1. Introduction to the *Handbook on the Geographies of Power*

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INTRODUCTION

The question of how power is a spatial or geographical problem – or what we’re calling in this book the spatialities or geographies of power – has been a longstanding research focus in human geography. At the same time, the spatialities of power have attracted increasing attention across the social sciences and humanities over the past decade. This interest, sometimes dubbed the “spatial turn”, can be attributed to researchers struggling, empirically, to make sense of the seemingly increased complexity of global politics and economics. Border scholars in particular have embarked on a broad and provocative rethinking of the relationship between power and space by virtue of the ways in which inter-state borders in the post-9/11 context have been hardened and militarized, but also multiplied in a less located, patchwork-like manner. Indeed, border scholarship has increasingly come to consider formally non-border spaces – that is, sites at some remove from international frontiers – as different sorts of border spaces which are selectively crossed, negotiated, and policed during the course of mundane laboring and social reproduction activities (Mezzadra and Neilson 2013; Balibar 2002). This research has also explored state power in these spaces as capricious, selective, intermittent, and modulating rather than enduring – in the way that scholars have typically analyzed the fixed infrastructures that constitute so many international borders (Coleman and Stuesse 2014). This reconsideration of the way that state power works has also come to border studies proper. For example, based on their ethnographic fieldwork at the U.S.–Mexico border, Campbell and Heyman (2007) suggest that the domination/resistance couplet which researchers typically center in their discussions about omnipresent state power at international borders, both implicitly and explicitly, fails to describe the emergent, improvisational, and everyday – or what they call “slantwise”, as well as “zigzag” – spaces of borderland life, from the standpoint of both the state’s martial apparatus as well as the populations that the state seeks to govern.

Renewed interest in the spatialities of power has also been driven by more strictly theoretical debates focused specifically on the retreat from seeing power as singularly associated with state sovereignty. Indeed, theorists working in a number of different disciplines – not just human geography – are now increasingly inclined to conceptualize power not just as a relationship of territorial and bounded domination between subjects but as inherent in all kinds of far-flung, non-linear, and non-proximate relationships between people and objects (Allen 2011; Lash 2012; Bigo and Walker 2007), and moreover in ways which usefully decenter the drama of human agency and intention (Clark and Hird 2014; Yusoff et al. 2012). This sort of research marks a significant conceptual shift. Many of the most famous authors on the topic of power, such as Machiavelli and Hobbes, have been read to justify an account of power as equivalent to the problem of how

domination is exercised by some over others (although see Walker 1993 on reading these canonical figures differently). Though power-as-domination is hardly redundant (Sharp et al. 2000), how researchers think about power has become much more multidimensional and nuanced as its spatial forms and manifestations have come into clearer focus. Recent theory work in human geography in particular has played an important role in extending the use of the term power beyond its typical meaning as a resource that pools up in some hands – and in some places, as if power was a located property – to an agentic medium which has different effects depending on how it is deployed across space as well as how actors and things cooperate, or not, to give it effect.

The purpose of this book is to trace some of the myriad ways in which power is now being thought of by human geographers, in relation to a range of research foci. In this introduction we address several of the overarching questions that inform our approach to the spatialities of power, as editors, but also as geographers who have written about state power, political economy, nationalism, and borders. We also intend what follows below to work as a general theoretical invitation to the original chapters in this book – although by no means does the scholarship collected here constitute a coherent whole, as we make clear in our smaller part introductions.

To start our introduction, we begin with a discussion of the central problematic of the book: the question of whether to think of power in the singular or in the plural and what this difference entails. Our argument is that human geographers have for too long conceptualized power as a singular entity. We then turn our attention to how a common emphasis on modeling and predictability constitutes much of the human geography research on power and space. Instead, we emphasize the importance of thinking transductively about power – a term we anchor in Henri Lefebvre's work, although its origins are multiple (Dodge and Kitchin 2005). Subsequent sections address how to go about doing research attentive to the powers of people and things in relation to a particular topic, as well as why the book is organized into four parts: bodies, economy, energy and environment, and warfare.

POLITICAL GEOGRAPHY IN QUESTION

Our chief focus in this book is to move beyond the power/space couplet as it has been understood by political geographers. Political geography is obviously not coterminous with the larger concern of human geography, but the former has played what we see as an outsize role in terms of how the broader community of human geographers has thought about power and space, although less so now as we also make clear below. While political geographers have produced some very important insights about the centrality of space to power, we also contend that the dominant role played by this smaller community – focused as it is mostly on the problem of state power and state territoriality – has come at a certain conceptual and theoretical cost.

As the traditional sub-disciplinary home for thinking about power and space, political geography has been, in the main, restricted to the study of state power, state territoriality, and state bordering. For example, mainstream political geographers typically understand power as emanating from a sovereign such as a state or monarch within a jurisdictional or networked structure that subordinates or co-opts other actors (see review and criticism in Agnew 2003, 2010; Murphy et al. 2004; Murphy 2010). We would note too that even

critical political geographers who have sought to push beyond this very limited understanding of power and space – for example, critical geopolitics scholars – have in many ways reproduced this state-centric lens on the question of power. This has been referred to as the “deconstructive paradox” of critical research, in the sense that circling an object of critique can risk unintentionally repeating rather than replacing it (Ó Tuathail 2000). Feminist political geographers in particular have noted how traditional divisions between “low” and “high” politics, as well as deeply gendered accounts of power, remain intact in much of the supposedly critical, deconstructive research on the topic (Sharp 2000; Dowler and Sharp 2001). In this way, political geography and feminist geography remain strangely “two solitudes” despite otherwise overlapping interests (Hyndman 2007).

So ingrained is the state in political geography scholarship on power and space that in the not-too-distant past – well after the cultural turn in other subfields in the discipline, as well as outside geography – political geographers were forced to consider the possibility of a “political geography in question” due to the field’s overwhelming state-centricity as well as abbreviated notion of what counts as politics (Low 2003; Cox and Low 2003). As Robinson (2003) put it, the state and the norm of stateness act as a “god trick of the center” in political geography. In her annual *Political Geography* lecture, Marston (2004) argued, moreover, that political geographers were losing their sway over the study of politics because they had failed to address the intertwined problems of state power and culture, and that questions related to social reproduction and the everyday – as constitutive of the political, but not in a necessarily “big P” sense – were being creatively addressed by researchers in a variety other subfields in geography, but also well beyond (see also Painter 2003). As such, Marston (2003) pointed to a certain migration of politics away from political geography to subfields such as feminist geography, social geography, urban geography, and cultural geography – where politics enjoys a more agentic and less disembodied state-based existence. Partly in response to these debates, and remarkably but a decade ago, Painter (2006) published a groundbreaking call for political geographers to consider what he termed the “prosaic” coordinates of statecraft. Painter’s argument was for shifting from a view of the state as a taken-for-granted object of analysis to the state as an effect of practice (see also Billo and Mountz 2015; Mountz 2010). We welcome practice-based analyses of state power such as Marston et al.’s experimentation with so-called flat ontology, to which we return below (Marston, Jones, and Woodward 2005; Woodward, Jones, and Marston 2010).

