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Mapping the political in medical and health geography: the *terra incognita* of biopolitics

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Abstract

Medical and health geographers are united by a dual interest in the politics of health evidenced by overlapping engagements with public policies, most notably those related to health disparities and accessibility to health services. In this literature review we explore the relevance of ‘biopolitics’ as a theoretical framework for critically engaging with the politics of health. Biopolitics directs attention to the powers that organize life itself. We begin by reviewing Michel Foucault’s writings noting what is unique about his perspective and how it helps us see the politics of life in a new way. We then map two contemporary manifestations of the politics of life: molecular politics and geopolitics. We conclude by reflecting upon the ways that biopolitics helps us better understand political investments in life and their stakes while opening doors to a life-affirming domain of praxis.

I. Introduction

When it comes to the history of medical and health geography, the conventional narrative presents two sub-fields separated along theoretical and methodological lines (Kearns and Moon 2002). On one hand, the medical tradition has focused on disease ecology and access to health services and, on the other hand, the cultural and humanistic tradition has focused on wellness, identity and place (Kearns and Collins 2010). Despite these differences, medical and health geographers remain united by a dual

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interest in the politics of health. This shared interest is reflected in overlapping engagements, by both medical and health geographers, with public policies, particularly as they impact health disparities and accessibility to health services (Rosenberg 2013; Donovan and Duncan 2010). In the literature review that follows, we explore the relevance of ‘biopolitics’ as a theoretical framework for critically engaging with the politics of health. By ‘critical engagements’ we are thinking of “ideas and theoretical possibilities that hold the potential for better understanding social processes and spaces, as well as possibly facilitating different pathways to praxis” (Parr 2004, 249). We aim to show that the potential of a biopolitical framework lies not only in its theoretical prowess but also in the way it might serve as a shared praxis domain for medical and health geographers.

Generally speaking, biopolitics addresses not just the politics of health per se, but more broadly “*the political negotiation of life*; how life, its existence and vitality, is linked to the regulation and contestation of who has priority to live and flourish, and who might be left to wither and die” (Tyner 2013, 2). The range of geographical scholarship on biopolitics is broad and includes, for example, research exploring population science (Legg 2007; Philo 2005), war and genocide (Tyner 2012a, 2012b), urban public health (Brown 2009; Brown and Knopp 2010) and global health (Brown et al. 2012). To date most of these geographical articulations have occurred outside medical and health geography (see Rutherford and Rutherford 2013a, 2013b). It is worth remembering, however, that in the early 1990s a related notion of ‘body-politics’ was sutured into the debates that launched health geography (see Dorn and Laws 1994); yet, in the words of Kearns and Collins (2010, 22) a “fully embodied health geography has been slow to develop.” In this review, we seek to address this theoretical gap by pulling on this ‘body-politics’ thread. We see biopolitics as a fitting and timely construct for doing so given recent arguments about health as a ‘nature-society’ relation (Mansfield 2008) as well as calls for more ‘critical’ (Parr 2004) and ‘politically engaged’ (Luginaah 2009)

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geographies of health. More provocatively, we see it as an invitation to consider how the knowledge generated by medical and health geographers is, itself, constitutive of politics and vice versa.

Our literature review begins by presenting Michel Foucault's writings as an essential touchstone for historically grounding biopolitics both as an emergent political order and a novel framework for conceiving of life itself. Foucault's approach to biopolitics must be understood in relation to his methodological commitment to genealogy, an historical method that conceptualizes history as a network of local and visceral struggles and traces the contingent and contentious pathways by which objects and subjects come to their present form. By remaining mindful of the power-laden nature of history and by placing objects and subjects in relation to unacknowledged events and subjugated knowledge, genealogies unsettle conventional historical narratives helping us to see the present and ourselves in a new light. Such a perspective invites us to map the geographies imbued in various 'bio-histories' and address new biopolitical formations in the 21st century. In this regard, we review recent work on biopolitics by Nikolas Rose (2001, 2007) and its reception by geographers. Here we find focused debate on the politics of life; more specifically, how, in light of technological advances in biomedicine and the life sciences, we are coming to experience individual and collective health and wellbeing in terms of a 'molecular politics of life' and a 'geopolitics of life.' We conclude by discussing the importance of an 'affirmative biopolitics' in future research agendas.

