# Chapter One
# Critical Human Geography Today: A Multitude of Approaches and Concepts?



Just over half a century ago, David Harvey (1969: p. 486) ended his *Explanation in Geography* with the grand statement that 'By our theories you shall know us'. As of the mid-2020s, it is not an exaggeration to claim that Geography is characterized by a multitude of (critical) approaches and concepts, but perhaps too few substantive theories explaining diverse geographical phenomena that can be and/or have been well adopted in the wider social and natural sciences. In critical human geography today, we are now better known for our nuanced interpretations and trenchant deconstructions of representations in all sorts of past and present discourses, texts, and images, our sophisticated understandings and accounts of diverse embodiment, intersectionality, practices, and encounters in everyday life, and our highly contextualized and place-based critiques of unequal and oppressive capitalist relations in society and space. In most of these critical geographical approaches well informed by different social theories and continental philosophies, however, it remains unclear what theory really means and if explanatory efficacy is important for theory and the theorizing process.

Indeed, the term 'theory' is often a misnomer or a 'placeholder' in these critical approaches grounded in specific social *theories*. For example, leading geographical proponents of poststructuralism (actor-network theory in Murdoch, 2006), postcolonialism (postcolonial theory in Jazeel, 2019), and new materialism (non-representational theory in Simpson, 2021) in Geography[1] have made clear that these approaches are not theory per se, but perhaps should be conceived more as methodology (or a 'method to describe' in Latour, 1996, 2005; and a 'style' of theorizing

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in Thrift, 1996, 2007; Anderson and Harrison, 2010a). To Jazeel (2019: pp. 14–15, 227; original italics), 'postcolonialism is best conceived not as a theory per se, but instead as *methodology*. If postcolonialism is opposed to information command, if much of its promise is in its persistent effort to unsettle the contours of power, it is indeed a contradictory exercise to map or survey postcolonialism as some*thing* as settled and authoritative as a "body of theory"'. While Nigel Thrift (1996: p. 30) describes in *Spatial Formations* his non-representational framework as a 'modest theory' and 'a theoretical synthesis… with a lighter touch', Simpson's (2021: p. 7) recent review of diverse geographical thoughts in non-representational theory notes that 'at the outset, much of the reference here was in the plural and was about "thinking" rather than a "theory." "NRT" really acts as an umbrella term for a wide range of ideas, concepts, theories, and approaches largely originating beyond the confines of geography which have in common concerns for practice'.

Despite Harvey's (1969) passionate call for 'our theories' emanating from Geography, there are now seemingly many different conceptions of what theory means in these critical approaches and/or 'isms' – universalistic, predictive, interpretive, explanatory, representational, non-representational, discursive, nomadic, and so on. If actor-network theory (and its variant in assemblage theory), postcolonial theory, non-representational theory, feminist theory, and the likes are not necessarily theory per se as their names suggest, what then is theory and how does it matter in Geography and beyond? How do we know a theory when we read or see someone's 'theoretical' thinking in words and textual representations? What might constitute the basic tenet(s) of theory and how might we go about practising theory development (i.e. the theorizing process)? What are the key considerations for such theorizing?

I believe these are important questions and reflexive issues for academic geographers, graduate students, and like-minded social scientists for/to whom this monograph is primarily written and speaks. But given the extensive theoretical and philosophical literature underpinning this work, the book is inevitably pitched at a fairly high scholarly level of abstraction that might not be suitable for undergraduate teaching. Instead, it represents a provocative effort in geographical scholarship to interrogate and complement the diverse calls in critical social science for grounded theory, weak theory, modest theory, dirty theory, minor theory, mid-range theory, and so on. To me, all these epistemological efforts necessitate a clearer sense of what theory (and explanation) actually means in our scholarly pursuit. Overall then, this monograph seeks to examine the nature of theory *and* explanation in contemporary geographical enquiry and to provide a potential focal point for rethinking theorizing in Geography. Its initial four chapters are grounded in a critically generous reading of different approaches in human geography and their diverse conceptions of theory (and explanation). In this sense, the book is written more for human geographers than peers and colleagues in physical geography, GIS, and remote sensing. This latter 'half' of Geography, however, can still benefit from reading this work in order

to gauge a sense of *critical* theory development and broaden their epistemological apparatuses for causal theorizing that will go well beyond the conventional scientific approach to knowledge production.

Echoing the early Harvey, I maintain that theory is what defines an academic discipline and, in the grand scheme of things within academia, 'our theories' in Geography are currently perhaps still rather limited in number, scope, and impact. But this book's similarity with Harvey (1969) actually ends there. We now know Harvey's theories then were positivist explanations based on objective laws and empirical regularities – space and time were fixed, absolute, and independent of human conceptions. Contrary to this positivist Humean law-based approach (and those by other 'space cadets' of spatial science during the 1960s well described in Barnes, 2001, 2011), I have no intention at all to prescribe a common standard or model (i.e. what *all* geographical theories should be), nor a common explanatory framework (i.e. a specific geographical theory of some-*thing*/*event* in space and place). This seemingly 'authoritarian' goal is unrealistic and virtually impossible precisely because of the actually existing multitude of approaches and concepts in critical human geography today (to be discussed in depth in Chapter 2).

Since the 1970s, human geography has undergone many rounds of ontological and epistemological 'turns' so much so that theory and explanation mean rather different things to different geographers – even the concept 'difference' is still highly contentious today (Cockayne et al., 2017)! Despite these 'turns' (to be addressed in this book), the positivist norms of scientific approach remain fairly enduring in human geography and mostly dominant in physical geography, GIS, and remote sensing today. In certain subfields of human geography, research funding institutions often favour the quantitative testing of, and experimental approaches (e.g. randomized control trials) to, measurable variables as the proper 'scientific' explanations of socio-spatial outcomes. On the brighter side though, critical human geography is quite unique and exceptional in the wider social sciences wherein many larger disciplines, such as Economics, Political Science, and Sociology, have devoted specific subfields, faculty hiring, and even journals to *specializing* in 'theory development', i.e. economic theory (*Journal of Economic Theory*), political theory (*Political Theory*), and sociological theory (*Sociological Theory*). In Geography as a whole, we do not have such a ghettoized subfield, hiring practices, and journals known as 'Geographical Theory', except perhaps a few self-proclaimed theory books such as this one (and Harvey, 1969; Gregory, 1978). I believe this geographical exceptionalism is a good thing because it allows us to integrate theory and theory development into our everyday geographical research, scholarship, and practice.[2]

Still in these highly contested and sometimes overlapping turns in critical human geography, there is often a direct relationship between *ontology* (theorizing the nature of reality and existence in philosophy and metaphysics) and *epistemology* (our theory and knowledge of actually existing empirical worlds). Theory can exist in both domains of knowledges, though ontology tends to

be much more philosophical and abstract. At this moment in the mid-2020s, 'What theory?' has ironically become a rather difficult question to answer. Geographers have engaged in all sorts of theorization, from ontological objects such as human subjectivity, mind and the body, political-economic structures, and more-than-human things and matter in general, to social constructions through representations and discourses, and experiential encounters and sensuous apprehension (e.g. affect, emotion, feelings, and so on). Amongst these many 'isms' representing different approaches to theorization in human geography, why and how do theory and explanation matter and/or work? This is the central focus of this book that advocates two things: first, theory and explanation as the *raison d'être* of human geography; and second, explanatory theories, one of the several possible kinds of theorizing, as its normative, context-specific, and practically adequate contributions to the social sciences.

More specifically, this book (re)examines why an explanatory theory might be useful in certain kind of geographical enquiry and how it can be better developed (i.e. theorizing) through *mechanism-based thinking* informed by critical realist and relational thought within Geography that has been recently revitalized in the broader social sciences. Avoiding what Jazeel (2019: p. 210; original italics) terms 'authoritarian theorization', my approach to theory and explanation – not as 'some-*thing* in which to specialize' but as a normative practice – might allow for more epistemological possibilities for crossing what Cox (2014: p. vii) describes as 'a highly fragmented field' in Geography characterized by 'a division by theory and method'. If well executed in the book, this approach can focus our attention on rethinking how we might better theorize and explain geographical realities. Defending sociologist Anthony Giddens' insistence on the importance of doing social theory in a particular way, Thrift (1996: p. 61) makes this point clearly by recognizing that 'theory is quite simply a way of clarifying one's ideas for emancipatory purposes. In other words, theory is limited, but it is still important'.

While many geographers tend to describe (and/or blame on!) different critical approaches and epistemologies as 'social theories', this book takes a more modest and specific conception of theory (and explanation). It does not seek or advocate social theory as such – these theories have much broader historical reach and societal coverage, from capitalism in Marxism to human-nature relations in poststructuralism (e.g. actor-network theory) and unequal power relations in feminist and postcolonial theories. While engaging with these approaches and their epistemologies, I focus on the explanatory nature of theory and develop a causal mechanism-based approach to theory and explanation in/for Geography, with the prospective view that it might enable our discipline's explanatory mission to be better accomplished in the next one to two decades. I believe this epistemological task is imperative and timely in the present turbulent world in which radical intellectual critiques seem to have lost some of their public appeal and trust in many democracies. Revisiting theory and explanation in Geography can be *one* way forward to rebuild better the analytical rigour and public

relevance of our discipline. It can offer a strong(er) defence of the importance of critical scholarship in engendering the common good and our collective well-being against the sort of anti-intellectualism so eloquently critiqued in feminist historian Joan Scott's (2019) *Knowledge, Power, and Academic Freedom*.

While grounded more specifically in *some* of these critical approaches – relational thinking and realist philosophies,[3] this book does not seek to 'spatialize' these approaches by focusing on their conceptions of space and place. Instead, I draw upon these critical approaches to reorientate our attention to rethinking theory and explanation in/for Geography. Part of my purpose here is also driven by the lack of dedicated work on 'theory' and/or 'explanation' in recent human geography handbooks (e.g. Agnew and Livingstone, 2011; Lee et al., 2014; Aitkin and Valentine, 2015a). This lacuna is somewhat surprising since there are some relevant chapters in earlier collections for undergraduate teaching prior to 2010, e.g. 'theorizing' in Hubbard et al. (2002: ch. 1) and 'explaining' in Cloke et al. (2004: ch. 9).

## Main Argument and Approach

Before I delve more deeply into the book's key caveats and considerations in this chapter and contemporary geographical thought in Chapter 2, let me state my arguments more explicitly for the kind of theory and explanation to be pursued in this book. When we study a particular geographical phenomenon (e.g. place-based subject experience, inner-city decline, social movements, regional restructuring, or geopolitical conflicts), we can go about describing it in great detail and accuracy. In the more recent forms of geographical enquiry inspired by critical social theories since the late 1970s, we witness theory as uncovering social structures determining human action in structural Marxism and their trenchant critiques in the forms of poststructuralism, postmodernism, postcolonialism, and other thoughts (e.g. feminism, post-phenomenology, and posthumanism). In these critical 'post-' thoughts, theory is often abstract, discursive, and situated – spaces of social relations are discursively (de)constructed and contingently (re) framed through specific historical-geographical interrogations. Causal relations in these critical theories tend to be vague and indeterminant due to their 'flat ontologies' (Marston et al., 2005; Jones et al., 2007; Ash, 2020a) and/or commitment to heterogeneous associations and assemblages (Murdoch, 2006; Anderson et al., 2012a; Kinkaid, 2020).