In the context of this now fifteen-year-old discussion on so-called new political geographies, we think that it is time – especially for self-identified political geographers, but also for human geographers more broadly – to take a serious look at how power has migrated to other subfields, and with what effects. We very much agree with Marston that the study of power and politics has migrated away from political geography, and yet at the same time we would point to the relative marginality of these other approaches to power and space to political geography, as well as more generally to human geography. Indeed, we would argue that human geographers still look to political geography for insights about power and space, despite the migration that Marston suggests is in play. Our intention in this book, then, is to provide a necessarily partial lens into this migration – to explore some very important theoretical and empirical insights about power and space which do not emanate from strictly within the subfield of political geography, and which indeed have engaged the problem of power and space in what we think of as spirited and newly exciting ways.

POWER VS POWERS

By way of an introduction to the chapters collected in this volume, we'd like to outline how we understand power, space, and indeed politics. Based in part in the critical realism literature, and particularly Sayer's critique of "closed system" social scientific models of power which pretend to be able to know the world in advance according to grand theoretical constructs, we approach the problematic of politics, power, and space in terms of "powers", in the plural (Sayer 2000, 10–28). From this perspective, power is never singular and easily modeled according to straightforward theoretical bullet-points, but instead is best approached as contextually emergent and relational, and thus as a matter deserving of concrete investigation in particular spacings and timings. The critical realist insight about power in the plural obviously had important linkages with the localities-related and feminist geographical research on power which emerged during the 1990s, and which argued convincingly for space as relational, heterogeneous, open, and overdetermined (more recently, see Massey 2005). Strangely, the critical realist aspects of the cultural turn in human geography seem to have been misplaced or at least marginalized in the ways that geographers typically narrate the development of human geography today.

Our approach to the problem of power and space also reflects Foucault's refusal to regard power as a unitary and homogeneous "thing" that is deserving of its own separate and finalized philosophy. In seeing through the imagined singularity of power, Foucault focused on the various forms that power could take. Foucault's purpose was to leave power open to varied sources and manifestations so as to make room for the freedom that power in its multiplicity would then allow but that a singular power of domination would always trump. This is well reflected in Allen's approach to power, and in particular his insistence, also shared by Sayer, that the only defensible approach to power is one which emphasizes and explores multiple modalities of power and their multiple, hybrid spatialities (Allen 2003; see also Sayer 2004). As we see it, the pluralization of power as "powers", which is perhaps similar to how the term is used in the contemporary natural sciences, designates a complex terrain of movements and units – and the insufficiency of theories of power developed in relation to a singular, essentialist, and reductionist definition of power in which a single source is given the power to completely determine a given outcome. We might think of the latter as a "smoking gun" approach to the problem of power, where the goal is to produce a generalizable, conclusive model of power that can be used to show why something happened and who or what was involved, in a particular instance but also more universally. Most of our models of explanation are, in fact, based on isolating and then emphasizing some specific factor or force rather than identifying and relating the various complex sources of causality that empower actions, decisions, and behaviors.

Before turning to the conventional models and how they have informed the main traditions of geographic inquiry down the years, we lay out some of the main elements of a plural account of power and its relevance for contemporary understandings of power in geography. First, we examine the typical understanding of power in the singular and its limitations. Second, we detail three of the main features of the pluralized view: powers to do things, the empowerment of people and things as no longer simply objects of domination, and the spatial sameness and difference that multiple powers entail. Third, and finally, we explore the contention that the emphasis on multiple powers reflects a conception of the world as fundamentally open and unfinished. The open and unfinished

nature of the world of power is something that the singular view closes down in the interest of certitude and closure.

Within political geography, and certainly more generally, power has been understood almost entirely as control and/or authority exercised by some entity over other entities, typically a sovereign of some sort or other. This meaning has triumphed over more general ones such as the ability to act or produce an effect, a source or means of energy, mental or moral efficacy, and the probability of rejecting a hypothesis when it is true. The first and second items on this list are the ones that we see as being more useful in expanding the scope of the concept of power. They are also closely related in the sense that it is energy which produces the ability to act. This emphasis on the productivity of power points towards a sense of power as something dynamic rather than fixed and circumscribed. Rather than something possessed and centered, power is distributed, relational, networked, and immanent in all relationships. It is not that this framing has been absent from geography, of course. In particular, Allen (2003) has written at length about both the fact that power is never undifferentiated or invariably reducible to simple spatial oppositions like center and periphery and the fact that it always takes specific modalities such as domination, manipulation, seduction, and authority. But Allen is something of the exception that proves the rule. Few others have attempted to provide such a detailed basis for understanding power as pluralized. Nevertheless, his exposition remains largely within the traditional social science canon of power. This is not in any way problematic, save that it is insufficient relative to a more radical pluralization of power once attention extends beyond the political/jurisdictional.

There are several reasons why the directly political/jurisdictional take on power has been so prevalent in geography. A first reason is the fact that the early twentieth-century intellectual history of this subfield is intimately connected to state-centered and imperial projects that considered power as entirely about domination and subjugation. Even other modalities of power centered in states and empires such as manipulation and authority were largely absent from consideration. A second reason is that in being defined as predominantly a social science since the 1960s, partly to eschew its environmental heritage and the seemingly negative associations with environmental determinism this involved, the field's practitioners turned overwhelmingly to political and social theory rather than to the philosophy of science as sources of conceptual renewal. Thus, political theory's focus on sovereignty and the history of political language has inspired most discussions about power, well beyond the confines of political geography. Thinking about power in terms of action and energy rather than in narrow political terms has been off the agenda, that is, until recently. Some of the aversion, even if subconscious, to casting a wider net towards the natural sciences to gain purchase on the potential of thinking about power in the plural lies possibly in the retreat that social scientists beat from the explicitly naturalistic view of knowledge (that nature "speaks" directly unmediated by any sort of social or philosophical bias) that informed late nineteenth- and early twentieth-century geography. This likely turned human geography in particular away from considering the possibility that such a naive empiricism was in fact not characteristic of the practice of much of what goes for science. Realist conceptions of science, in contrast, emphasize that theorizing is an active part of empirical analysis along with the invocation of causal powers as intrinsic to that task (see below).