II. Foucault and the Rise of Biopolitics

Biopolitics is a term with a lengthy and complex history going back to the early 20th century (Lemke 2011). The recent notoriety of biopolitics within the humanities and social sciences is largely attributed to Foucault (1990, 2003, 2007, 2008) and his interlocutors (see Rabinow and Rose 2006).

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Foucault (1990) first came to discuss biopolitics in relation to the mutation of political power that accompanied the birth of capitalism. In Foucault's analysis, pre-modern political authority flowed through a model of sovereign power: the right of a ruler to seize property, bodies and ultimately life. This was a deductive form of power premised upon the right 'to take life or let live.' Beginning in the 18th century, this sovereign 'right of death' came to be rearticulated within a new model of *biopower* oriented in the opposite direction, 'to make live and let die' (Foucault 2003). Biopower was "situated and exercised at the level of life, the species, the race, and the large scale phenomenon of population" (Foucault 1990, 137). It was organized around two poles: first, around 'anatomy-politics' that sought to maximize the capacities of the individual body through disciplinary mechanisms (e.g. prisons, schools, hospitals), and later around 'biopolitics' which took the collective life of the nation, understood in biological terms, as its object. It was these political techniques that facilitated the "insertion of bodies into the machinery of production and the adjustment of the phenomena of population to economic processes" (Foucault 1990, 141).

Foucault was not the first to employ the frame of biopolitics; however, his perspective is notable because it represents a substantial departure from prior articulations (Esposito 2007). First, Foucault espoused a novel ontology of 'life itself.' Through his historical investigations into madness, illness and disease, deviancy and sexuality, Foucault approached life as both an emergent biological form and historical experience invariably shaped, and reshaped over time, by relations of power and knowledge. In short, life did not belong only to biology or exclusively to history but was produced at their point of intersection. Biopolitics exemplifies this position. In Foucault's (1990, 143) estimation, biopolitics took root in a new historical-political ontology that placed life "at the same time outside history, in its biological environment, and inside human history, penetrated by the latter's techniques of knowledge and power." Referencing Aristotle's classic distinction between biological life (*zoé*) and

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political life (bios), Foucault (1990, 143) commented: “For millennia, man remained what he was for Aristotle: a living animal with the additional capacity for a political existence; modern man is an animal whose politics places his existence as a living being in question.” The threshold of modernity occurred when biological processes *knowingly* entered into political calculations, and, as lived existence was ‘placed in question’ the material body, in both an individual and collective sense, was transformed. The rationalization of government in relation to biological understandings of human existence had profound material effects (e.g. the epidemiological transition).

Second, Foucault (2003, 2007, 2008) illustrated exactly how biological existence entered into political calculation by tracing the co-emergence of a new political subject – population – and a new political technology – security. Under the pre-modern model of sovereignty, population consisted of the sum of all the subjects belonging to a ruler or territory. Biopolitics was defined by an entirely new notion of population that emerged in the 18th century (Foucault 2007, 66-79). Population came to be understood as a ‘fact’ dependent upon a series of ‘natural’ variables (e.g. climate, economy, custom and religion) that were beyond the ruler’s juridical control but accessible to measured calculation, analysis and intervention. Population came to be understood as animated by natural desire that when given space to flourish produced the general interest of the collective. Moreover, while the constellations of natural variables themselves came to be seen as complex systems patterns and regularities were discovered that lent themselves to regulation. This interpretation of population invited a different political response: the sovereign must act in a reflective and calculated way upon these natural variables (e.g. physical environment, economy) to manage the population all while saying ‘yes’ to desire. Foucault (2007, 63) calls this political response ‘security,’ an apparatus that took charge of life by distributing the living around a norm and “acting to bring the most unfavorable in line with the more favorable” (otherwise called ‘normalization’). Through security, political authorities sought to

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‘regularize’ the collective life of the nation by protecting against internal dangers (e.g. endemic disease, famine, accidents) while promoting the conditions of life required to grow the population.

Finally, Foucault revealed to us the stakes of biopolitics by illuminating a fundamental paradox. Despite its investment in the promotion of life, modern biopolitics has, in numerous instances, operated in tandem with its opposite: the destruction of life (known as thanatopolitics). Foucault (2003, 254) associated this “biopolitical excess” with the way in which discourses of ‘racism’ (the fragmentation of the biological field into races of greater and lesser value) and ‘evolutionism’ (the struggle for existence among species - survival of the fittest) became inscribed into security apparatuses over the 18th and 19th centuries eventually culminating in the state racism and genocide of the 20th century (for example, Nazi Germany and closer to home, Indigenous-settler relations in Canada). In these instances, racism and evolutionism furnished a genocidal/eugenic rationale for identifying internal threats to biological purity and establishing a positive relationship between eliminating these threats and the vitality of the population as a whole. Foucault (2003, 256) did not limit these actions to killing; rather, he also included “every form of indirect murder: the fact of exposing someone to death, increasing the risk of death for some people, or, quite simply, political death, expulsion, rejection, and so on.” Here, ‘normalizing society’ is understood to advance itself by defending itself against internal biological dangers through *a return* of sovereign power over ‘inferior’ forms of life.