Whatever one's epistemological position though, I believe a theory is likely built on existing or new concepts that necessarily abstract from material realities and/or social formations to form a set of meaningful and comprehensible statements. These theoretical statements can be interpretive, explanatory, or even normative. In a nutshell, all theories are an abstraction of the empirical world, but not all theories are explanatory of this actually existing world and even fewer are

causal in their explanations. Just because a 'theory' – with the word 'theory' in its title – appears to be highly abstract and discursive does not necessarily mean it is an explanatory theory, and this is quite a commonly misunderstood syndrome in many critical approaches. While some of the above-named critical thoughts in human geography prefer a more open-ended and discursive approach to theorizing, this book argues for an *explanatory* kind of theory and theorizing. Here, I adopt sociologist Richard Swedberg's (2014: p. 17; emphasis omitted) simple definition of theory as 'a statement about the explanation of a phenomenon' and his view that '[a]n explanation represents the natural goal of theorizing and completes the process of building out the theory' (p. 98; see also Elster, 2015: p. 8). Theory, in short, is more than 'organized and patterned sets of ideas' (Cresswell, 2013: p. 7) and/or 'ways of knowing and being' (Aitken and Valentine, 2015b: p. 8); and explanation should go beyond interpreting, understanding, accounting, experiencing, making sense, critiquing, interrogating, (re)thinking, contextualizing, and so on of events, practices, and processes to uncover their causes that really make things happen in society and space.

The art of this explanatory theorizing, however, is a much more complicated and variegated thought process and practice. This book gestures towards a non-deterministic and yet mechanism-based approach to theory development and causal explanation in Geography. This kind of causal theory should be explanatory in nature, and its explanatory power depends on the identification and specification of mechanisms connecting cause and outcome within particular historical-geographical contexts. These causal mechanisms can be related to material processes, but also discursive practices or, as described in Jazeel (2019: p. 17), 'representational mechanics' – they clearly go beyond the primary idea of deterministic 'underlying structures' in the earlier Marxian thought that has been much critiqued and eschewed in poststructuralist and postcolonial approaches. In this sense, the book is as much an epistemological project as a normative one (see later section on 'key considerations'). In fact, I will argue that all epistemological debates and positions, whether in their empiricist, positivist, realist, poststructuralist, or feminist persuasions, are normative because they seek to justify or even normalize the importance, and sometimes the dominance, of a particular approach to situated knowledges and theory production (see also Agnew and Livingstone, 2011; Cox, 2014; Johnston and Sidaway, 2016).

In writing this book, I am fully aware that this mechanism-based conception of causal theory represents only *one* particular view of what (geographical) theory can be in an epistemological sense. I certainly do not pretend that this explanatory kind of theory represents the universe of all possible theories. Nor does the book provide a comprehensive ontology of the open-ended socio-spatial world for which this kind of theory can be developed. Nevertheless, I ground my argument for causal theory in relational thinking, critical realism and its more recent revitalization in speculative realism, and mechanism-based thought in the wider social sciences.[4] Engaging with these influential thoughts on mid-range

theorizing and social mechanisms, this book aims to offer a clearer conception of causal mechanisms in order to speak to the kind of 'processual' or process-based theorization in the existing geographical literature and the wider social sciences.

Taken together, this book focuses on the relevance and usefulness of mid-range theories in geographical research and the importance of mechanism-based explanations in such causal theories. While the days of developing grand (social) theories for such complex geographies ranging from uneven global development to situated practices and embodied experiences in everyday life are perhaps over, we certainly still need less macro/planetary and more 'ordinary' theories that straddle capitalism's continuous reconfigurations and the changing dynamics of our everyday life and practices. These mid-range theories can focus on the more specific dimensions and unfoldings of these uneven developmental trajectories and embodied social practices such that they can be less 'essentialist' and 'reductionist'. Mid-range theories might also be a more productive way to theorize socio-spatial changes in an intellectual world of multiple and, often, conflicting approaches and in the post-pandemic world of far greater complexity and unpredictability. These theories can be helpful in uncovering causal mechanisms without the methodological commitment to theorizing the deep, deterministic, and totalizing structures of social relations, as manifested in certain extreme versions of geographical historical materialism.

While pushing for explanatory goals, these mid-range theories can also avoid the overzealous universalistic generalizations and acritical claims in positivism that, as argued by Cox (2014: p. 28), became the Achilles heel of the 'quantitative revolution' in human geography. Last but not least, mid-range theories might be more 'transferrable' across different social science disciplines due to their explanatory concern with specific domains of, and events/episodes in, society and space. This in turn provides new directions for Geography's future engagement with the wider social sciences and the development of relevant research agendas in geographical thought. Ultimately then, this book's examination of theory and explanation emphasizes the analytical significance of mid-range theories, contextualized explanations, and causal mechanisms in their variegated forms – from historical-material processes to discursive formations and social practices.

Before I pursue further this kind of mid-range theories and mechanism-based explanations in later chapters, this opening chapter, together with the next chapter on contemporary geographical thought, makes the case for revisiting theory and explanation in Geography by tracing its changing intellectual backdrop and context since Harvey (1969) and providing the necessary epistemological grounding in different critical approaches in human geography today. My primary focus in these two initial chapters is on critical human geography and its multitude of approaches and concepts since the 1990s in order to be more contemporary and to presage the kind of analytical geographies to be developed in later chapters. Taken together, both chapters situate the conceptions of theory and explanation in different epistemological approaches, such as structuralist,

poststructuralist, posthumanist, feminist, and postcolonial geographies, and discuss the possible limitations of these approaches in relation to causal explanations and geographical theorizing. At the risk of caricaturing such diverse bodies of work and approaches within very limited space – some accounts here (e.g. feminist theory and postcolonial theory) are likely to be too thin and reductionist in the eyes of specialists and practitioners of these 'isms' and I ask for forbearance, these two chapters also serve as a framing template for later chapters that will revisit and identify the distinctive role of explanatory theories in Geography.[5]

To 'cramp' the enormous literature on these different approaches into the two opening chapters, I do not intend to go back too much to the original philosophers and critical theorists. Instead, I focus on their contemporary adoption in critical human geography.[6] This meta-narrative approach should serve the primary purpose of this book – engaging with existing approaches in human geography and yet highlighting possible gaps in their explanatory intentions and capabilities. This 'less philosophical' approach is similar to Simpson's (2021: p. 5; my emphasis) recent book on non-presentational theory in which he notes that '"NRT" is often felt to be difficult to grasp given the way that it mixes conceptual vocabularies, complex social theories, and references to seemingly *esoteric* continental philosophy; involves potentially unusual styles of research and writing; and, as there is often either a surprising empirical focus or as there isn't a clear empirical object of study at all'.

My narrative approach of relying on secondary texts on these critical social theorists and philosophers (except for critical realism, actor-network theory, assemblage theory, and feminist theory where key theorists and philosophers will be evoked) also reflects the fact that there are excellent texts and chapters written by geographers (for geographers) on each of these approaches that draw freely and sometimes very extensively on the original material – repeating such lengthy quotes might not be too productive for an audience in the 2020s and beyond.[7] Ironically, many of these original theorists and philosophers have less to say about theory and explanation per se, and much more about their conceptions of knowledge, language, mind, body, society, politics, space, time, and so on. This book thus focuses more on the contemporary work in the discipline on theory and explanation and its potential for future development. In this sense, the book is more an introspective piece about the discipline and its future, rather than one that covers the entire spectrum of critical social theories and philosophical traditions.[8]

As such, the first two chapters offer a critical examination of explanatory theorizing within the context of ongoing debates in diverse epistemologies in/for Geography. Drawing upon an 'old' theme of theory and explanation in human geography since Harvey (1969), I survey briefly how theory and explanation have been treated in various critical approaches and 'turns' and move swiftly across some of them to develop a more synthetic view of theory and explanation for future geographical enquiry. Overall then, the main text in this opening

chapter and the ensuring book is meant to be more readable, less jargon-laden, and lightly referenced. Insofar as possible, I relegate relevant lengthy quotes, contextual material, and personal reflections to endnotes for advanced readers and paraphrase/weave their core messages into my narrative. Throughout the book's main text, only the most essential quotes are incorporated sparingly. I hope this different style of academic writing offers a more amenable level of abstraction – not too abstract beyond comprehension by the less well informed, and yet intellectually challenging enough to the experts.[9]

The remaining of this opening chapter is organized into three sections. In the next section, I elaborate on two important caveats on what the book is *not* about – neither the championing of a particular approach and/or an actual theory of the socio-spatial world, nor a philosophy in/for Geography and/or a new 'turn'. I then examine three key considerations *of*, and *for*, theory and explanation in Geography in terms of normative concerns in the politics of theorizing, the importance of socio-spatial contexts, and the yardstick of practical adequacy. The final section reiterates this book's synthetic approach that allows for greater epistemological possibilities for rethinking theory and explanation in geographical research. It also introduces the book's overall narrative, organization, and the ensuring chapters.

## Important Caveats: What This Book Is Not About

I start with two disclaimers to alleviate at the outset some possible concerns and/or expectations from readers. These caveats require some elaboration beyond a simple statement, an important lesson from my close reading and reflecting on earlier influential works in human geography. Opening her *Hybrid Geographies* with a concise disclaimer of its non-philosophical tract and situated knowledge, Sarah Whatmore's (2002: p. 6) modest claim was subsequently critiqued by sympathetic reviewers as 'inconsistent or even hypocritical' and 'false modesty'. In response, Whatmore (2005: p. 843) conceded that she might have chosen her words 'too carefully in retrospect'.[10] In what follows, I reflect more openly on my book's positionality in relation to various critical approaches and philosophical/ontological 'turns'.

First and foremost, this book does not advocate a particular critical *approach* nor an actual *theory* of the world and being. This non-deterministic gesture is perhaps more befitting in an intellectual world of Geography characterized by its leading historians (Cresswell, 2013; Cox, 2014; Johnston and Sidaway, 2016) as a fractured plurality of critical approaches and relatively peaceful co-existence of substantially fragmented communities – the idea of geographical exceptionalism in theory and practice noted at the beginning. I take a more catholic view towards integrating constructive ideas from across different approaches insofar as they are consistent with my key considerations of/for theory and explanation

in Geography (see next section). While I have previously written about critical realism and, more recently, its relevance for distinguishing mechanism from process thinking in human geography (Yeung, 1997, 2019a), readers of this work will notice my discussion of theory and explanation may depart quite significantly from most critical realist thinkers and philosophers in terms of my epistemological claims and emphasis on mid-range theories, contextualized explanation, causal mechanisms in variegated 'material' forms – from narratives and representations (e.g. 'discursive formations' and 'affective atmospheres' in poststructuralist thought and 'representational mechanics' in postcolonialism) to material practices and assemblages (e.g. actor-network theory and assemblage thinking) and situated knowledges (feminist and postcolonial thought). In this sense, the book embraces *both* realist and social constructionist thought in its engaged-pluralistic epistemological orientation (cf. Hacking, 1999; Barad, 2007; Elder-Vass, 2012; Gabriel, 2015).[11]

More significantly, even realist thinking has substantially evolved from its more restrictive forms of transcendental realism in the 1970s (after Roy Bhaskar, 1975, 1979) and critical realism in the 1980s (Sayer, 1981, 1984; Allen, 1983, 1987; Bhaskar, 1986, 1989). It is now not exaggerating to claim that since the late 2000s, realist thinking has made a major return via the expanded and diversified work of critical realists, such as the late Roy Bhaskar and his followers (including their institutionalization of critical realism with its own journal, book series, country networks, and regular conferences; see Chapter 3 endnote 28), and another group of 'speculative' philosophers advocating 'the rise of realism' (DeLanda and Harman, 2017; see also Rutzou, 2017; Rutzou and Elder-Vass, 2019; Elder-Vass, 2022).[12] Where relevant, I will introduce this revitalized realist thinking in greater length in later chapters (2 to 4). Suffice to say here that in both critical realism and speculative realism, material objects exist and are not socially constructed, but social structures are because they depend for their existence on how we think about them and act in relation to their potential (but not deterministic) and conjunctural structuring effects.