The third, and final, reason is methodological. There is an historic affiliation in human geography, as in many other social sciences, between conceptions of space relating to

modern statehood, on the one hand, and research methods on the other. As Elden (2006, 176) has argued, thinking about space as centered and territorial developed alongside geometric/mathematical ideas of “the calculative cast of being, reducing the world to a problem of number, of quantity”. In this way, rather than casting research as about the investigation of causal mechanisms deploying powers, human geographers have too often come to see research as involving the deployment of statistics (the term itself deriving from the collection of data for state-mandated national censuses) and the interpretation of the world as reflecting frequency distributions of different “variables” and the prediction of effects from those distributions. The generalization of correlations thus substitutes for the demonstration of causal mechanisms that has long been more typical of the natural sciences today. By their very nature, however, these methods have often relied on assuming the absence of any spatial dependence across variables and encouraged the rush to generalize across spatial units in the search for so-called functional – or what we’ve called “smoking gun” – regularities by invoking such measures as statistical tests of significance in a quasi-mystical manner (Sayer 2010, 175–203; Gould 1970; Young 1979). This was most obviously the case in the reductionist versions of spatial analysis which focused explicitly on the world as an isotropic – that is, ontologically undifferentiated – plane onto which geometrical models of spacing and distancing of objects (settlements, routes, resource sites, etc.) could be emplaced (Haggett 1965).

Yet, the realist philosophy of science provides a more capacious and fruitful approach to the understanding of power. In a critical realist view, “science” is about identifying the causal powers and liabilities of people and things rather than relationships between discrete events (Harré and Madden 1975). From this perspective, a causal claim concerns what a person or object is like and what they/it can do. Thus causal powers and liabilities can be attributed independently of the specific patterns or frequency distributions of events and variables. These can be associational among and not simply endowed in individual persons and things. So, it is not just a question of unequal capacities or one’s powers being expanded at the expense of others. Causal or generative mechanisms produce observable outcomes including individual or unique combinations of phenomena (Outhwaite 1987). From this viewpoint, theory is not about generality in the sense of accounting for the repeated series of events everywhere. Indeed, we see an all too common slippage in human geography between generality and universality, such that the latter is often counterposed to the particular. Critical realism helps to think about the general without recourse to the universal. As Sayer (2010, 2) puts it:

Realism replaces the regularity model with one in which objects and social relations have causal powers which may or may not produce regularities, and which can be explained independently of them. In view of this, less weight is put on quantitative methods for discovering and assessing regularities and more on methods of establishing the qualitative nature of social objects and relations on which causal mechanisms depend.

Perhaps the key issue here is the notion of power as an elemental *and* relational capacity. In both modes we are led beyond the primitive understanding of power as invariably about domination. The idea that power is a capacity of all persons and objects, an ability to do something, has been criticized for its neglect of power as something important only when exercised and thus shown through its effects. But power has both aspects to it. Only under certain conditions does capacity or potential power result in its actualization (this

is a theme which has received recent attention as a result of Agamben's interest in power as a potentiality; see Agamben and Wakefield 2014). Indeed, contingencies of all sorts intervene. It is precisely the ubiquity of causal powers that makes power beyond domination, something available everywhere, plausible. This approach can also "accommodate the fact that reasons and other discursive phenomena may be causes, that is the things that produce change" (Sayer 2010, 264). This is non-trivial in the sense that even domination over some humans and objects by other humans can involve the creation of consent as much or more than giving rise to resistance. Such examples of hegemony, people vesting their power in other people and objects, can thus be included within the reach of the more pluralized conception of power we are offering here (Agnew 2005).

The inherently spatial character of power under this formulation bears reiteration. If all of us regardless of perspective can agree that space does not exist apart from objects and people but is constituted out of them, as a relational model of space suggests, the emphasis on causal powers insists that "the exercise and effects of causal powers always depends on their spatial form and arrangement" (Sayer 2010, 267). Space is not simply a "reflection" or afterthought. Yet, also, as Sayer (2010, 267) rightly argues, "it is impossible for social theory to say much about the particular spatialities of social [or other] phenomena without moving to more concrete levels of analysis". That is precisely the task taken up by the contributors whose work is included in this book. Methodologically, the authors collected here, despite other differences, point well beyond the "calculative model" sketched above. Diverse geographies of proximity and reach involving diverse objects and people engaged in different activities require closely grounded explorations of the powers at work in each case. As Allen (2003, 193) convincingly argues, topological transformations of power in varied modalities (domination, seduction, etc.) may hardly be the final word but nonetheless offer a way of "side-stepping approaches that assume fixed distances, settled proximities, unproblematic extensions, linear projections and fluid transmissions as well as the totalizing reach of power".

This overall perspective entails a number of broadly philosophical positions that inform the chapters in this book and put it in opposition to alternatives such as relativism or positivism. The broadest and most fundamental of these is that the world/earth we inhabit is an open and not a closed system. In other words, contra positivism, the world is in flux and our efforts to "pin it down" via simple propositions and theories can never be finalized, or entirely certain. Nevertheless, knowledge is not immune to empirical checking. At the same time, therefore, contra relativism, the world/earth exists independently of the knowledge we have of it. Finally, it is to the powers of people and things that we should look to understand how the world/earth is constituted and how ways of acting/not acting produce different and similar outcomes across space and over time.

POWERFUL MODELS

The readings we have collected in this volume represent an attempt to think through the problem of how space and power have been made knowable as a couplet in human geography, for the most part beyond political geography. But by way of an introduction to the diverse work collected here, and unlike other synthetic overviews on the topic of power and space, we are not interested in forcing this conversation into what has become

a well-oiled disciplinary trope of progressive intellectual betterment focused on major epistemological and methodological disjunctures, or eras. That sort of disciplinary history, often guided by the comfortable premise of disciplinary evolution and enlightenment, has been told too many times in our opinion. We see in this quasi-evolutionary approach a version of storytelling that Foucault (2003, 72) called “Roman-style history” – although in this case the history in question is not that of the state but instead the way that contemporary human geography is narrated as a progressive enterprise which has successfully struggled with its troubled pasts. For example, so many histories of geographic thought either implicitly or explicitly celebrate geographers’ critical rethinking of past epistemological commitments as well as their dogged willingness to press on by developing different, and increasingly emancipatory, knowledges. Hence the obsession with “schools” as well as with epistemological periodization. Indeed, the way that the history of human geographic thought is usually taught recalls Bachelard’s (2002) analysis of scientific progress as an obstacle-laden process in which the various pasts of present scientific knowledge are reassessed as misconceptions and then replaced, or corrected (see also Kuhn 2012 on paradigmatic breaks between “normal” and “revolutionary” science).