Foucault’s perspective is valuable for it emphasizes how the biological reality that came to be represented in fields of study such as public health and town planning was an emergent political domain tied to modes of governing the nascent nation-state. New knowledge about the biological reality of human beings as a species proved transformational, inviting novel ways of problematizing the human condition and new ways of administering life. Foucault’s take on biopolitics has profound

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repercussions for medical and health geography. In ways it can be read as an invitation to consider how the knowledge generated by medical and health geographers has been, and continues to be, constitutive of modern politics (see Kearns and Reid-Henry 2009). Historically, the field of medical geography co-emerged with some of the most significant biopolitical projects of the 20th century (Dorn et al. 2010). The birth of medical geography, and the ‘population health’ movement more generally, can thus be traced to an emerging biopolitical order. Biopolitics also invites us to consider the philosophical positions on life we employ in our understandings of health. The implications of this point are significant. When life comes to be reductively modeled in standardized terms of mortality, morbidity, or quality of life, with no regard for historical contingency, geographers risk taking for granted the multiplicity of life itself, particularly the way in which it is continually invented, reinvented, formed and reformed, as well as the political valence attached to the meaning, status and vulnerability of human lives and life more generally (Kearns and Reid-Henry 2009). Taking the latter as a point of departure, we turn next to explore 21st century mutations in the politics of life.

III. Biopolitics in the 21st Century

Since the period in which Foucault was writing (late 1970s-early 1980s), biopolitics has continued to change – particularly in the age of biomedicine, biotechnology, and bioscience – and challenge past understandings and valuations of human life (Kearns and Reid-Henry 2009). This has necessitated new inquiries into contemporary manifestations of biopolitics in the 21st century. Where Foucault’s inquiries were historically benchmarked to the 18th-20th centuries and geographically situated in Western Europe, more recent work has directed analytical attention to other sites, spaces and

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scales. Two contemporary manifestations are reviewed next: the ‘molecular politics of life’ and the ‘geopolitics of life.’

a. Molecular Politics of Life

Today, more than ever before, advances in the biosciences are leaving the boundary between life and death, and the capacities of humans, open to negotiation. In ways, the biopolitics of our current century stand in stark contrast to the biopolitics of centuries before. While some warn that biomedical and biotechnical tampering may come at the cost of humanity losing its ‘nature’ (Fukuyama 2002) others see 21st century biopolitical formations somewhat agnostically. Nikolas Rose (see also Rabinow and Rose 2006) falls into the latter camp. Rose (2007) sees the biopolitics of our century as qualitatively different. The biopolitics of the 18th and 19th centuries was, as Foucault traced, a politics of population grounded in the prevention of disease and epidemics, the sanitation of towns and cities, and the vitality of the nation. Having ‘mutated’ considerably, Rose (2007, 64) notes that contemporary biopolitics:

no longer operates in a problem space defined by population, quality, territory, and nation.

Individual substitutes for population, quality is no longer evolutionary fitness but quality of life, the political territory of society gives way to the domesticated spaces of family and community, and responsibility now falls not on those who govern a nation in a field of international competition but on those who are responsible for a family and its members.

Rather than lament a lost essence, Rose (2007) echoes Foucault’s emphasis on bio-histories, suggesting that these mutations reveal one more ‘emergent form of life’ in a series that is not ‘post-human’ but rather *more* biological.