Following this non-deterministic orientation towards critical approaches, *mechanism* in social science explanation cannot and should not be conceived as a machine-like mechanical or technical sequence of physical things, like some critics of mechanism-based realist thought have argued and some dismissive readings of this work as too macho-mechanical-technical might think. In actor-network theory terminology, such mechanism is not made up of non-humans or material things. Mechanism refers to the different but necessary steps for a 'social' cause in its broadest sense to produce empirical effect within specific contexts. Some of these steps can be recursive and thus a causal mechanism needs not be sequential in its action and practice. In social science explanation, a causal mechanism often refers to a discrete process embedded in social relations, rather than machines, matters, and things per se, as will be further conceptualized in later chapters (3 to 5).

Despite my epistemological claims of mid-range theories and causal explanations in context, this book does not offer an actual theory of the world/empirical reality/space/subjectivity-humanism. It does not develop a spatial theory of capitalism, the materiality of social relations, the meanings or conceptions of space and place, the spatiality of social life, nor a theory of geographical knowledge or key concepts in Geography per se. There is a fairly large and substantial literature in human geography on these theories and their analytical subjects.[13] Still, the search for an all-encompassing theory of space and spatiality remains elusive and perhaps impossible. As well recognized over a decade ago by humanistic geographer Yi-Fu Tuan in his 2010 panel discussion at the annual meeting of the American Association of Geographers,

> is a theory of space and spatiality possible? My answer is that I have my doubts, for space, to me, is a cultural and experiential construct, the meaning of which can vary widely from people to people, and from individual to individual… Isn't it strange that this should be the case when few of us fully grasp what our own theorists say about space and spatiality, even though they speak in prose and strive, as scholars of a scientific or philosophical bent, for maximum clarity? Suppose one theorist does come up with a theory or framework that grips the imagination and commands the respect of many. Can it be that its power lies not, as the theorist himself [*sic*] may believe, in its compelling logic, but rather in its hidden metaphors – its poetry? (Merriman et al., 2012: pp. 12–13).

Tuan's critical view on the Holy Grail of an all-encompassing geographical theory should serve us well in terms of not only his doubtfulness about such a venture, but also his suspicion towards the increasing role of poetical power rather than compelling logic in determining a theory's acceptance in Geography. Akin to realist philosopher Markus Gabriel's (2015) observation on scholars avoiding criticisms by evoking continental philosophy in ontological debates, hidden metaphors and poetical beliefs or parochial standards of justification are often deployed to prevent bad theory in human geography from being criticized by others from different critical approaches.[14]

This brings me to the second important caveat that the book is not about *philosophy* in/for Geography nor a new 'turn'. Unlike some influential geographers' works that draw heavily on original critical theorists and, indeed, 'continental' philosophers, this book attempts to be less poetical and more analytical logic-driven in order to avoid the general tendencies of such work to be overtly theoretical, textual, and representational.[15] Here, I take seriously critical realist Bhaskar's humble view that philosophy should serve as an underlabourer for knowledge production and projects of human emancipation by clearing away the 'philosophical rubbish' and obstacles to progress in social science, not as a dogmatic thought dictating its substantive content.[16] Another realist philosopher from the poststructuralist 'camp' also points to this underlabourer role of philosophy in clarifying ontological doubts for the (social) sciences. Introducing his Deleuzian ontology

of assemblage theory, Manuel DeLanda (2006: p. 7) argues that cross-cultural comparisons, detailed analyses of social mechanisms, and historical vignettes in social science are worthy tasks that cannot be carried out within an impoverished ontological framework. To him, 'while philosophers cannot, and should not, pretend to do the work of social scientists for them, they can greatly contribute to the job of ontological clarification'.[17]

Still, I think the reverse trend in DeLanda's caution above might be taking place in contemporary human geography and critical social science. There is a real danger of geographers doing too much of this ontological work that resembles a form of 'philosophy envy' (or 'academic escapism', as coined by Häkli, 2020: p. 370).[18] Paraphrasing DeLanda, I argue that while geographers cannot, and should not, pretend to do the work of philosophers for them, we can greatly contribute to the job of theoretically grounded empirical knowledge production. In its extreme form, the current state of ontological contest and philosophical multiplication in human geography can be rather counterproductive when it becomes a form of asserting authority or, in Eric Sheppard's words, 'my ontology versus yours'.[19] To him, Geography as a discipline used to ground its respectability through its claim and rooting in science during the heydays of quantitative revolution. But instead of our 'physics/science envy' then, he wondered 'if we have now moved to try to claim respectability by rooting ourselves in philosophy… [W]hile geographers may spend a lot of time reading particular philosophers, do they actually sit down and debate with the philosophy profession about these issues and seek to learn from those debates' (Merriman et al., 2012: p. 16)?[20]

This raises an important issue of whether extensive import and quotes from philosophers of different (mostly 'continental') persuasions by geographers in their writings are often done to buttress one's discursive views and/or to burnish one's intellectual credentials and respectability? Sometimes, geographers practise 'reading against the grain' to draw out such traces of philosophical pointers just to import them into geographical writing and to offer their own re-readings that can perhaps lead to excessive regurgitation and, sometimes, the extremes of obscurity and befuddlement.[21]

In his recent book *Killer Cities*, Nigel Thrift (2021: p. xi) uses the term 'phiction' to describe these risky adventures into opaque philosophical writings akin to fiction.[22] Following Sheppard's reservation above, we might ask what is new and novel in these imports and (re)readings for Geography and for philosophy and how do they strengthen our existing or new theories and explanations? On their own, philosophical ideas cannot substitute for good geographical theories and explanations. As noted by Elden (2003: p. 239), we should not licentiously import and appropriate philosophical ideas through selective quotes unless one can appropriately explain 'their ideas in a way that might open them to a wider audience'.[23] Otherwise and to Simpson (2021: p. 221), such 'phictional' work in human geography may risk taking place within an echo chamber occupied by a select few well-read philosophical geographers. But even in philosophy, the

endless dispute of human/mind versus world/reality can be equally debilitating as if its resolution were the magic key to all ontological secrets. As reflected by Graham Harman (2010: p. 174), a co-founder of speculative realism since the early 2000s, 'Whether we deny things-in-themselves outside the human/world correlate, or insist upon such extra-mental realities, this endless dispute [mostly in philosophy] orbits the single dismal pair of human and world. The relation between just these two terms is treated as the magic key that will unlock all the secrets of ontology if solved' (see also Sparrow, 2014: ch. 1).

More recently, Joronen and Häkli (2017: p. 562) caution the use of ontology in human geography as an assumed mandate and a quick pass to speak in the name of reality, rather than as a critical analytical step towards questioning it. The uncritical import of philosophical ideas on ontology runs a risk of turning theological, such that ontology becomes metaphysics or 'onto-theology' celebrating the endless becoming of entities. To them, this 'onto-theological lock-in easily turns into "theoretical path dependency," directing and circumscribing how the political is taken up' (Joronen and Häkli, 2017: p. 568). In Bhaskar's (2016) final work on realist philosophy, this form of 'onto-theological lock-in' is known as 'ontic fallacy', defined as our knowledge of the world being determined by the nature of the world itself. This fallacy overlooks the important role of epistemology in that our knowledge – like this very book – is an irreducibly social and changing product, and our access to knowledge and the world is always mediated by the research process (i.e. knowledge production). To Bhaskar (2016: p. 11; original italics), 'the ontic fallacy reduces the resulting knowledge to the world: it ontologises, hence naturalises or *eternalises* our knowledge and makes the social status quo seem permanent and ineluctable'. I will revisit this notion of ontic fallacy in my discussion of the various critical approaches throughout this book.

Avoiding too much dependence on such ontological registers from philosophers, my book takes a more catholic approach to ontology and different philosophies, as the starting point of knowledge production. But it focuses on *epistemology* – how do we go about producing knowledges – by arguing for the necessity of theory and explanation in empirical inquiry as 'the work of social scientists' in DeLanda's academic division of labour. One might contend that different ontologies may prescribe different epistemologies, from the deterministic ontology of Comtean positivism to the relativist claims of Jacques Derrida's postmodernist and poststructuralist thought. This book's epistemology eschews these philosophical extremes and argues for a pragmatist middle-ground that retains both causality and relationality in theory and explanation. I will develop these arguments much more explicitly in Chapters 3 and 4.

In short, a social ontology that claims reality as unknowable, impenetrable, and/or always-becoming cannot support substantive epistemological effort towards theory and explanation because it will simply be a futile exercise in chasing after a moving target, i.e. 'explain' the un-explainable. It fails DeLanda's (2006: p. 7) job of ontological clarification prescribed for philosophers. Ironically, this danger is

well recognized in poststructuralist philosophers Gilles Deleuze and Félix Guattari's (1987 [1980]) *A Thousand Plateaus*, often seen as a key poststructuralist referent in their celebrated flat ontology. In the concluding chapter laying out 'concrete rules and abstract machines' as a summary of their key concepts, they not only emphasize the importance of both the 'structuring' concepts of strata and stratification by starting with them first (before other more influential concepts such as 'assemblages' and 'rhizome'), but also caution against our urge towards disarticulation and destratification (or always-becoming).[24]

Conversely, a social ontology of reality as merely autonomous entities and fixed or transcendental structures renders theory and explanation rather dull, macho-mechanical, and over-deterministic. My project in this book is to gesture an epistemology that can be both meaningful and practical in empirical geographical research. Instead of thinking too incessantly the ontological question of what reality might be like (metaphysics), I would rather focus on how we might be able to understand and explain better the already existing world as it unfolds and takes place. In this sense, my project is less about *thinking* in terms of philosophical (mis)claims and much more about *doing* – the practice of knowledge production through developing novel theory and explanation. This pragmatic approach to ontology and epistemology is in line with recent efforts by sociologists Rutzou (2017), Decoteau (2018), and Rutzou and Elder-Vass (2019) in reconciling poststructuralist thought in assemblage theory with critical realism. As concluded by Rutzou and Elder-Vass (2019: p. 420),

> Good social research requires a social ontology that is both internally coherent and consistent with our experience of the world, including the evidence revealed by research. Just as many ontologists take a relaxed attitude to empirical research that allows them to cherry pick illustrations in service of the theory, many [social science] researchers take a relaxed attitude to ontology, allowing them to cherry pick concepts from different traditions. But where ontology is merely implicit, it risks inadvertent incoherence and logical irresponsibility. Where it is explicit let alone dogmatic, it risks discouraging or excluding attention to important aspects of social reality.