Bachelard’s interrogation of scientific obstacles – or what Althusser (2005, 167–168) rephrased as epistemological “breaks” – is certainly not foreign to our interests. We appreciate in particular the destabilization of scientific progress implied by Bachelard’s discussion of epistemic breaks, and specifically the implications of his critique for the way that mainstream histories of science typically gloss knowledge production as a linear process. Moreover, Bachelard’s trenchant critique of the “conservative instinct” in science – when “the mind’s preference is for what confirms its knowledge rather than what contradicts it, for answers rather than questions” (Bachelard 2002, 25) – is very close at hand when it comes to our own doubts about modeling, which we unpack below. However, we also think that accounts of academic knowledge production focused on the problem of epistemological rupture alone can encourage an intellectually difficult celebration of the discontinuities between knowledges past and present – at the expense of considering the potential ways in which epistemological assumptions reproduce themselves across otherwise very different intellectual projects, as well as contexts. Indeed, the focus on discontinuity can sometimes manifest itself in terms of a “stages of development” storyline, and thereby strangely mimic positivist histories of science. This is evident in Bachelard’s own three-stage discussion of science in terms of empirics, spatial geometrics, and finally abstract thought – as well as his apparent interest in psychoanalysis as cathartic for science (Bachelard 2002, 20–21).

For this reason we think it important that when Foucault (1972) engaged with Bachelard’s work he drew attention to the reproduction, or stickiness, of rules governing what can be said, and how, and not to epistemic correction in order to make sense of the sometimes significant transformations which constitute the project of knowing. In Gutting’s paraphrasing of Foucault (1989, x), what we’re interested in about Foucault – more than Bachelard – are the assumptions which he suggested perpetually “hang over us” without necessarily being subject to conscious reflection or critique, and which therefore bind otherwise different epistemological projects together. In particular, Foucault’s problematization of the author and the *oeuvre*, as well as his archival approach to knowledge in which “the subject of the statement should not be regarded as identical with the author of the formulation” (Foucault 1972, 95), has got us thinking about the ways in which geographers have, with some important exceptions, theorized space and

power in surprisingly similar ways despite offering, over many decades, quite different accounts of how thinking about one requires at once a consideration of the other. As we explore below, the centrality of modeling to human geography is core to this continuity – but models which specifically neglect power in the plural, as above.

Let us quickly rehearse what students often first learn about the discipline in terms of its intellectual development. The story goes something like this. From the Berlin Conference through the turn of the twentieth century, human geography was defined by an environmental determinism which saw landscape and climate as wholly productive of certain forms of social and cultural organization. In our terms, the causal powers of the environment – climate, water, topography, fauna, and so on – trumped those of humans by directing human reasoning and action in predictable ways (Agnew 2011). This approach to space and power enabled a more or less fixed civilizational hierarchy of tropical and temperate populations and places, and moreover played an all-important role in legitimizing murderous colonial land grabs at a time when European states were being newly theorized as inviolable legal and political entities with more or less fixed borders and populations (Bassin 1987). The next step in the story is usually the consolidation of human geography under the sign of geopolitics in the early twentieth century, starting with Mackinder's heartland mapping of world geopolitical space in which only three named (European) political entities are actively featured – Great Britain, Germany, and Russia – and in which the rest of the world is present only in terms of a sweeping crescent-like biogeographical theater of conflict and geopolitical struggle open to those named countries. Then students learn that Ratzel and Mackinder wound up as constitutive ingredients of Hitler's *Mein Kampf* via German geopolitician Karl Haushofer, which then prompted Bowman's typification of geopolitics as "illusion, mummery, an apology for theft" – and of course his claim that the entirely different enterprise of geography was nonpolitical and soundly scientific (Bowman 1942). And indeed it is in the wake of Bowman's article – which in Smith's (2003, 289) memorable words "bricked a high wall between geopolitics and political geography" – that the first big epistemic rupture occurs in our story. Indeed, the second half of the twentieth century is set apart from the problem of environmental determinism and geopolitics by virtue of largely American geographers' interest in distancing themselves from the Nazi's ethno-territorial management of European space and (again) the principally American turn to idiographic regional science. At this point, the history of human geographic thought becomes about a rapid succession of significant epistemic breaks, in distinction to the continuity of environmental thought during the first half of the twentieth century. By the mid-1950s, the encyclopedic, list-style approach to geography which dominated among regional geographers was replaced by spatial science and the retooling of geography as a mathematical and geometric enterprise. In response to the way that spatial science actively displaced the problem of power, and championed an isotropic account of space, geographers then turned to Marx and developed a rich theoretical toolbox of spatialized political economic terms to reevaluate how it was that space and power were related. The epistemic bookends to this trajectory are the localities, feminist, and then poststructuralist-inspired critiques of political economy, developed during the late 1980s and throughout the 1990s, which held in general that political economy-minded geographers were too committed to the problem of class and capitalist crisis, and had misplaced other important aspects of the social-spatial dialectic organized around race, gender, sexuality, and nationality.

This way of narrating the emergence of modern human geography is not without merit, of course. Pedagogically the story is useful insofar as it draws our attention to some very real differences in terms of how space and power have been theorized as a couplet. The way that space and power are conjoined under environmental determinism in the early twentieth century and, for example, how space and power were theorized in the 1990s during the so-called poststructuralist turn, are in many important ways unlike. Perhaps the most obvious difference, which for most readers is going to hardly merit mention, is the overt discussion of power/knowledge at the heart of the poststructuralist turn which obviously provided for a robust and much-needed critique of the colonial predicates of environmental determinism.

However, we also think that this episodic account of the history of human geographic thought neglects similarities between the ways that these various “schools” of thought conceptualized space and power, as well as commonalities in the way that these schools deployed their otherwise different theoretical armatures relating to the geographical problem of power. As far as we are concerned, a core similarity – although certainly not an identity – concerns how human geographers, working in sometimes very different epistemic contexts, have in large measure not been capable of thinking of power as “powers”, or as power in the plural, as developed above. There are, again, some important exceptions to this claim, such as feminist geographers’ insistence on anti-essentialist theory (Graham 1992) and on the importance of theory which is relational, internally transformative, and open to the world rather than a “stable form” (Katz 1996). But it is nonetheless remarkable how frequently geographers have jumped epistemological ships and yet have continued to reproduce singularly conclusive models of how power is a spatial problem, and vice versa. Indeed, we see in the trajectory of geographic thought, especially since the Second World War, an arc of incredibly narrow theories of space and power, focused specifically on hunting down and isolating causal “smoking gun” accounts of the geography of power which as we see it are too committed to seeing the space/power couplet in singular ways, and moreover with determinate, model-like properties. As such, we see in the various “schools” of geographical thought narrated above a common modeling approach to space and power characterized overwhelmingly by certainty and closure – certainty in the sense of a mistaken conflation of explanation and prediction such that explanation is future-oriented, and closure in the sense of developing “in the last instance”, or slightly differently, narrowly paradigmatic, theories of space and power which are then routinely applied to real world case studies. In this way, geographers have not entirely transcended their various problematic pasts in the way that typical disciplinary, or sub-disciplinary, histories celebrate. Rather, geographers have remained trapped in a certain sovereign imaginative universe which, we would argue, is radically insufficient for grasping the complexity of the world as it is.