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In charting these mutations and emergent forms of life Rose (2007) provides a cartography of 21st century biopolitics. He locates contemporary biopolitics at the intersection of multiple and continent pathways. First, life is increasingly made visible and acted upon at a molecular scale. The clinical gaze, that focuses on limbs, organs, circulatory systems and hormones, has been supplemented by a *molecular gaze*, that operates at the genetic and cellular level of the human body. Second, this ‘genomic body’ is subject to new technologies of optimization (e.g. genetic therapy) that no longer accept ‘biology as destiny’ but rather see biology as open to re-engineering. This *ethos of optimization* is future-oriented, manifesting in notions of susceptibility and enhancement. Third, in light of this ethos of optimization *new subjectivities* are forming around what Rose (2001) calls ‘somatic individuality.’ The biopolitical management of health is being devolved to individuals who, in the process adopt a more risk-adverse and enterprising relationship towards themselves as biological beings. This form of ‘etho-politics’ is itself generating new forms of ‘biological citizenship’ as individuals build local and transnational communities of support and engage in biomedical activism. Fourth, these forms of biological citizenship are increasingly couched in *biomedical expertise* on genetic and reproductive vulnerabilities. Rose’s fifth and final intersection sees biopolitics as a type of *bioeconomics* as forms of global capital have organized around molecular life and its associated subjectivities. In this sense, biopolitics today has been re-territorialized through these intersecting pathways to scales below and beyond the nation state.

A number of geographers have engaged with this ‘molecular turn’ in biopolitics. This includes work on end-of-life decisions (Cadman 2009), organ donation (Sothorn and Dickinson 2011), pharmaceuticals (Del Casino 2007), bioscience (Greenhough 2011), and the geneticization of heart disease (Hall 2004). One excellent example, by Mansfield (2012a, 2012b), is her work on the gendered

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biopolitics of seafood consumption advisories. Here the security of the population, both present and future, is established through the responsible food choices of ‘good mothers.’ The pregnant woman’s body, and its processes of reproduction, serves as a spatial threshold for biosecurity at multiple scales:

By calculating proper seafood choices, risk spatializes reproductive women as the physical, bodily threshold between the outside contaminated environment and the population, represented by the fetus. But the threshold is less one of biophysical porosity and more about the choices that women are supposed to make. Women are to ensure population security by carefully managing movement of chemicals through their own bodies (Mansfield 2012b, 970).

Work such as this has usefully shown how molecular biopolitics has involved the increasing individuation of susceptibility and enhancement. While molecular biopolitics certainly rings true, Rose’s arguments around the re-scaling of biopolitics have not gone unchallenged. These ‘geopolitical’ geographies of life are examined next.

b. Geopolitics of Life

As globalization has accelerated in the 21st century, unprecedented levels of inter-connectivity have been achieved. Paralleling the increased movement of goods and people is growing anxiety about the vulnerability of populations to re-emerging and new infectious diseases (Brown 2012). While not disputing the validity of Rose’s thesis about the molecularization of life and its biopolitical implications, others (Braun 2007; Dillon and Lobo-Guerro 2008; Kearns and Read-Henry 2009) have convincingly argued that Rose’s characterization of 21st century biopolitics, particularly the re-scaling of biopolitics to the individual and community is partial and incomplete for it overlooks the status of

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life as a global phenomenon. This literature has drawn attention to global health discourses and practices, what can be qualified as the ‘geopolitics of life.’ Braun (2007, 14) argues that Rose’s privileging of the molecular body fails to take into account its ongoing displacement, exchange and circulation in the context of globalization, stating that:

molecular biology and genetics have given us a body known at a molecular scale, and thus made the physical mechanisms of ‘life’ available to political and economic calculation in new ways, they have also, in conjunction with the science of immunology and virology, given us another way to conceive our biological existence, no longer in terms of a self-contained body whose genetic inheritance is to be managed and improved but in terms of a body embedded in a chaotic and unpredictable molecular world, a body understood in terms of a general economy of exchange and circulation, haunted by the spectre of newly emerging or still unspecified risks.

Braun (2007) argues that having come to understand our biological existence in relation to the increased circulation and contact inherent to globalization *and* the increased transferability and virulence of highly pathogenic viruses, we now are more inclined to accept and deploy pre-emptive and anticipatory measures to secure our existence in the face of various ‘worst-case’ scenarios. For Braun (2007, 22), these anticipatory logics and acts of biological pre-emption play out globally through extra-territorial extensions of sovereign state power: “What *has* changed under the regime of ‘biosecurity’ is the *geography* of health security, for in an age of globalization it is not enough to protect borders: the fight must be taken ‘over there,’ before it ‘reaches here.’”