Overall then, readers will be pleased to know that this book is not proposing a new philosophical 'turn'! Human geography today has perhaps already suffered from premature 'turns' that have 'cancelled' far too much. As Cox (2014: p. vii) reflects critically, 'at each stage there has been an unnecessary rejection of too much. Ground has been vacated before it has been thoroughly turned over and cultivated. Each "turn" has reacted to what has gone immediately before it and, possibly to justify itself, has been too sweeping in its rejection'. In that sense, this book draws upon an 'old' theme of theory and explanation in Geography since Harvey (1969). But instead of surveying historically and genealogically how theory and explanation have been treated in these various critical approaches and

'turns', I move swiftly across some of them to find common grounds and to develop a more synthetic view of theory and explanation for future geographical enquiries and knowledge production. Going beyond the false dichotomous choice between explanation (as in positivism) and interpretation (as in hermeneutics) in the social sciences, this 'house-clearing' on theory and explanation might be in order *for* geographers who are confronted with a (looming) crisis of legitimacy: how can human geography thrive in the wider social sciences of the post-pandemic 2020s and beyond? My short answer is better theories and explanations! It is not just about better description and accounts – no matter how nuanced, but rather certainly more about realistic theories and explanations that can contribute to real-world understanding and interpretations necessary for a practically adequate social science. This manifesto brings me to some necessary considerations of, and for, theory and explanation in Geography.

## Key Considerations: Of/For Theory and Explanation

Despite a relatively large body of literature on the development of geographic thought and the geographies of geographical knowledge, we do not yet have a commonly recognized epistemology for theory and explanation. In this section, I consider and reaffirm three necessary criteria for theory development in relation to normative concerns, socio-spatial contexts, and practical adequacy. To be illustrated thoroughly throughout the book's chapters, these key considerations provide a critical guidance for adjudicating the kind of theory and the ways of theorizing that might be productively advanced in Geography and, in turn, the kind of geographical knowledge as our collective contribution to critical social science priorities and research agendas.

First, if we truly believe human geography should be critical and emancipatory, our theories and explanations must explicitly incorporate *normative concerns* and be sensitive to the *politics of theorizing*. The question of 'for what and on whose behalf' is imperative in theory development, even though its politics and geographical specificities (i.e. more practised in Anglo-American human geography) may be a dilemma for causal theorizing that needs remedy. My book does not advocate an 'anything goes' approach to theory characterized by epistemological relativism and radical contingency.[25] Rather, we need to be seriously concerned with the normative issues in theorizing and ask for what purpose and whom our theories might serve – I will offer some personal reflections on 'theorizing back' and my own theory development journey in economic geography in the penultimate Chapter 6. Here, I argue that critical theories are not the same as critical theorizing. As noted by Derek Gregory (1994: p. 62) in *Geographical Imaginations*, Habermas' (1972) notion of a critical theory with an emancipatory interest – both critical of real-world injustice and self-critical of its own 'politics

of location' and its context of production (theorizing) – is particularly relevant in such a normative consideration; theory, in short, should be 'a sort of moving self-reflectivity' (Gregory, 1994: p. 86).[26]

In critical realist thought (e.g. Bhaskar, 2016), this notion of an immanent critique of one's own theory and its ontological foundation is also seen as a necessary practice for social science to demystify and enlighten common sense. In this reflexive thought, all knowledge is fallible, but not equally fallible. The adequacy of social knowledge can be established by practice through immanent critique and real-life applications. As such, we need to be cognizant of the inherent limits to our theories, such as the importance of open systems, contexts, and the politics of knowledge, and yet immanent critique requires us to specify clearly the kind of epistemological position(s) we are committed to and isolates any theory/practice inconsistency.[27]

As will be discussed in the next chapter, the multitude of critical approaches in human geography have rather different conceptions of theory and explanation. Broadly, we can distinguish between radical 'ideologically-oriented' and more 'open-ended' approaches to theory. Harney et al. (2016: pp. 323–324) refer to the former as normative theories in Marxism, feminism, critical race theory, and postcolonialism developed in the wake of post-positivism. The latter is often grounded in a process pragmatism premised on an ontology of anti-foundationalism that understands the world to be radically contingent and thus its open-ended epistemology and socially-embedded politics of inquiry (see also Popke, 2003; Shannon et al., 2021). And yet contrary to Harney et al.'s (2016) optimism in process pragmatism, these more open-ended approaches tend to exhibit normative 'blind-spots' that have recently been subject to significant critiques in human geography.[28]

In Tolia-Kelly's (2013: p. 154) earlier critique, human geography's recent surge towards new materialisms and material geographies is running a risk of doing/becoming 'surface geographies' that are merely recordings of matters at play on surface rather than critical evaluations of the politics and affects/effects of the interconnectivity and co-constitution of these materialities and their uneven geographies. To Sundberg (2014: p. 34), some of these posthumanist approaches might have committed 'the ontological violence authorized by Eurocentric epistemologies' that make and solidify universalizing claims about the socio-spatial world. Grounded in feminist and postcolonial thought, Mitchell and Elwood (2012: pp. 792–793) also take on the more open-ended approaches, such as non-representational theory in human geography, and contend that such a mode of theorizing individual bodily encounters and emotions tend to ignore normative concerns with social injustice and exploitation. More recently, Kinkaid (2020: p. 469) points further to the weak normative commitment in assemblage thinking and theorizing, despite its potential for explaining and intervening in uneven geographies.[29]

Indeed, such normative concerns with ethics and justice are particularly strong and prevalent in feminist scholarship and theorizing. Let me offer a brief example

by way of a leading feminist theorist. In her performative theory of assembly, Judith Butler (2015a) argues strongly in favour of bodily enactments in public assemblies and demonstrations that are performative of the people's right to rights and transcend the binary claim of the public and private spaces of bodily appearance. Her 'ethics of cohabitation' call for the performativity of bodies in public not to be silenced, sequestered, or denied, for they are always there and here and never stop 'speaking'.[30] Irrespective of whether such a theory is merely performative or explanatory (and even causal) in its epistemological gesture – see more in Chapter 2 on feminist theory, there is no doubt that it offers a more explicitly normative take on how we *should* understand the politically difficult and shifting global connections of social movements (cf. McAdam et al., 2001; Abbott, 2016). In this spirit of theorizing, the value-laden nature of the social world makes it necessary for explicitly normative commitments in our theory production.

Second, our critical theories and explanations must be well grounded in different *socio-spatial contexts* precisely because of the contingency and specificity of place unique to Geography. To Gregory (1994: pp. 12–13), social theory is not only a critical discourse, but also a 'travelling theory' in relation to its contextual specificity.[31] As will be evident in Chapter 2, many of the more open-ended approaches in human geography are highly sensitive to context in their theoretical accounts of bodily encounters and affect, social identities and interactions, and broader community engagement. However, theories in the more radical ideologically-oriented approaches are often more concerned with unpacking the structural underpinnings and system-level injustice in capitalist societies. But as Doreen Massey (1984: p. 70) has argued some time ago in *Spatial Divisions of Labour*, there is no reason why such more structural theories cannot recognize contextual contingency and place-based specificity. To her, 'The challenge is to construct an approach which is neither detailed description and empiricism nor a "mechanistic Marxist" insensitivity. It is possible both to recognise specificity and to situate it within the grander historical movements of capitalist societies'.[32]

Irrespective of our critical approaches in human geography, the recognition of socio-spatial contexts is indispensable to the development of theory and explanation. I argue that this necessary sensitivity to context is particularly important for the development of causal theories informed by mechanism-based explanations in Geography and the wider social sciences. As well noted by philosopher of social science Daniel Little (2016), social beings are heterogeneous and changeable in different contexts, and the social world can never be like the natural world governed by Humean universal laws of nature. Indeed, such conceptions that social worlds are open systems characterized by both complexity and emergence and that mechanism-based explanations are context-dependent have already been well recognized in critical realist thought for over three decades (Bhaskar, 1986, 2016; Pozzoni and Kaidesoja, 2021; see also my Chapter 3).[33]

This insistence on theory and explanation in context can also be a useful strategy to avoid the sort of Cartesian desire for explanation, finality, and (accurate)

representation that has been much critiqued in some critical approaches. Drawing extensively on Ludwig Wittgenstein's philosophy of language and meaning and 'uncertainty' of thought, Harrison (2002) offers a critical reading that questions the inherent difficulties of language and meaning in accounting for distinct objects, social conventions, and practices. This doubtful approach to scientific explanation is also central to Amoore's (2020a) work on algorithms and artificial intelligence grounded in poststructuralist and posthumanist thought in science and technology studies. In her call for the 'doubtfulness of partial perspectives', she examines critically the generative and emergent effects of algorithms in contemporary life and advocates a cloud ethics that explicitly instantiates a mode of doubtfulness to counter the grain of Cartesian thought. Taking an avowedly political-normative approach to cloud ethics, Amoore (2020a: p. 145) argues that 'It is precisely this mode of intuitive causality and embodied doubtfulness that I am seeking as a resistant and critical form of responsibility'.

Putting these arguments against rationalist explanation into this book's epistemological orientation, it seems quite clear that contextual contingencies and place-based specificities in the social world fundamentally disrupt the Humean theory of causal laws as constant empirical conjunctions or invariant regularities of events. And yet these contingencies and specificities do not necessarily invalidate the productive role of intuitive causality and mechanism-based explanation in theory development as long as good judgement and embodied doubtfulness are properly exercised. As such, theory and explanation *in context* can avoid the sort of transcendental finality in the Cartesian explanation of open systems (i.e. social worlds). Recognizing the importance of context and contingency in explanation also means that causal theory is always partial and its explanatory power is contingent on the operating context.

But this partiality of theory and contingency in explanation does not mean we should give up on explanatory theory and theorizing altogether and, instead, opt for descriptive accounts of unfolding, becoming, and eventalization that, in philosopher Michel Foucault's (2001: p. 227) argument against historiographic explanation in social analysis, serve as 'a way of lightening the weight of causality'. This is because the latter and more open-ended mode of understanding by leaving everything as it is and processual, termed 'witnessing' in Harrison (2002: p. 500), *can* also be as partial and incomplete.[34] I believe it is possible to conceive an iterative process of theorizing in which witnessing and (causal) explanation-in-context go hand in hand (more on this in Chapter 4). After all, there is no fundamental reason why one mode of knowledge production (i.e. processual understanding) must preclude another mode of knowledge production (i.e. causal explanation), however partial and doubtful each of them might be.[35] This brings me to the thorny consideration of how we know if theory is indeed useful.

Third, I advocate *practical adequacy* as a key criterion for adjudicating a theory's usefulness, irrespective of its normative stance and operational context. This consideration goes some way to address the 'so what' or 'why bother' question and

to identify a theory's relevance for important real-world applications. In *Practising Human Geography*, Paul Cloke et al. (2004: p. 308; original italics) rightly note that scientific methods and positivist Geography fail to account for what it means to be human: as they put it cryptically, '*people are not rocks*' and human geography should be concerned with 'figuring out what spaces, places, environments and landscapes *mean* to people, or trying to understand the *meanings* that people in given situations acquire, elaborate, share and perhaps contest in relation to activities of geographical consequence'. I am concerned though that this approach to practising human geography might be taking a too human-centric view to the 'activities of geographical consequence'. What about those activities, things, and events of unintended geographical consequences that do not necessarily reflect the immediate consciousness of humans? Do these activities, things, and events in turn impinge on human consciousness that compel them to think and act in particular ways? Why and how do these particular ways work, practically? Can the understanding of meanings alone, no matter how well developed by means of empathy, intuition, or imagination, be practically sufficient in our explanatory goals? In philosopher Ian Hacking's (1999: pp. 20, 95) terms, we should unmask the underlying functions served by existing ideas and understandings in established order and raise our collective consciousness to make the world a better place.