THE LIMITS OF DEDUCTION AND INDUCTION

One of the keys, for us, in grasping the epistemological ties that have bound human geographers since at least the environmental determinist period is a relatively recent rethinking of a core methodological and theoretical divide – not just in geography, but across the social sciences. This is the divide between so-called inductive and deductive

research. The difference between ground-up and top-down knowledge production, in which the general is inferred from the particular or vice versa, is often understood as fundamental. For example, the difference between deduction and induction is often narrated by human geographers in terms of a world-engaged “muddy boots” geography focused on the particular and a world-disengaged “office chair” geography focused on the general. Although there is very obviously a deductive/inductive split in human geography, which among other things maps onto significant debate about structure and agency as well as abstract versus embodied/situated knowledge production, we are not totally convinced by this distinction at the level of epistemology. Both inductive and deductive geography are, alike, committed to the construction of models, albeit differently, which are then to be put to not only explanatory but also predictive ends. One way of exploring this commonality is through showing the similarity of inductive and deductive approaches to knowledge production in that each “creeps up” on the real world in the sense of striving for certainty about the world as it is, with a clear preference for either an economy of terms or a solution-set via a core apparatus of (soon to be orthodox) terms. Moreover, both approaches are usually oriented around the goal of knowing worlds-to-come. In short, both approaches seek to make the worlds we live in permanently less surprising by merging explanation and prediction.

Here we find Henri Lefebvre’s work exceptionally useful. Lefebvre’s discussion of the society–space dialectic – in terms of “spatial practice”, “representations of space”, and “spaces of representation” – in his *The Production of Space* (1991) has been well examined by human geographers interested in a deductive approach to the problem of space and power. That is, human geographers have spent a lot of time reading Lefebvre on the production of space for core theoretical insights about the socio-spatial dialectic which can subsequently be brought to bear on the world. For us this has always seemed entirely mistaken; rather than a ruleset for how to infer the particular from the general, Lefebvre’s rumination on the ways in which space is produced has always struck us as an invitation to think differently – permanently differently – about the relationships, plural, between space and power. Indeed, that the first half of Lefebvre’s enormously complex and oftentimes internally inconsistent – or better, experimental – account of the production of space is consistently mined for a coherent theoretical edifice which can then be applied authoritatively to the study of the world seems to us a significant departure from the spirit in which Lefebvre wrote. For us, Lefebvre is hard to read if one is not prepared to read him dialectically – that is, as an experimenter whose words and ideas interact in a generative way and which are, productively, in flux (Shields 1998, 109–126). The coherent, social science-y reading of Lefebvre – which often involves the use of tables or matrices to sort out what he is saying, even if what he is saying remains fundamentally unsortable! – is also belied by his 1958 abandonment of the French Communist Party, from the left, which disclosed a constituent (or open) rather than constituted (or rule-bound) approach not only to spatial thought but to the world more generally. In this sense, we agree wholeheartedly with feminist geographers Buckley and Strauss who have pointed to the open, non-unitary, and incomplete “models” which populate Lefebvre’s writings. As Buckley and Strauss (2016, 632) put it, Lefebvre’s wandering approach to theoretical production and interest in the residue or remainders of formal, disciplinary explanations “challenges us to bring conflicting epistemological views into the frame through critical, scholarly encounters with different pathways to knowledge” (see also Kipfer, Saberi, and

Wieditz 2012). We also see value in Soja's (1996) emphasis on Lefebvre as a theoretical provocateur and intellectual itinerant, as well as Shield's (2013, 23) understanding of Lefebvre as a topological (constantly deforming) rather than topographical (fixed) thinker of space whose undisciplined approach to thinking and writing is missed by "a particularly American industry of translators and whips concerned about gaining Lefebvre epistemological and professional legitimacy".

But there is more at work in Lefebvre's writing than theoretical incitement. Lefebvre makes this clear in his *Critique of Everyday Life Volume 2* (2002) which at least in contrast to *The Production of Space* has been strangely neglected by geographers. In this crucial yet generally overlooked text (which may in fact reflect on its open and heterodox character, as well as its unmanageability), Lefebvre suggests that the distinction between induction and deduction is a mistake. There are obviously very real differences between deductive and inductive methods, for instance, the tendency for deductive methods to be disembodied and unplaced, or written from and about nowhere, whereas inductive work tends more to embodied and contextual work. But what Lefebvre insists on is that induction and deduction are only different in that they are coming at the problem of what can be known from different ends of a shared interest in modeling the world, that is, from the standpoint of the particular and/or the general. Moreover, Lefebvre argues – and for us this is by far and away the most important point – that both approaches are unhelpful when it comes to knowing the world as it actually is, as a fundamentally open system of relations between things-in-the-world.

For Lefebvre, a transductive – rather than inductive or deductive – approach to the problem of space and power is much better for addressing the complexity and openness of the world because it does not confuse the problem of explanation with the development of determinative, certainty-based models. Indeed, transduction refuses modeling as such, if by modeling is meant the future-oriented, parsimonious quest for certainty. As Lefebvre explains it, transduction takes seriously the in-formation or protean qualities of the world and indeed matches these qualities in the here and now with theory-building which too is always in-formation (or alternatively, in constant deformation), rather than settled. Lefebvre's claim is that the social world – he is mostly focused on the world of humans, which is an evident limitation, given especially the chapters in this book by Bauch, Clark and Hird, Steinberg, and Boyce – develops in the way that a crystal grows, that is uncertainly and capriciously, albeit leaving behind an identifiable and analyzable pattern. From this perspective, although explanation is important the future is not something that can be modeled with conviction on the basis of what has been explained. This disjuncture between explanation and futurity is due, Lefebvre suggests, to the excessiveness of things-in-the-world, and especially to the excessive character of the ways that things-in-the-world interact with one another. Another way of putting this is that remainders are of core concern for Lefebvre – what gets left out of a particular explanatory framework is what he returns to repeatedly in all three volumes of the *Critique of Everyday Life*.

Lefebvre's remainder-centric, transductive approach to knowledge production is akin to looking through the front windshield of a car with eyes wide open to the possibilities of the road ahead, at the same time as squinting carefully into the rearview mirror to see what has happened. Indeed, possibility and virtuality (rather than certainty) are core to Lefebvre's endorsement of transduction as a "never-ending prospective operation" and orientation to the world. As he writes (Lefebvre 2002, 117–118, italics in the original):

The classical operations of reasoning can no longer suffice. Induction turned fact into law, the particular into the general, and the contingent into the necessary. To draw its conclusions, deduction went from the general to the singular, from affirmation to implication, and from the necessary to the necessary. To these rigorous operations we would add the notion of *transduction*, which builds a virtual object using information, and which uses givens to arrive at a solution . . . transduction goes from the (given) real to the possible.

