, be retained as something that is ‘good’ even if individual freedoms are curtailed? Graham made similar claims with Paul Boyle in 2001, in an article that associated mainstream thinking in population geography with methodological conservatism, a lack of attention to theory and over-attention on migration (Graham and Boyle, 2001).

I would suggest that this methodological conservatism can perhaps be explained by the way in which theory is sometimes taught; as something alien and external that can be parachuted in and strategically deployed. For people trained in quantitative methods, much theory may well seem unnecessarily verbose and difficult to apply. Through addressing population directly and suggesting a series of practical scales and analytical levels, Foucault’s writings will hopefully appear more approachable. His writings can also appeal to the political recommendations of Jackson and White, which have lain only partially obscured in some of the papers discussed.

Findlay and Li followed up their epistemological claims by stressing that statistical regularities are worthy of academic study, but that they must be acknowledged as descriptive, not explanatory (Findlay and Li, 1999). As such, empiricism must be challenged not just in methodology, but also in openness to considering deeper structures and mechanisms. Graham also pushed towards not just philosophical but also political considerations in her criticism of the Eurocentrism of transition theory and the need for a critical population geography (Graham, 2000). This argument has perhaps been made most forcefully in Findlay’s discussion of population geography in the twenty-first century (Findlay, 2003). Here Findlay took on many of the developments that had come from an engagement with theory. He asserted the limited yet useful nature of quantitative data, the importance of integrating the global and the local, the value of multi-methods research, and the need to integrate changing conceptions of space.

Returning to and augmenting Jackson and White’s political suggestions, Findlay stressed the need to use data-sets to survey the actions of politicians and decision-makers, holding them to account for the way they distribute resources, the way information is created and the relationship between labels and power relations. That is, we must consider the outputs of enquiry by population geographers. In addition to critiquing the relative apoliticism of population geography, Findlay challenged the applicability of social theory to work on the geography of populations. Although acknowledging the use of studying positionality, critical realism was dismissed as lacking a methodology, and social constructionism as having already been covered by other geographical subdisciplines. I would argue that Findlay goes too far here, conflating the practical application of theory with its pedagogic presentation thus far. In his claims Findlay is also implicit with the apoliticism he denounces, through failing to acknowledge the radical and critical nature of much social theory. Feminism, Marxism and post-colonial studies all have radical and inherently political origins and structures which can be applied to population geography. Amongst these theories, the governmentality work stands not just as an impressive means for an archaeological investigation of population policies, but also as a genealogy that seeks to explain the present and open up that present to change. It is in this sense that Foucault’s musings on the objects of enquiry and the methods used to approach
them are ultimately tied to the outputs of research and their effects on the politics of the present.

CONCLUSIONS

This paper aims to contribute in a narrow sense to the ongoing debate on the evolution of population geography. It has not considered many of the current parallel levels of development, whether concerning multi-writing-styles, the qualitative turn in quantitative analysis, or the detailed intricacies of picking apart the epistemological situatedness of the methodologies which are an essential part of the identity of many population geographers. Similarly, there are many aspects of the Foucault debate that have not been considered here. Feminists continue to lambast his failure to consider gender issues (McNay, 1992), while the colonial other is also conspicuous by its absence in his works (Stoler, 1995). There are also many other authors whose work complements Foucault’s and can be thought of in a comparative, if still contestatory light, such as the work of Giorgio Agamben, Gilles Deleuze, Jacques Derrida or Antonio Negri and Michael Hardt.

I hope to have shown that Foucault maintained not only an implicit interest in geography, but also one in population. Indeed, the title of his 1977–78 lecture course ‘Security, territory and population’ represents his ongoing interest in power, geography and population (Foucault, 2000b). I would argue that attention to the different scales at which biopolitical processes occur, and to the variety of levels at which these processes must be analysed, proffers a mode of population geography that can meet several of its contemporary needs. Firstly, it highlights the centrality of ‘population’ to one of the most cited and respected social theorists of the twentieth century. Indeed, this was an author whose central conception of modern state power ‘...has as its primary target the population and as its essential mechanism the apparatus of security’ (Foucault, 1978 [2001]:219).

Secondly, the governmentality literature brings with it a critical potential that seeks to expose the power relations lying within the categories, processes and forms of modern government, as these seep into and live through statistics, embodied urges, and built forms. These writings can be used to explore the objects, methods, and outputs of contemporary research, denaturalising our taken-for-granted assumptions and opening a space for new types of research. Decoding existing power relations cannot just rely upon a textual approach or thick description, but must use the qualitative methods that can naturalise large-scale processes, but need not do so. The organisational capacities of modern states and corporations allow them to span the global and the bodily; our theories have to equal this span and scope if they are to comprehend the processes which shape populations, their distributions and their habitations. While remaining aware of the differing epistemological presumptions of multiple methods, with due consideration these methods can be used in conjunction, highlighting rather than obscuring their differences.

Finally, the accusation most regularly charged at Foucault, and one to which his studies are least able to respond, is his lack of empirical research. While his work showed a vast breadth of reading and understanding, his generalisations were often speculative and are in need of testing and investigation. In this sense population geography’s ‘weakness’, its empirical focus, could be refrigured as its greatest strength, if deployed in a critically sensitive, quantitative mode. Many elements of the ethos of a regime will lie encoded in archived statistics, while effects on a population’s constitution by governmental practice may only be apparent at the level of serial population statistics. It is at this level not only that population geography could benefit from Foucault’s writings, but that Foucauldian studies could benefit from geographical investigation.

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NOTES

(1) There is much debate over Foucault’s treatment of people as subjects: whether this annihilates the individual within a discursively produced subject position. This perspective was countered to an extent by Foucault’s later work on the care of self in which individuals consciously craft themselves (Foucault, 1986b), and his emphasis more generally on government as the ‘conduct of conduct’.

(2) Foucault’s lecture courses are not fully translated, yet summaries are provided in Foucault (2000b). The lecture courses so far published include Society Must be Defended (Foucault, 1975–76 [2003]) and Abnormals (Foucault, 1974–75 [2003]). The first tentative translations of the Security, Territory, Population (1977–78) course show that there will be a distinct focus on the spaces of security, using the example of urban planning, followed by work on governmentality and the emergence of ‘population’. The problem of government is then explored in depth, moving to a genealogical investigation of the pastoral and its relation to individual conduct and resistance. The pastoral became government through the ‘reason of state’, in both its diplomatic-military and policing functions (Graham Burchell, personal communication).

(3) I am indebted to Chris Philo for clarifying these three points and their importance to the argument.

REFERENCES