This is where explanatory theories of such activities, things, and events are needed, *not just* nuanced understandings of humans and subjectivity in/around them. Eschewing theory and explanation just because 'people are not rocks' might seem a little premature and understating because these human-centric meanings and social constructions can perhaps be explained to arrive at even better understanding and practical outcomes. In short, we should not stop at just understanding meanings and experiences, but our theories need to engage with the practical adequacy of explanation for making possible our interventions and transformations in a material social world. Explanatory theories are necessary for human understandings and practices. But what counts as practical adequacy – a concept that might appear to be rather nebulous to some readers? Realist geographer Andrew Sayer (2015: p. 106) has made it easy to understand the practical adequacy of our theories and knowledge because 'the fact that we can successfully do so many things through our practical interventions in the world suggests that the knowledge informing those interventions has at least some "practical adequacy"'.[36] Similarly, practice philosopher Theodore Schatzki (2019) has argued that the value of a theory is akin to 'the proof is in the pudding' or its practical adequacy, not necessarily its conceptual elegance or sophistication.[37]

In brief then, a theory's practical adequacy refers to its analytical robustness in explaining empirical outcomes (being adequate to the researchers) and its usefulness to the practice of positive social change (being practical to both the researchers and the actors experiencing such change). Even though multiple good theories exist in different domains – ontological and epistemological – and

we might simply have to live with this plurality, theory development remains a pragmatic matter and must be useful for researchers engaging in substantive empirical work and making real-world interventions.

In this context, even postcolonial theory/geographies, as one of the more ideologically-oriented critical approaches, has been critiqued for emphasizing too much on the deconstruction of colonial representations and the metaphorization of decolonization, and spending too little practical efforts in addressing the real-world issues of massive poverty, dispossession, inequality, abuses of human/civil rights, and so on faced by many in the Global South (and, increasingly, in the Global North too!). Postcolonial feminist theorist Gayatri Chakravorty Spivak (1999: p. 142) thus argues in *A Critique of Postcolonial Reason* that 'We cannot "learn about" the subaltern only by reading literary texts, or, mutatis mutandis, sociohistorical documents… It is responsible to read books, but book learning is not responsibility'. As well recognized in Tariq Jazeel's (2019: p. 188) geographical text *Postcolonialism*, 'For many Indigenous communities, activists and scholars, decolonization is thus not (just) an injunction towards critical methodologies or theory work after and beyond Eurocentrism as Chakrabarty (2008 [2000]) might have it. It is about social and spatial justice. It is about addressing the continued fact of dispossession'.[38]

Taken together, practically adequate theories cannot be (just) about change in our mental constructs nor perceptual operations – that is a self-indulging kind of intellectual luxury in the ivory tower.[39] Equally important, these theories must also inform our understanding of the practical realities of conflicting interests and continual power struggles in an uneven social world characterized by interconnected structures of domination and discrimination. Positive social transformation needs more than reflexive change, but also much greater awareness of the power of causality and the practical adequacy of explanation.

## Chapter Outlines

Before venturing further in Chapter 2 to set the book's intellectual context by critically revisiting the role of theory and explanation in contemporary geographical thought, I now outline more explicitly the synthetic approach taken in this book. Grounded in and drawing on relevant debates on theory and explanation in various critical approaches to be discussed in the next chapter, this book focuses on the development of explanatory theory within a mechanism-based approach that takes seriously the above three key considerations of/for theory and explanation in Geography. And yet it occupies an epistemological position relatively free from the shackles of specific philosophical stances and ontological fixes (i.e. neither critical realism nor poststructuralism and postcolonialism). My approach seeks to explain enduring and/or changing *relations* between places that are constitutive of different spaces. As such, people (different gender, race, sexuality, culture,

and identity), social groups, economic organizations, and political institutions are *critical agents* in diverse geographical phenomena at all spatial scales, from the individual (affects, emotions, and identities) and the regional (cultures, institutional thickness, and resilience) to the national and the global (change, growth, and development trajectories).

To reiterate two earlier caveats, my approach does not offer a new theory of society and space nor another (continental?) philosophical turn. Acutely aware of the inherent limits of grand social theories, it represents a coherent and yet rigorous effort to engage with what theory and theorizing entail in various critical approaches in human geography (Chapter 2) and to gesture towards and elaborate on a kind of explanatory theory underpinned by mid-range theorizing and causal mechanisms (Chapters 3–5) for critical geographical scholarship. While some readers might argue that this modest approach to theory and explanation is already quite evident in what many in Geography have been doing and/or at least striving for (e.g. relational thought and power dynamics in some Marxian, feminist, and postcolonial approaches in critical geographies), I contend that such doing (and striving for) in these various critical approaches can still be better consolidated and informed through mutual engagement with the kind of epistemological thought towards mechanism-based mid-range theorizing in this project. Nevertheless, my argument does not suggest that these highly influential approaches do not take theory seriously nor are short of explanations. But their focus on causal explanations and mechanisms of relationality and power dynamics might be better integrated and presented through a synthetic treatment offered in later chapters that address (1) mid-range theorizing; (2) relationality and causal powers in relational theory, and (3) theorizing mechanism and processual thought.

This synthetic project towards theory and explanation thus comprises these three interrelated steps to be elaborated more fully in Chapters 3–5. Taking the first step in Chapter 3, I discuss the kind of causal explanatory theory/theorizing that might be epistemologically realistic and practically adequate. To do so, I take up an *epistemological position* that views theory not only as abstract devices, but more importantly also as explanation of socio-spatial change. I elaborate on the importance of causal mechanism in such an explanatory kind of theory. This epistemology entails a different kind of normative position in human geography in which causal explanations are a necessary step towards critical geographical research. It contends that our socio-spatial interventions can be better developed if we have a clearer sense of why and how causal mechanisms interact with contingent contexts to produce specific socio-spatial events and outcomes.

I then discuss the relevance and usefulness of what might be termed *mid-range theories* in geographical research and the importance of mechanism-based explanations in such theories. My justification for mid-range theories is grounded specifically in some of the critical approaches, such as critical realist thought and relational thinking. Engaging with certain poststructuralist and postcolonial

thought discussed in Chapter 2, I (re)introduce critical and speculative realism as a useful body of philosophical work for this mode of mechanism-based theorizing, though I am fully cognizant that it cannot substitute for other non-realist ontologies in the multiple trajectories of geographical scholarship (e.g. some open-ended approaches in poststructuralist, feminist, and postcolonial geographies). This section also draws upon the well-developed literature in analytical sociology, political science, and the philosophy of social science on mid-range theorizing and mechanism-based thinking.

My second step in Chapter 4 puts this epistemology of causal theory into the development of a *relational theory* through the reworking of relationality, power, and agency in the socio-spatial world that makes possible the search for causal mechanisms in explanatory theories. It takes stock of the analytical purchase of such relational thinking advanced by geographers grounded in poststructuralist, postcolonial, and institutionalist thought, such as the focus on the (un)folding of relations and co-relations in poststructuralist geography premised on actor-network theory and assemblage theory and its conceptions of power – heterogeneous associations and 'thing-power' – different from postcolonial theory and feminist thought discussed in Chapter 2. But Chapter 4 builds on the critical discussion of these relational thoughts and develops a theory of relationality to identify the underlying causal properties of actors, practices, and structures. This relational theory specifies the nature of relationality and the multiple ways through which power works itself out in what might be termed 'relational geometries', defined as the spatial configurations of heterogeneous power relations that are more than simply 'heterogeneous relations' in actor-network theory or 'processes of becoming' in non-representational theory and some feminist and postcolonial theories.

Drawing on the work on power by geographers (e.g. Allen, 2003, 2016) and others (e.g. sociologists, political scientists, and philosophers), I then conceptualize different forms of *power* in such relational geometries and their causal effects in producing concrete/spatial outcomes. This reconceptualization of relationality represents an important step towards explanatory theory building because some extreme variants of the 'relational turn' in human geography tend to move towards anti-essentialism (e.g. actor-network theory) and 'surface relations' (e.g. non-representational theory). My relational theory thus entails an analytical movement away from recognizing the de facto differences in relational geographies to theorizing the causal efficacy of difference. A relational geography, then, requires such a conceptual apparatus to explain why and how relationality and power relations matter in making things happen and explaining events and outcomes that take place in society and space.

Having set up the *raison d'être* for mechanism-based explanatory theory (Chapter 3) and the ontological basis of causal powers in more-than-heterogeneous relations (Chapter 4), I move on in Chapter 5 to the third step in my synthetic approach and demonstrate what a mechanism-based explanatory theory might look like. Here, I develop a *theory of mechanism* that draws upon and yet

goes beyond critical realism and engages with the rapidly growing 'mechanism thought' in the wider social sciences during the past two decades. I illustrate how to theorize and explain socio-spatial practices and phenomena in a more robust manner on the basis of clearer conceptions of explanation through mechanism-based thinking. Engaging with the more open-ended approaches and processual thought in human geography discussed in Chapters 2 and 4, this theory of mechanism conceptualizes *process* as a contingent change in a general recurrent series of related actions/events and *mechanism* as a particular and necessary relation connecting initial causal conditions, such as actions and events, with concrete outcomes in specific contexts – a mechanism can be a particular kind of process, but it is distinct from general processes. This particularity in mechanism is premised on the time-space specificities of the empirical phenomenon in question. These specificities in turn refer to the unique context in which one or more necessary mechanisms can be specified for explaining a concrete outcome.

In doing so, I examine how mechanism-based analytical tools for causal explanation in geographical analysis might be distorted by the kind of processual or process-based thinking common in contemporary geographical thought (e.g. open-ended approaches in Chapters 2 and 4) and why conceptual rethinking is necessary. Ironically, this conceptual discussion of process and its distinction from mechanism is largely missing in critical realist thought and poststructuralist theories (e.g. actor-network theory, non-representational theory, and assemblage theory). I argue that there is a tendency in the geographical literature to conflate mechanism and process in different meso-level theories of socio-spatial change and encounters. This conflation, in turn, distorts the causal links in core concepts and reduces their explanatory efficacy in accounting for socio-spatial formations and uneven geographical outcomes.

Chapter 5 therefore links this process-mechanism discussion back to the processual thinking in Marxist geography on social relations of production and dialectics and poststructuralist approaches to practices, encounters, and assemblages. In a modest way, my (re)conceptualization of the process/mechanism distinction seeks to offer a focused discussion of the importance of causal explanations and to reconcile both process-based thinking (in relational thought discussed in Chapter 4) and mechanism-based explanation for future geographical analysis. A brief 'case study' of the geographical studies of neoliberalization is offered to illustrate this process/mechanism conflation and how a better process-mechanism distinction can enhance its analytical and explanatory validity. This choice of illustrative materials might mislead readers to think that the book is leaning towards my own subfield in economic geography and urban and regional studies, despite my broad engagement with various critical theories and approaches in feminist and postcolonial geographies, social/cultural geography, urban geography, and so on in various chapters.[40] But in a pragmatic sense, my familiarity with these materials does allow me to reflect better on their intellectual origins and geographical situatedness in relation to theory and explanation as the main tenet

of this book. I presume other geographers from these subfields will take some cues from my approach here to reflect on their 'favourite' theories and explanations in other domains of geographical knowledge.