Moreover, Lefebvre explains the openness of transduction as an approach to the world, as well as a description of how things-in-the-world are defined by a perpetual state of becoming, as dialectical. Whereas many scholars think of dialectics as somehow fixed, Lefebvre reminds us that mobility is its core feature (Lefebvre 2002, 252):

Dialectical thought consists of a study of stabilities and structures which does not overlook the process of becoming, and of a study of the process of becoming which does not overlook stabilities. In short, it is a question of grasping structurations without omitting the process of becoming which dismantles them and which is already active within structuration per se.

Lefebvre's focus on the problem of virtuality, and his emphasis on dialectics as a dance between becoming and stabilities, leads him to critique what he calls "planetary models" of explanation which prioritize stability over becoming. For Lefebvre, the latter are centered and stable and emphasize a "single force" (2002, 247), as if the world is graspable as a snapshot and in unitary terms. He contrasts planetary models with a "harmonic model" of things-in-the-world which "enables us to represent something the planetary model could not: dual interactions (positive and negative, attraction and repulsion). Via this model we can turn our minds to representing a veritable complex field: spectrums, transitional, static states, harmonics, the determinable relation between the finite and the non-finite (between the continuous and the non-continuous" (2002, 248). For Lefebvre, the virtual (or emergent) aspects of the harmonic model move against the planetary model in the sense that "stabilities and periodicities emerge from a set of fleeting and profound phenomena: transitional and transitions" (2002, 256). Here, by way of a brief qualifier, we should note that Lefebvre is using the term planetary in a way which does not correspond well with the way that it is sometimes used by postcolonial scholars – that is, as a category of excess, difference, and alterity (Jazeel 2017). Indeed, for Lefebvre the planetary negates excess, difference, and alterity.

The singular – or for Lefebvre, planetary – ambitions of some human geography approaches to power and space, as above, have been well excavated. For example, the worldwide division of peopled places into tight climatic/cultural couplets via environmental determinism has been a sustained object of critique (Livingstone 1992, 177–303) such that anything written by human geographers today that even hints at the possibly structuring properties of non-human environments is viewed with deep suspicion. Clark and Hird have more to say about this problem in their chapter on micro-organisms in Part IV of this book.

The planetary coordinates of more recent approaches to space and power too have been roundly problematized. Cox (1995), among others, pointed out that a deeply flawed logic of placeless substitution and abstract repetition underwrote spatial science, and subsequently impeded any serious relational consideration of space and power. Indeed, Cox argued that spatial science's isotropic, geometric fetishism presumed little (or no) meaningful variation in the ways in which markets and transportation networks could be

analyzed, or for that matter organized, as if the hexagonal structure of Toledo, Ohio could somehow make sense of Toronto, Tehran, Mumbai, and so on. And subsequent to Marxist geographers' critical engagement with spatial science, feminist geographers, among others, pointed to entirely similar simplifying assumptions at work in political economy approaches to space and power. For example, in early and enduring pieces Massey (1991a, 1991b) and Deutsche (1991) reflected on the ways in which the "boy's town" of Marxist political economy repeated the same retreat into placeless and yet planetary abstraction that the latter charged was typical of spatial science. The "planetary problem" here was twofold. On the one hand, Massey argued that the world under examination by Marxist geographers was far more complicated than the abstract and non-site-specific problem of class and capitalist crisis, and as such required grounded and embodied research (for a more recent critique of capitalo-centrism, see Gibson-Graham 2006). On the other hand, Deutsche charged that Marxist geography required misrepresentative theoretical readings of its detractors – a sort of disembodied and planetary misappropriation of multiple theoretical texts in the name of a coherent *oeuvre* – in order to work. In short, Massey and Deutsche showed convincingly that planetary modeling required an abstract and disembodied position with respect to both the world and feminist research about it.

The debate over Marxist geography's abstract planetarity is hardly over, as evidenced by a flurry of recent commentaries by prominent feminist and postcolonial geographers in response to calls for an "urban theory without an outside" (Brenner 2014). In his argument for an "urban theory without an outside", Brenner is interested in correcting what he sees as an overly stark urban/rural imaginary in urban studies. This is arguably an important move, given especially Brenner's argument that urban sites are processes and not bounded city-like containers (Brenner and Schmid 2015, 165–168). However, the jump from the problem of pervasive urbanization, or what Brenner and Schmid call "landscapes of extended urbanization" (2015, 162) to a theory without outsides, particularly given their voiced concern over retreating from core concepts and theories, implies the possibility of developing a conceptual and explanatory apparatus about "the" urban in the singular and without remainders. Roy (2016, 2015) has responded by arguing that the globality of a phenomenon – in this case, urbanization – should not imply universality and moreover can't be read as requiring universal concepts. Others have emphasized the evacuation of embodied context in the planetary urbanization approach, in favor of a larger non-place-specific or more-than-global framing. For example, Derickson (2015, 650) notes that the strongly deductive inflection of the "urban theory without an outside" argument discloses a "non-placed perspective" with little to say about actually existing everyday, which are instead to be investigated in the wake of theoretical development (see also Peake 2016, 832 on the planetary urbanization thesis as "largely devoid of urban life in its various agentic forms"). For us, given arguments in the early 1990s by localities scholars about the limitations of big picture political economy models and the need to investigate what Massey (1993) called "power geometries", as well as more recent research by feminist economic geographers problematizing the abstract and disembodied "spaces of globalization" which feature in mainstream (as well as critical) economic geography (Nagar et al. 2002), it is indeed remarkable that Derickson has to remind geographers today, in the context of the planetary urbanization debate, that "this way of knowing and associated politics has always had a problem with understanding and accounting for difference . . . as a lived experience of intersectional power structures as well as a recognition of the way

in which that lived experience makes available different places and spaces from which to know” (Derickson 2015, 650; see also Oswin 2016 on the elision of feminist and cultural turn debates from the early 1990s in contemporary urban studies scholarship).

Perhaps less well reflected upon, however, are the planetary aspects of work on space and power that emerged in the 1990s, as part of the so-called poststructuralist turn in human geography. Although the “cultural turn” in human geography is now frequently narrated as a deconstructive coming-apart-at-the-seams of modeling, especially by its critics, we see something quite different at work. It is important to stress that the poststructural turn did indeed pluralize the discussion of space and power in useful ways. Foucault’s critique of sovereign-juridical power, for example, via his discussion of differently organized disciplinary and biopolitical arts (and spaces) of governance, played an all-important role in getting geographers, and especially political geographers, to think of power outside the “territorial trap” of the modern state system (Agnew 1994), as for example evidenced in so-called critical geopolitics research during the 1990s (Ó Tuathail and Dalby 1998). Certainly as a result of engaging with Foucault’s work, it was difficult for political geographers, by the end of the decade, to engage with the question of space and power through only the lens of the territorial state.