Kearns and Reid-Henry (2009) also take up the ‘geopolitics of life’ but in a slightly different manner. They attempt to counterbalance Rose’s molecular vision with a geographical vision of life. To

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paraphrase them, where one vertical axis of biopolitics can be constructed in terms of the geography of scale (as in molecular to global), another horizontal axis be constructed in terms of the geographical variability, or uneven development, among places in the world. They argue that Rose's account of 21st century biopolitics is narrow insofar as it says little about those populations and places in the world that remain untouched by advances in bioscience or where western norms remain foreign. Rose's (2007) account, in its focus on the technologically 'cutting edge,' also overlooks the more mundane determinants of health such as nutritious food, clean water and adequate housing. Finally, by individualizing risks, Rose's account fails to adequately address how this biophysical existence is politicized in different ways by states and capital from one place to the next (see Sultana 2012). For Kearns and Reid-Henry (2009, 570), "the most interesting and complex questions are those that investigate the mutually constitutive relationship between advancement of our capacity to shape life at one end of the spectrum and to neglect it at the other."

Geographers have drawn attention to these political negotiations of life covering a range of topics including SARS (Ali and Keil 2006; Major 2008; Van Wagner 2008), West Nile Virus (Tedesco et al. 2010), foot and mouth disease (Donaldson and Wood 2004), food safety (Bingham and Lavau 2012; Mansfield 2012a, 2012b; Nally 2011) and HIV/AIDS (Ingram 2010a, 2010b). Together this work provides insight into the unfolding geographies of surveillance, risk-based calculation, and emergency preparedness that increasingly give shape to our understanding of global health (Brown et al. 2012). An important corollary to these new understandings of vulnerability is the deployment of security (Dillon and Lobo-Guerrero 2008). The securitization of life is now a powerful rationale shaping *geopolitics*. Securitization takes many forms including global surveillance programs (Braun 2007), border control (Sparke 2006), and disease containment (Craddock 2009). Twenty-first century security regimes also raise questions regarding whose health is being protected? Moreover, to what extent are the lives of

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some being placed in jeopardy to secure the lives of others? This century is shaping up to be one of ‘humanitarian wars’ (think Iraq and, at the time of this writing, possibly Syria) that mask geopolitical anxieties surrounding chemical and nuclear weapons in the hands of ‘failed states.’ Here attempts to secure life retreat from ‘making live’ to ‘letting die’; however, the practices of letting large segments of ‘second class citizens’ die through famine, malnutrition and exposure to violence cannot be read as unintentional but rather as part of the calculated management of life and death.

IV. Conclusion

In this literature review we have endeavored to show that ‘biopolitics’ offers a promising framework for medical and health geographers seeking to critically engage with the politics of health. Biopolitics helps us better understand the political investment in life while opening doors to different pathways to praxis. We see biopolitics as an opportunity to shift theorizations of ‘health’ by inviting geographers to think more broadly about ‘life itself,’ its limits and capacities, in relation to epistemic conditions (Foucault 1990). This involves unpacking ‘health’ in terms of the various philosophies of life that are brought to bear on questions of illness, disease and wellbeing (see Greenhough 2011) and, relatedly, how these problematizations are bound up with the production of geographical imaginaries and struggles over space (Kearns and Reid-Henry 2009). This line of inquiry poses a challenge to conventional approaches that take for granted contingent social norms and locate ‘health’ solely within the individual body or geographically circumscribed population. Attending to these emergent biopolitical geographies (such as the molecular and geopolitics of life) can require one to acknowledge non-human constituents of life and may trouble the anthropocentrism underpinning current health understandings (Hinchliffe and Bingham 2008; Greenhough 2010). We see this as a good thing.

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Finally, we see biopolitics as an invitation to shift theorizations of health by dwelling on the political negotiation of life; who has priority to live and who is abandoned to die. A biopolitical framework has the potential to facilitate a different type of political praxis rooted in a fundamental love for and solidarity with life (or biophilia). This ‘affirmative’ praxis (Hannah 2010) would be oriented against any use of violence, direct or structural, especially under the auspices of protection or improvements of population health. It would advocate a perspective beyond matters of national security to encompass the wider landscape of human security. As Kearns and Reid-Henry (2009) argue, this affirmative biopolitics cannot be achieved without acknowledging the national and global disparities in health *and* the obligations that follow from them. This would certainly involve engaging directly with the politics of the state to reintroduce life-affirming practices into governmental apparatuses (Hannah 2011). We have shone a light upon two biopolitical geographies – molecular and geopolitical – as domains of praxis for promoting a life-affirming biopolitics. Going forward, it is the intersection of the molecular body with local, national and global biosecurity that constitutes the space of praxis for an affirmative biopolitics.

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