In the final two chapters, I offer a 'stress test' of the practical adequacy and normative stance of this synthetic approach to building mechanism-based explanatory theories in Geography.[41] This test entails two parts – from initial theory construction and interrogating the situatedness of theory to making such kind of geographical theory appealing to the broader social science and public communities. Taking its epistemological cues from previous chapters, Chapter 6 focuses on *theorizing globalization* as one key contemporary geographical phenomenon and its underlying political-economic organizational platform known as 'global production networks'. My basic premise is to illustrate how an explanatory theory comprising causal mechanisms can be, and has been, developed to examine this all-important and yet highly contested contemporary phenomenon and its multifarious geographical outcomes. This process of theorizing builds on and speaks to the kind of causal explanations, mid-range theories, and mechanism-based thinking expounded in Chapters 3–5. Extending my earlier conceptual work on globalization and the theory of global production networks, I reflect on how explanatory mid-range theories can be developed and why they are important for understanding complex geographical phenomena. More specifically, Chapter 6 examines critically the entire process of theory building rather than the nuts and bolts of the global production networks theory (see Coe and Yeung, 2015). While this examination of the development process of an explanatory theory might appear to be self-centred, retrospective, and post hoc in rationalization, the case study does make a contribution to theory development in human geography by showing what kind of mid-range theorizing works and how it can be done effectively.

As an indispensable part of this stress test, Chapter 6 also pays special attention to the normative stance of theory and its situatedness in particular epistemic contexts. Indeed, such interrogations of situated knowledges have been much explored in feminist and postcolonial geographies. Drawing on these thoughts, Chapter 6 makes a similar case that geographical theories are not contextually neutral nor devoid of value-ladenness. Rather, they almost always reflect the positionality of theorists and the historical-geographical contexts in which these theories are situated. Such geographic specificity in constructing theories in human geography and 'other geographies' or 'distant geographies' outside the Anglo-American context perhaps should not be surprising in light of the institutionalization of Geography as an academic discipline. This chapter not only offers an immanent critique of this situatedness and the geographical specificity of existing theories in human geography, but also argues for the kind of reverse discourses in order for geographical work outside the Anglo-American context to 'theorize back'. While this debate on the situatedness of knowledge and theories has been well developed in feminist and postcolonial

work, there has been relatively less attempt to engage in this mode of *theorizing back* through which a new theory on/in the Global South not only 'can speak', but also can 'speak back' to mainstream Anglo-American Geography. Drawing on my earlier theory work and my situatedness as a human geographer based in East Asia, I illustrate how such theorizing back in human geography and the wider social sciences has taken place and become impactful in the context of developing new theories of state capitalism and global production networks that are empirically grounded in the transformative material realities of East Asia. This reflexive and personalized section represents my own account of situated theory development in economic geography.

The concluding Chapter 7 completes my stress test of explanatory theory by examining the practical adequacy of theory and offers a brief reprise of Geography's future role in social science. Constrained by severe word limit, this relatively shorter chapter returns to epistemology by arguing for a kind of *analytical geographies* that can engage broadly with the wider social sciences of the future. To date, few geographers have developed explanatory theories that can move and shape the social sciences.[42] Still, not many geographers have reflected critically on the place of Geography in the social sciences. In his final chapter on making space for human geography in the social sciences, Cox (2014: p. 201) complains that 'in their more abstract claims as opposed to their empirical work, it is true that the other social sciences have, and with some important qualifications, given human geography short shrift'. Parallel to my main claims in Chapter 6, I argue here that geographers should perhaps construct reverse discourses in Geography to theorize back at social science – there is no reason why Geography should remain short shrift as simply the producers of geographic data for the theory mills of other social sciences.

This final chapter starts by making the case for how current and future mid-range theories and mechanism-based explanations in human geography can make practically adequate contributions to broader social science priorities and agendas by going beyond the offering of common concepts in human geography (e.g. space, place, scale, location, landscape, settlement, territory, network, and so on) and our often self-assumed midwifery/husbandry role in the social sciences. While spatializing social science theories by inserting into them the disturbing effects of space and place might well be appropriate in earlier canonical works, I argue that geographers should now be at the forefront of new (social) theory development during their formative phase, *not* after they have already been made (by inserting space into them thereafter). Going beyond the kind of 'academic esotericism' in some geographical work discussed in earlier chapters, these mid-range explanatory theories should also be more relevant for public engagement and policy agendas in the post-pandemic world confronted with immense uncertainty and widespread disruptions. The book ends with the plea for a more pragmatic approach to theory and explanation in Geography and its knowledge production in the 2020s and beyond.

## Notes

1 Throughout this book, I will use 'Geography' (with a capital G) to denote the long-established academic discipline and 'human geography' (in small caps) to indicate the subdiscipline's more specific form of knowledge communities.
2 My sincere thanks to one reviewer for prompting me to note this geographical exceptionalism that I have personally noticed for quite some time whenever I speak to (and often tease!) economists, political scientists, and sociologists.
3 Some prominent authors in these approaches refer to relational thinkers among actor-network theorists (e.g. Michel Callon, Bruno Latour, and John Law) and their interlocutors in Geography (e.g. Nigel Thrift, Jonathan Murdoch, and Sarah Whatmore), 'relational' geographers (e.g. Doreen Massey, John Allen, Ash Amin, and others), and realist philosophers in the traditions of critical realism (e.g. Roy Bhaskar, Margaret Archer, Rom Harré, Andrew Sayer, and others), and, recently, speculative realism (e.g. Manuel DeLanda, Graham Harman, Markus Gabriel, Tom Sparrow, and others).
4 Influential authors advocating this mechanism-based approach to causal explanation come from analytical sociology (e.g. Peter Hedström, Richard Swedberg, Philip Gorski, Neil Gross, and Dave Elder-Vass), political science (e.g. Jon Elster, John Gerring, James Mahoney, and Charles Tilly), and the philosophy of social science (e.g. Daniel Little, Stuart Glennan, Arthur Stinchcombe, and James Woodward).
5 For example, more explicit discussion of relational thinking in some of these critical approaches is offered in Chapter 4 on relational theory. Chapter 5 on mechanism and process revisits processual theorizing in geographical political economy and poststructuralist geographies, such as actor-network theory and non-representational theory.
6 In doing so, I draw upon leading texts and collections on the development of geographical thought (e.g. Agnew and Livingstone, 2011; Cresswell, 2013; Cox, 2014; Aitken and Valentine, 2015a; Johnston and Sidaway, 2016) and specialized geography texts/handbooks on specific approaches, e.g. poststructuralism (e.g. Murdoch, 2006), feminism (e.g. Moss and Donovan, 2017; Oberhauser et al., 2018; Johnston, 2019; Datta et al., 2020), postcolonialism (e.g. Sharp, 2009; Jazeel, 2019), and non-representational theory (e.g. Thrift, 1996, 2007; Anderson and Harrison, 2010a; Simpson, 2021). Where appropriate, the discussion is supplemented by key articles grounded in these specific approaches and published in leading geography journals.
7 Some earlier works by geographers, who drew extensively selected quotes from original texts by the likes of Karl Marx, Jacques Derrida, Michel Foucault, Gilles Deleuze, Judith Butler, Bruno Latour, Edward Said, Homi Bhabha, and so on, sometimes border on the extremes of obscurity and abstraction – what Seamon (2015: p. 45) characterizes as 'the dense, cerebral hardheartedness of the current dominant geographies' or what Thrift (2007: p. 3) recognizes as the problem of 'a certain kind of overtheoretization at present'. Despite my pitch for a more advanced audience rather than undergraduate students, readers of this book are also not necessarily well versed in the original material. Extensive quotes from these original texts might be too demanding and esoteric. See more discussion on how I intend to handle this material in the next section on caveats.

8 Indeed, many existing 'ism' books in geographical thought do not cover the full spectrum of social theorists and philosophers either – readers will not often find readings of Adam Smith, Max Weber, Karl Polanyi, Benedict Anderson, Clifford Geertz, Anthony Giddens, and so on in books on feminist or poststructuralist geographies, nor Bruno Latour, John Law, Arjun Appadurai, and so on in books on Marxist geography. Work in non-representational theory and postcolonial geographies hardly look into the original texts of critical realism and structuration theories.

9 My approach to writing in this book is similar to Aitken and Valentine's (2015b: pp. 1–2) style of approaching human geography: 'It is an attempt to lift the seemingly impenetrable veil that sometimes shrouds philosophical and theoretical issues, and to show how these issues are linked directly to methodologies and practices… The book avoids jargon-laden, impenetrable language and concepts while not sacrificing the rigour and complexity of the ideas that underlie geographic knowledge and the ways that it is conflicted and contested'. Moving long quotes and clusters of citations to endnotes also resembles the writing styles in political theorist Jane Bennett's (2010) *Vibrant Matter* and Oswin's (2020) recent article.

10 Whatmore (2002: p. 6) states that 'This book is not a lot of things. It does not espouse a particular philosophy, although its engagements and commitments position it philosophically. It is neither a complete "thesis" nor an assembly of "empirical" fragments, but rather an effort to germinate connections and openings that complicate this settlement. It is not a "geography of nature" – though natures and geographies are always in play. Doubtless this list will grow as the book travels…'. But her critics have picked on these modest claims. Demeritt (2005: pp. 820–822) indeed thinks *Hybrid Geographies* is 'first and foremost, a philosophical tract. … [Its] epistemic modesty of claims about partial and situated knowledge is somewhat belied by some quite strong claims about how the world actually is… If that strikes you as inconsistent or even hypocritical, it is partly because the underlying notion of situated knowledge has become debased through careless and sloppy usage'. Another more sympathetic commentator Braun (2005: pp. 834–835) also notes the same: 'despite the author's claims otherwise – and this is a moment of false modesty – this book is a decidedly philosophical book, one that puts to work a coherent and consistent set of philosophical propositions and asks us to imagine the world through its terms'.

11 Despite his abandonment of Derridean postmodernist hermeneutics in the early 1990s, realist philosopher Maurizio Ferraris (2014 [2012]: p. 52) remains committed to the value of careful deconstruction before realist reconstruction: 'That is why, in my opinion, the real deconstruction must commit to distinguishing between regions of being that are socially constructed and others that are not, to establishing for each region of being some specific modes of existence, and finally to ascribing individual objects to one of these regions of being, proceeding case by case'. Through these combinatorial steps of deconstruction and reconstruction, he calls for 'a "treaty of perpetual peace" between the realist insight and the constructionist one. It is simply a matter of assigning each one to its field of competence' (p. 63).

12 This strand of speculative realism literature summarized in Harman (2018) includes Manuel DeLanda's (2006, 2016) assemblage theory, Graham Harman's (2010, 2016, 2017) object-oriented ontology, and Maurizio Ferraris' (2014 [2012], 2015), Sparrow's (2014), and Markus Gabriel's (2015) new realism. As noted in their first

correspondence in January 2007, DeLanda said to Harman that 'for decades admitting that one was realist was equivalent to acknowledging one was a child molester' (Harman, 2008: p. 368, DeLanda and Harman, 2017: pp. 1–2)! DeLanda (2016: p. 138; also in DeLanda and Harman, 2017: p. 3) reflects that he was an unapologetic realist after his 1991 book on warfare; he is also recognized by Harman (2010: p. 171) as 'a realist with a straight face and without ironic tricks'. As discussed in DeLanda and Harman (2017: ch. 1), both of them began to write in a realist direction in 2002 and that year marks the beginning of a prominent realist current in continental philosophy. See also feminist physicist Karen Barad's (2007: ch. 4) work on what she terms 'agential realism' in *Meeting the Universe Halfway* that 'rejects the notion of a correspondence relation between words and things and offers in its stead a *causal explanation* of how discursive practices are related to material phenomena. It does so by shifting the focus from the nature of representations (scientific and other) to the nature of discursive practices (including technoscientific ones), leaving in its wake the entire irrelevant debate between traditional forms of realism and social constructivism' (Barad, 2007: pp. 44–45; my emphasis).