At the same time, the way in which Foucault’s work was taken up by political geographers (and more broadly) during the 1990s is very instructive. Much as we’ve discussed with respect to Lefebvre’s work, above, we’ve always understood Foucault’s exploration of sovereign-juridical, disciplinary, and biopolitical spaces and strategies of governance not as a strict typology or periodization of spatialities of power but as a prompt to investigate government beyond the narrow confines of a centralized, neatly bounded state-based problem of domination (Coleman and Agnew 2006). In this sense, we’ve always thought of Foucault primarily in terms of getting out from underneath the extraordinarily limiting assumption that governmentality – that is, the production of government as a problem worthy of investigation by those who govern (Gordon 1991) – and sovereign-juridical power are the same thing. And yet so much of what has been written, in human geography and elsewhere, with reference to Foucault’s work on this question, which he famously defined in terms of recasting state power in the model of the Leviathan as but an “episode in governmentality” (Foucault 2007, 248), sought to isolate the core characteristics of his three principle governmentalities – rule via sovereign-juridical power, rule via disciplinarity, and rule via biopolitics – with the aim of developing coherent theoretical models of each which could then be used in rather straightforward ways to make sense of the world of power. This was evident in the way that so much that was written about Foucault on the topic of power, even as it emphasized questions of “how” government was accomplished (which we see as a necessarily open-ended problem), condensed variations in power’s practice and representation to several core, identifiable *dispositifs*. In this way, Foucault’s discussion of power became, perversely, a way of enclosing – and closing down – the complexity of governance and governed worlds into one of three new models.

A much more compelling alternative would be to understand Foucault’s various investigations of power as an exploration of the diagrammatic qualities of government, or as unstable, uncertain, and yet concrete (Deleuze 1988). Here we follow in particular Grosz’s reading of Foucault (and Deleuze) as a theorist of the “outside”. In response to the apparently poststructuralist mantra that “there is no outside”, Grosz argues that there is a constitutive outside not only to the world as it exists but to thought about the

world too. As she puts it, “the outside is a virtual condition of the inside”, and not a fixed limit (Grosz 2001, 66). And moreover: “Thought confronts us necessarily from the outside, from outside the concepts we already have, from outside the subjectivities we already are, from outside the material reality we already know” (Grosz 2001, 61). The diagrammatic – uncertain and yet concrete, or following Grosz, outside – aspects of Foucault’s work on power is what we understand by his oft-repeated focus on the “micro”. For us, the problem of the “micro” does not mean a miniaturization or re-scaling of power to account for somehow “lesser” or “finer” levels of analysis; rather it refers to the twists and turns of power as an actually existing phenomenon. For example, in *Discipline and Punish* (Foucault 1978, 139) Foucault describes a “micro-physics of power” as “acts of cunning, not so much of the greater reason that works even in its sleep and gives meaning to the insignificant, as of the attentive ‘malevolence’ that turns everything to account”. Malevolence, or “turning everything to account”, is for us the key part of this excerpt, even though it seems to have received very little attention, especially by human geographers. What is this malevolence? Elsewhere, Foucault (1977, 182) contrasts “good sense”, which “extracts the generality of an object while it simultaneously establishes the universality of the knowing subject”, to an “ill will”, which instead perverts “good sense and allow[s] thought to play outside the ordered table of resemblances”. In these terms, malevolence challenges sedimented and certain systems of representation and knowing at any scale – “the greatest and the smallest, the brightest and the darkest” – which Foucault (1977, 183) attributes to the “good will” or “common sense” of an “immense table of measurable differences”. In short, the micro is not about scale as such; instead, it designates a shift in how we go about conceiving power such that mobility and uncertainty is a core feature. The micro is, as such, about the difficulty of modeling the problem of power.

In contrast, as we’ve already hinted, we would argue that Foucault’s work was in large part taken up by human geographers in the 1990s in a strictly categorical and model-like manner: in order to discretely multiply the spatial models of power then in circulation rather than to rethink the dynamism of government and its object worlds per se. Indeed, what was missing from these conversations was Foucault’s underlying reason for insisting on the multiplication of government beyond the state: the fundamental excessiveness – or as above, openness – of the actually existing world to projects of governance, be they state-based or otherwise (see for example, Foucault’s brief remarks on multiplication and displacement in Deleuze and Guattari 2000, as well as his evisceration of categorical analysis in Foucault 1977). It was explicitly in the context of the increasing demographic and political economic complexity, mobility, and hyper-connectivity of modern social life that Foucault multiplied government – but in order to recast government as a dynamic field of experimentation and constant reinvention. In this we see no great difference between Foucault and Negri’s (2005) work on government as parasitic on, and effectively always two or three steps behind, the dynamic social, political, economic, and cultural worlds which are the objects of its governance.

Our point, then, is to highlight the centrality of planetary models in human geography research on space and power. It is as if planetary modeling begets planetary modeling. But indeed, things have taken somewhat of a different course over the past decade. There is not the room here to comprehensively address what we see as somewhat of a sea change in human geography research on space and power – mostly from geographers

working outside political geography. And indeed, the collection of chapters which follows is our attempt to curate some of the most exciting work in human geography from this “harmonic” standpoint, to borrow Lefebvre’s phrase. But we would be remiss to not explicitly mention the explosion of human geography scholarship on power as affect (Woodward 2014, 2016), power as object (Meehan, Shaw, and Marston 2013, 2014; Shaw and Meehan 2013; Boyce 2015), power as effect (Painter 2010), human and non-human materialities (Steinberg 2010; Steinberg and Peters 2015; Sundberg 2008), spatial assemblages, everyday geopolitics (Pain et al. 2010; Bernazzoli and Flint 2010; Hyndman and Giles 2017; Williams and Boyce 2013), aesthetics (Saldanha 2013), social reproduction (Katz, Marston, and Mitchell 2016; Strauss and Meehan 2016), and, among other things, topology (Dixon and Jones 2014; Allen 2009; Belcher et al. 2008; Lash 2012; Secor 2013). This small but provocative collection of research has, in our view, substantially altered the discipline’s discussion of the power/space couplet – and we might add, profitably so – in the direction we’ve indicated above. This is obviously only a partial citation of the existing research, and we will do more signposting and discussion in our part introductions. But as a whole, this research is primarily attentive to the in-formation – Lefebvre would say transductive – quality of power in specific sites, much in the way that Marston, Jones, and Woodward (2005) have explored in their work on “flat ontologies”.