13 Some well-known examples are Harvey (1982, 1989) on the spatial logics of capitalism; Massey (1984) on spatial divisions of labour; Soja (1989) on socio-spatial dialectics; Thrift (1996, 2007) on spaces of practices; Massey (2005) and Murdoch (2006) on different conceptions of space as relational, co-constitutive, multiplicity, and heterogeneous, and their social and political effects; Simonsen and Koefoed (2020) on the spatiality of social life in 'new humanism'; and Clifford et al. (2009) and Agnew and Livingstone (2011) on key concepts and geographical knowledge.

14 In his preface to *Fields of Sense: A New Realist Ontology*, Markus Gabriel (2015: p. xii), a leading contemporary German philosopher in idealism and new realism, proclaims that 'If "analytic philosophy" means a commitment to clearly expressed arguments and the willingness to revise arguments and give up beliefs in light of better counter-arguments, all philosophy is analytic, and what is not is mere rhetoric or metaphor-mongering… If "continental" philosophy means "philosophy" as it is practiced in continental Europe, there is no continental philosophy, as philosophy in continental Europe is just like philosophy anywhere else: an attempt to deal with concepts fundamental to our self-description as rational animals under the condition that we are able to articulate them in more concise and coherent ways than they are often used loosely in everyday life and in the other sciences… In short, the categories of analytic and continental philosophy are often merely used in order to prevent bad philosophy from being criticised by people who do not belong to the group of those sharing a particular set of beliefs or parochial standards of justification'.

15 These geographical works can appear to be rather philosophical with excessive quotes from original texts by critical social theorists (from Karl Marx to Jacques Derrida, Gilles Deleuze, Michel Foucault, Pierre Bourdieu, Ernesto Laclau, Bruno Latour, Judith Butler, Donna Haraway, Gayatri Spivak, Edward Said, Homi Bhabha, and so on) and philosophers (from Friedrich Nietzsche to Martin Heidegger, Ludwig Wittgenstein, Edmund Husserl, Maurice Merleau-Ponty, Henri Bergson, Michel de Carteau, John Dewey, and so on).

16 This intellectual high ground of viewing philosophy as an underlabourer for the (social) sciences has been consistently found throughout Bhaskar's (1975, 1989, 2008

[1993], 2016) work over four decades. Bhaskar (2016: p. 2) reiterates his commitment of critical realist philosophy as an underlabourer for knowledge production right at the beginning of his very last (albeit most reader-friendly) book-length manuscript (re) introducing critical realism for the social sciences and written just before his untimely death in November 2014: Quoting the 18th century British empiricist philosopher John Locke's (1975 [1690]) notion that 'The commonwealth of learning is not at this time without master-builders… [but] it is ambition [*sic*] enough to be employed as an under-labourer in clearing the ground a little, and removing some of the rubbish that lies in the way to knowledge', Bhaskar (2016: p. 2) declares that 'Critical realism aspires to clear the ground a little, removing, in the first place, the philosophical rubbish that lies in the way of scientific knowledge, especially but not only in the domain of the social sciences; and in this way to underlabour for science and (partly in virtue of this, it argues) more generally for practices oriented to human well-being and flourishing. These philosophies have been inherited largely unthinkingly from the past. At one time they may have played a progressive role, but they have long since ceased to do so'.

17 Agreeing with DeLanda (2006), feminist philosopher Rosi Braidotti (2011: pp. 6, 271) also points to the role of philosophy in 'the production of pragmatic and localized tools of analysis for the power relations at work in society at large and more specifically within its own practice. The philosopher becomes no more than a provider of analytic services: a technician of knowledge'. In *The Incorporeal*, another influential feminist philosopher Elizabeth Grosz (2017: p. 4) makes a similar case of philosophers in service of ontological clarifications: 'While I do not consider what follows to be a critique of epistemology, I aim to bypass epistemological questions in favor of a focus on an ontology sensitive to and engaged with the realities of space and time, of events and becomings, not just things and their knowable, determinable relations'. In her case of reworking ideas from a number of continental philosophers – from the Stoics, Benedict de Spinoza, and Friedrich Nietzsche to Gilles Deleuze, Félix Guattari, Gilbert Simondon, and Raymond Ruyer, she addresses the mind-body dualism through the concept of 'the incorporeal' that incorporates 'the subsistence of the ideal *in* the material or corporeal' and thus 'the immanence of the ideal in the material and the material in ideality' (Grosz, 2017: p. 5; original italics).

18 In his commentary on Ash's (2020a) (re)take on flat ontologies in actor-network theory, assemblage theory, theories of affect, and object-oriented ontology, Häkli (2020: p. 370) ruminates that 'Who would have thought that one day the arid "philosophical study of being" would become a hot topic in human geography? Not many, I bet, but these days it is difficult to find a paper that does not mention ontology in some way, shape or form'! See also DeLanda and Harman (2017: pp. 85–88) for an exchange of their views on different kinds of flat ontologies.

19 In the same 2010 AAG panel as Yi-Fu Tuan, Eric Sheppard cautioned that 'if we are going to make an ontological claim at all I think it should be relatively modest, not deeply philosophical. It is that complex emerging spatialities, or spatiotemporalities, matter. And they matter because even though they are in part constructed by us through a series of socionatural processes in which humans participate, they nevertheless always already exist, always coming back to shape what happens' (Merriman et al., 2012: p. 8). In the same forum, Nigel Thrift observed that 'there are many different

ways that you can define ontologies. If I was doing it I would probably index the Humean sense of the term, as inferences about the world's connections, natural organizations, perceptions of experience and causation and of what therefore constitutes both existence and non-existence. So that would, if you like, be a very general definition. Going on from that, though, I think what is interesting about the current moment is there are a lot of people who are playing around with this notion with the result, of course, that it has become *extremely confused*' (Merriman et al., 2012: p. 14; my emphasis).

20 See also Holbraad and Pedersen (2017) for an in-depth analysis of the ontological turn in anthropology. They note that despite 'a much-debated "ontological turn" within the discipline of anthropology… there is little agreement, and often little clarity, as to what anthropology's turn to ontology is actually meant to be, and how it relates to other recent ontological orientations within cognate fields' (Holbraad and Pedersen, 2017: pp. 44–45). Commenting on the apparent confusion over anthropology's ontological turn and its lack of conceptual parsimony, their solution is to argue for more 'turning', including turning on itself! As they conclude, 'the concepts that emerge out of our ethnographic engagements tend to seem similar because they are somehow tainted or otherwise influenced by the very *manner* or *method* by which they are derived. Maybe the ontological turn itself is just too "noisy" or powerful, generating concepts from here, there and everywhere, but somehow, and perhaps only to a certain extent, in its *own image*… For the point is that what the ontological turn seeks for itself, constitutively, is to *keep turning*. And turning in its most thoroughgoing orientation, as we have seen throughout this book, is fundamentally a reflexive exercise – it is above all of a matter of a turn turning on itself' (Holbraad and Pedersen, 2017: pp. 279–280; original italics).

21 Some of these quotes from philosophers can be rather weird and dysfunctional, from a few words (risking out-of-context quotation) to long paragraphs (risking obfuscation). Some book examples of such heavy engagement with critical social theorists and continental philosophers are Harvey (1989); Thrift (1996, 2007); Doel (1999); Massey (2005); Murdoch (2006); and Simonsen and Koefoed (2020). While Simonsen and Koefoed (2020: p. 2) recognize 'of course a risk to read philosophers as a nonphilosopher, since we do not have the resources fully to locate them in the intellectual histories from which they emerge', their book is actually much heavier in such readings of philosophers and critical theorists, from Maurice Merleau-Ponty, Michel de Certeau, and Hannah Arendt to Henri Lefebvre, Edward Said, and Sarah Ahmed and many others, than in its empirical illustration of these dense philosophical ideas and concepts with interview and observational materials from their four projects on urban encounters and embodied experiences in Denmark. For journal articles, see recent examples of such writing style in Joronen and Häkli's (2017) critique of Geography's 'ontological turn' (drawing much on Martin Heidegger); Ash (2020a) on 'flat ontology'; Bridge (2021) on John Dewey's pragmatist philosophy; and Kinkaid's (2021) critique of post-phenomenology (drawing much on Maurice Merleau-Ponty). In Robinson's (2016: p. 16) recast of comparative tactics for a more global urban studies, the need to go back into Deleuze's abstract philosophy and, by her own admission, 'an incredibly complex formulation' to justify all over again the relevance of *difference* for comparative urban studies in the late 2010s and beyond might seem a

little excessive (see also Cockayne et al., 2017). To take one example from the much celebrated poststructuralist work *A Thousand Plateaus*, Deleuze and Guattari's (1987 [1980]: pp. 87–91) thought on assemblage is what his interlocutor and philosopher DeLanda (2006: p. 3) calls 'Deleuzian hermeneutics' or 'a preoccupation with what Deleuze "really meant"' because 'part of a definition may be in one book, extended somewhere else, and qualified later in some obscure essay. Even in those cases where conceptual definitions are easy to locate, they are usually not given in a style that allows for a straightforward interpretation'.

22 As Nigel Thrift (2021: p. xi) reflects on some social theory writing, 'I have read too much social theory which blithely asserts the primacy of its account of the world on the basis of not much except other social theoretical accounts and a kind of theoretical puritanism. Fine, but with this tendency comes the risk of writing "phiction"'. But John Agnew (2011) is much more critical in his damning view of how (British) geographers latch onto French theorists to legitimize their rediscovery of 'place' for Geography. In the context of a revival of scholarly interest in the mediating role of place in social relations and acquisition of meanings, Agnew (2011: p. 322) notes that 'The ransacking of the works of French philosophers (Deleuze, Foucault, Derrida, Latour, etc.) by some British geographers to find a quotation or two to justify their reanimation of place would be just as simple-minded a representation of an equally wide range of writing'. Paradoxically though, Deleuze and Guattari (1987 [1980]: p. 24) intentionally took a rhizomatic approach to what they term 'nomadic' writing about many different plateaus such that their work cannot be 'ransacked' and reduced to straightforward subjects and objects (see also such 'nomadic habits' of writing and reading in Braidotti, 2011: p. 9)!

23 Reviewing critically Marcus Doel's (1999) *Poststructuralist Geographies*, Elden (2003: p. 239; emphasis omitted) has 'grave doubts' about the book's 'approach, and certainly its style' because Doel's 'own rampant licentiousness makes this text a collage, a bricolage, a patchwork of quotations and disparate thinkers uncritically assimilated to the schizoproject. However supportive of his endeavour readers might be, they are likely to be put off by the awkwardness of its expression and its intangibility. Doel appropriates the ideas of many, and rather than explaining their ideas in a way that might open them to a wider audience, seems content to speak like them'. For someone well versed with 'continental' philosophy (see Elden, 2001, 2004, 2017), Elden's remarks and their implications for geographical writing should be taken seriously.

24 Deleuze and Guattari (1987 [1980]: p. 503; my emphasis) caution that 'How could unformed matter, anorganic life, nonhuman becoming be anything but chaos pure and simple? Every undertaking of destratification (for example, going beyond the organism, plunging into a becoming) must therefore observe *concrete rules of extreme caution*: a too-sudden destratification may be suicidal, or turn cancerous. In other words, it will sometimes end in chaos, the void and destruction, and sometimes lock us back into the strata, which become more rigid still, losing their degrees of diversity, differentiation, and mobility'.