YOU HAVE TO GRUB AROUND

What does our argument about power in the plural, as well as transductive “modeling”, mean for how we do geography? In our view it points away from spatially broad studies that move shallowly over multiple locations searching for universal correlations to ones that focus in a grounded way on how selected phenomena relate to one another in specific settings or places. This does not mean that such studies are idiographic – a term used generally by nomothetic enthusiasts to demote the study of the particular. Rather, the move away from spatially broad studies means, in our usage, that causal relationships need to be established before engaging in any sort of generalization (not universalization) over space. Recent debates in geography over the use of the language of space versus place and regions reflect these concerns (Agnew 2013; Riding and Jones 2017). This research shows that place differences and similarities about different phenomena are made out of the joint effects of the operation of both local and more long-distance causal powers.

Broader descriptive empirics can figure importantly in identifying wide trends and trajectories, but it is to detailed case studies in specific places that we look to establish evidence of the workings of causal powers, or as we’ve described it above, power in the plural. This is not a naive empiricism, but an argument for the priority of grounded theory, or theory developed through cases. Our argument for case studies is somewhat different from that usually used to defend them. Typically, case studies are viewed as particularistic, even idiosyncratic, as against the universality of large-scale correlational studies. This is certainly how feminist geographers have been (mis)received in the planetary urbanization debate, as above. Roy (2015, 2016), for example, has argued that planetary research programs tend to reduce historical and geographical difference to empirical variation, thereby demoting empirics to the status of a case study which poses only a locally modifying (but not meta-transformative or constitutively dialectical) influence on theory.

With efforts at establishing the representativeness of a given site or setting a case study can be seen as providing inductive evidence for some theorized causal relationship. This is often how experiments or, in the social sciences, quasi-experiments are conducted through either comparing before and after trends following a signal event (a change in legislation in one jurisdiction compared to another, for example) or a control and treatment group/setting. Deductive case studies involve piecing together more complex strands of evidence in a particular setting showing a pattern of connections between causal powers that can then be explored in other settings in the face of different contingencies. Our preference is for what can be called transductive case studies, particularly when the study involves the joint operations of peoples and objects such as technologies. Here the stress is placed on tracing the mutual interactions, compatibilities, and conflicts between various actors in producing outcomes in a particular setting that can then be compared to others, if grounds for generalization (and again, not universalization) exist. Process tracing needs to be clearly established before attention is given to what has been called the external validity or generalizability of a given finding. Part of the problem of the social sciences in general and geography in particular has been the rush to generalize before causal efficacy has been established. Transductive case studies further, and crucially, assume an openness to flux and movement as opposed to fixity and closure. Such case studies are in our opinion the best way to engage in the process tracing that reveals the workings of causal powers.

Several important debates from the field of geography inform our overall perspective on methodology. In the first place, for us explanation and prediction are not equivalent. To those who would see them as the same, if you can predict the fit of a curve you are also explaining the same thing. One of the key differences between a positivist and a realist approach lies in this distinction between explanation and prediction. Positivists, with their penchant for inferential statistical models, tend to make no distinction. In contrast, the realist view is that explanation and prediction are completely different from one another. You can predict something statistically without accounting for the causal efficacy of the people and objects involved in that case. So, an identity between prediction and explanation is not our ideal. Second, rather than accepting the multi-scalar conception of place as coming about as a result of local and long-distance relations, some have either argued for a rigid set of hierarchical geographic scales in which one scale is “in the last instance” the most determinant (usually the global or the national) or conceive of the world in terms of “flat ontology”, as above, in which geographic scales mask the deeper role of networks over space. We see the latter as fitting better with the approach adopted here partly because it identifies a multiplicity of local sites at which networks of relationships between people and things emerge together, as with places, and because it also resists the urge to impose an a priori template such as a hierarchy of presumably extant scales on the world through which it is then interpreted. Third, in a significant departure from much contemporary geography where a priority has been given to questions of epistemology or “how we know” rather than to ontology or “what exists”, we are ultimately arguing for the utility of a strong ontology of things. Until recently issues related to language – for example under the sign of social construction – have been given pride of place. Our purpose is not to dispute the importance of language, or discourse. It is more to reframe the purposes of research away from the primacy of such concerns. It is much more to claims about

how the world works rather than to how we think and write about it that this book is devoted.

In a way, what we are proposing could be seen as a return to regional geography with its integrative rationale, albeit in a very different manner from the descriptive empiricism that characterized that approach in practice. But regional geography was not always the apparently intellectually arid activity, the moribund backwater, that it was portrayed as by proponents of spatial analysis. Indeed, Hartshorne's (1939) classic work can be considered as exemplifying a conception of causation involving multiple powers not that distant from the one championed here (Agnew 1989). These included a focus on regional/local element complexes, an absence of privileging particular spatial units (such as the national territory), locality–larger region linkages, and commitment to a realist notion of causality. Of course, other features of Hartshorne's work detracted markedly from this message, particularly his obsession with policing geography as a separate field and tracing everything geographical back to previous authorities.

ORGANIZATION OF THE BOOK

A brief last word on organization. We are framing this book as a critical overview of the spatialities or geographies of power, but not in terms of developments within any specific subfields of human geography. In our experience, formal disciplinary and/or sub-disciplinary overviews often result in one of two significant problems. On the one hand, breaking down theoretical innovations into disciplinary subsets or containers too frequently masks broader theoretical innovations, synergies, and debates which are taking place across and between subfields, and in so doing segregates the essentially disruptive and lively work of theoretical production as the result of distinct and easily identifiable intellectual sub-communities. On the other hand, sub-disciplinary overviews, by virtue of their abstract and broad progress-report-like quality, often struggle to connect theoretical debates to “actually existing” research contexts, and so reify the realm of theory as something floating impossibly above the real world. In this volume, our goal is to push back against these two tendencies by producing a series of carefully themed chapters which (a) speak to developments and debates about the spatiality of power in a theoretically rich and sophisticated way, and with an emphasis on conceptual exchanges across sub-disciplinary silos; and (b) ground theoretical developments and debates on the spatialities of power in cutting-edge research projects and/or methods such that what's at stake in the adoption of a particular theoretical approach to power and space can be brought into clear focus. The former avoids a sequential parsing of particular debates on power and space as proper to specific subfields, and the latter connects theory to empirics, which is closer to how geographies of power have actually been formulated in practice.

The chapters that follow are organized thematically into four parts that cover the main areas in which much of the contemporary work on geographies of power is concentrated: bodies, economy, energy and environment, and warfare. These labels should not be given too much emphasis as replacements for the more conventional disciplinary categories. Rather, our goal in using these categories is to interrogate and shake up thinking about power and space, and to not reify any existing or new sets of disciplinary divisions. Rather

than introduce all the chapters here, we preface each part with a brief preparatory essay on the chapters in the part in question. We will also return to some of the chapter material in our short conclusion at the end of the collection.

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