25 I concur with feminist-socialist Donna Haraway's argument against relativism, even though I may not subscribe entirely to her alternative and perhaps rather utopian approach. In her work on situated knowledges engaging with Sandra Harding's (1986) *The Science Question in Feminism*, Haraway (1991: p. 191) argues that 'The alternative

to relativism is partial, locatable, critical knowledges sustaining the possibility of webs of connections called solidarity in politics and shared conversations in epistemology. Relativism is a way of being nowhere while claiming to be everywhere equally. The "equality" of positioning is a denial of responsibility and critical enquiry. Relativism is the perfect mirror twin of totalization in the ideologies of objectivity; both deny the stakes in location, embodiment, and partial perspective; both make it impossible to see well. Relativism and totalization are both "god-tricks" promising vision from everywhere and nowhere equally and fully' (see also Harding, 1991: ch. 6; pp. 152–153).

26 But such a normative stance is not easy in practice! In his first book on the ideology of science and critical theories in human geography, Gregory (1978: p. 170) argues for a critical geography that moves beyond the epistemological discourse of positivism. And yet he concludes reflexively that 'in effect, I have as yet failed to apply to the critical model [theory] the same order of interrogation that I deployed against the traditional model [positivism] and, in particular, I have said very little about the nature of the emancipatory interest which provides the touchstone of the critique and the very foundation of the critical model itself'. See also feminist Sara Ahmed's (1998: pp. 54–58) *Differences That Matter* for her reflections on the practical difficulty in defining the universal emancipatory values of mediating ethics by feminist politics.

27 To Bhaskar (2016: p. 38), 'all human societies always already possess a proto-scientific account of the world and any serious science or philosophy is always necessarily trying to transform this account into a more adequate account, that is, to demystify and enlighten common sense. The relevant questions will then be how far this realism is developed (whether so as to include causal laws or universals, for example) and in what form it is manifest (empirical, conceptual, and so on). This of course gives the immanent critic of some position adopted in practice a way in which explicitly to critique it. But by the same token it becomes important for us not just to identify lazily as a realist, but to specify exactly what kind of realism the position being advanced is committed to'. See also Maurizio Ferraris' (2014 [2012]: ch. 3) arguments for immanent critique and the need for not only postmodernist deconstruction, but more importantly also realist reconstruction. To him, realist philosophy is critical 'in the Kantian sense of judging what is real and what is not, and in the Marxian sense of transforming what is not right' (p. 45). Such a paradox in the relationship between critique and creative (re) construction has also been recognized by feminist philosopher Rosi Braidotti (2011: p. 267) as 'a problem that has confronted all activists and critical theorists: how to balance the creative potential of critical thought with the dose of negative criticism and oppositional consciousness that such a stance necessarily entails'. She argues for an affirmative politics that 'entails the creation of sustainable alternatives geared to the construction of social horizons of hope, while at the same time doing critical theory, which implies resistance to the present'.

28 See Barnett (1999, 2008); Tolia-Kelly (2006); Mitchell and Elwood (2012); Joronen and Häkli (2017); MacFarlane (2017); Doucette (2020); and Kinkaid (2020, 2021). Taking a radical contingent view, Ruez and Cockayne (2021) recently offer an ambivalent-affective response to these critiques and yet leave us with their ambivalence about ambivalence as something to work with, not work through! Here, I share Wilkinson and Lim's (2021: p. 113) concern with the ambivalent 'who' who can benefit from their new affective dispositions and capacities for action, and Linz and

Secor's (2021: p. 109; original italics) response that 'We confess to being ambivalent about this ambivalence about ambivalence with which we are left. How does a tool that itself resists self-identity even work? How does it become ready-to-hand without any fixing of meaning or function? Can we use it *without* stopping it from slipping away – a tool of unmastery?'.

29 Citing key feminist and postcolonial thinkers such as Judith Butler (2006 [1990], 2011 [1993]) and Gayatri Spivak (1988), Mitchell and Elwood (2012: pp. 792–793) argue that 'In furthering theory and tackling injustice both scholars noted the difficult but vital importance of relying on (and constantly critiquing) a community of praxis rather than merely on individual observations, passions, or celebrations. This runs counter to the general mood of NRT [non-representational theory], which frowns on boring, "normative" concerns such as these and favors, instead, an attention to our personal bodily encounters and emotions'. Drawing on approaches in feminism, sexuality, indigenous, and critical race theory, Kinkaid (2020: p. 469) also points to the danger of missing gender, sexuality, and race in assemblage thinking and argues that 'in disavowing social categories, assemblage thinking may further obscure the operations of power and inequality… [Indeed], assemblage might provide a critical lexicon for better understanding and intervening in the uneven geographies of our world. Yet in order to activate these possibilities and avert these dangers assemblage geographies must conduct a serious accounting of its theoretical foundations and normative commitments'.

30 Following some of political theorist Hannah Arendt's arguments for cohabitation and equality, Butler (2015a: pp. 118–119) claims that our ethical responsibility and global obligation in unchosen cohabitation is expressed in the plurality of bodily life and thus our commitment to preserving the life of the other, as in the relational interdependency of our bodies 'up against' the distant suffering of other bodies on earth. To her, 'it is only when we understand that what happens there also happens here, and that "here" is already an elsewhere, and necessarily so, that we stand a chance of grasping the difficult and shifting global connections in ways that let us know the transport and the constraint of what we might still call ethics' (Butler, 2015a: p. 122). In *The Incorporeal*, Elizabeth Grosz (2017: p. 1) uses the term 'ontoethics' to describe this ontological approach to 'the question of how to act in the present and, primarily, how to bring about a future different from the present'.

31 In *Geographical Imaginations*, Gregory (1994: p. 12) argues that 'social theory does not come ready-made. As I have said, it provides a series of partial, often problematic and always situated knowledges that require constant reworking as they are made to engage with different positions and places. Conceived thus, social theory, like geography, is a "traveling discourse," marked by its various origins and moving from one site to another'.

32 Addressing problems of explanation in his book *Society and Economy*, prominent economic sociologist Mark Granovetter (2017: p. 14) takes a similar view of explaining human action in its necessary social context: 'A fruitful analysis of any human action, including economic action, requires us to avoid the atomization implicit in the theoretical extremes of under- and oversocialized views. Actors do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of sociocultural categories they happen to

occupy. Their attempts at purposive action are instead embedded in concrete, ongoing systems of social relations'.

33 As cautioned specifically in Bhaskar (2016: p. 80), 'it will not in general be possible to specify how a mechanism operates independently of its context. Hence we must not only relate mechanisms back to explanatory or grounding structures, as in the theoretical natural sciences, but also to context or field of operation. This means that in the social field in principle we need always to think of a context-mechanism couple, C + M, and thus the trio of context, mechanism, outcome (CMO), or more fully the quartet composed of context, mechanism, structure and outcome (CMSO)'.

34 Harrison (2002: p. 489) argues that 'the value of Wittgenstein's work lies in how it may be used as a way of getting to another understanding or sense of explanation… For Wittgenstein, as for (especially the later) Foucault, practices and their performance are understood as sufficient in themselves'. But in *The Art of Social Theory*, sociologist Swedberg (2014: pp. 71–74, 182–183) has extensively engaged with Wittgenstein to buttress his argument *for* explanation as the necessary ingredient of social theory.

35 Thrift (1986; reproduced in 1996: p. 132; original italics) compares theories with accounts: 'A theory is concerned with taking a set of events that already existed prior to it and made one kind of sense and reshaping them to make quite another kind of sense. It is a cognitive operation. In contrast, an account is a perceptual operation, a more explicit description of what an action taking place with a particular everyday context actually *is*'. I see these two modes as compatible since a proper description or account of what is taking place does entail theory as some *a priori* explanation or sense-making of what such events might be and why they *can* take place.

36 As Bhaskar (2009 [1986]: p. 104) argues in his *Scientific Realism and Human Emancipation*, 'Emancipation depends upon explanation depends upon emergence. Given the phenomena of emergence, an emancipatory politics (or more generally transformative or therapeutic practice) depends upon a realist science. But, if and only if emergence is real, the development of both science and politics are up to us'. Critical realist work should therefore be practical in the sense that it is applicable to everyday life. Bhaskar (2016: p. 4) notes further in his last and most reader-friendly book that 'For since there is only one world, albeit there are very variant descriptions of it, the theories and principles of critical realist philosophy should also apply to our everyday lives. If they do not, then something is seriously wrong. This means that our theories and explanations should be tested in everyday life as well as in specialist research contexts'. Committed to the need for social theory with an emancipatory intent, realist sociologist Dave Elder-Vass (2010: pp. 11–12) echoes Bhaskar's sentiment and argues that 'I do believe that we cannot pursue an emancipatory politics without a good understanding of how the social world does work and how it could work differently. It is only if we can provide causal explanations of the social world that we can attempt to predict the consequences of a possible change. It is only if we are able to predict, at least in broad outlines, these consequences that we can assess whether that change offers progress in a normative sense. And it is only if we can do this that we can honestly advocate it as an emancipatory strategy'.

37 As argued in his recent book *Social Change in a Material World*, 'The ultimate criterion for the [practical] adequacy of theory and theoretical concepts is their usefulness in empirical analysis, the use that is and can be made of them to conceptualize, describe, explain, and understand social life and social phenomena (or to order these cognitive

achievements). Success at conceptualizing, describing, explaining, and understanding might make theories and theoretical ideas useful for intervening in, that is, impeding, instigating, or inflecting social affairs. Although it is intellectually defensible for any work of theory that upholds theses such as these to be a work of pure theoretical development and elaboration, pure theory contravenes the spirit of the thesis; it is also tactically inadvisable' (Schatzki, 2019: p. 18).

38 Jazeel's (2016, 2019) argument has drawn upon indigenous studies (e.g. Tuck and Yang, 2012) to critique the dominant focus on representation and its literary critiques in postcolonial theory and subaltern studies (see also geographical debates in Curley and Smith, 2020; Oswin, 2020). In an earlier text on postcolonial geographies, Sharp (2009: pp. 145–146) also laments that 'the ideas of postcolonialism have been generated from inside the west, inside academia, and from an analysis of texts rather than fieldwork. The clever ideas of postcolonial theory are sometimes challenged for being too caught up with producing critiques of the texts central to western thought (whether western philosophy, literature or art) and for not spending enough time considering the real issues being faced by people in the global south today. For instance, some would wonder as to what the cultural and theoretical bases of postcolonialism can tell us about poverty, inequality, racism, subjugation'.

39 As noted in Deleuze and Guattari's (1987 [1980]: p. 500) *A Thousand Plateaus*, change alone through a smooth space (of thought?) may not be enough to save us: 'Movements, speed and slowness, are sometimes enough to reconstruct a smooth space. Of course, smooth spaces are not in themselves liberatory. But the struggle is changed or displaced in them, and life reconstitutes its stakes, confronts new obstacles, invents new paces, switches adversaries. Never believe that a smooth space will suffice to save us'!

40 My similar choice of illustrative materials in different chapters may invite such a reading, e.g. the focus on Doreen Massey's spatial divisions of labour in Chapter 3, regional development in Chapter 4, neoliberalization in Chapter 5, and economic globalization and the theory of global production networks in Chapter 6.

41 This idea of 'stress testing' might have its origin in the post-2008 global financial crisis and subsequent banking restructuring. But my evocation of the idea is more metaphorical than institutional, as practised in then the stress-testing of banks (see Fligstein, 2021).

42 Some contemporary exceptions are David Harvey's (1989, 2005) Marxist rethinking of postmodernity and neoliberalism; Edward Soja's (1989) spatialization of postmodern theory; JK Gibson-Graham's (2006[1996]) feminist critique of political economy; Michael Storper's (1997) institutionalist theory of regional development; Tim Cresswell's (2006) interpretive framing of mobilities; and so on.