A Critical Geography of Compact Urbanism

Urban politics of difference in Oslo

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UNIVERSITY OF BERGEN

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Scientific Environment

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The way things come together are often, if not always, disguised by how they are expressed. This thesis is no exception.

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May the future be hopeful.

Abstract

Since the 1990s urban sustainability has become a prominent international policymaking goal and global policy discourses have encouraged people to live in cities. Compact city policies have proliferated during this period. Positioned against urban sprawl and the expansion of suburban low-density development, compact city policy has been defined as a comprehensive urban development approach aimed for concentrating and optimising human settlements. While ongoing debates question the environmental, economic and social sustainability of compact urbanism, cities globally increasingly adopt a broad variety of compact city approaches. Urban density is commonly viewed positively in economic, ecological and social terms. In Oslo—the research context of this study—compact urbanism makes up the overarching land use strategy and is viewed as a successful policy for curbing sprawl and encouraging sustainable transportation. However, a broad literature shows that compact urbanisation also contributes to a considerable portion of global energy use and corresponds with increases in inequality. This thesis makes the case that compact city policies should be viewed in light of these complex trajectories of urban life and development.

To develop what I term *a critical geography of compact urbanism* I carried out a multi-sited case study on how urban actors seek to forge alternative regulations, practices and alliances that might enable more sustainable trajectories in Oslo. I am particularly interested in understanding how policies and practices from elsewhere influence urban actors' attempts to diverge from established development trajectories. If there are alternative trajectories for compact urbanism, how are they translated, learned and legitimised?

To understand the form of urban learning that influences societal shifts—what I have termed, how cities learn difference—I have critically engaged with how urban actors attempt to rearticulate hegemonic strategies in more sustainable directions. Engaging theories that understand difference as affirmative, contingent and relational has allowed for a research project focusing on how alternating stories of compact urbanism in Oslo are made apparent, coherent and subversive. My research shows that there exists a range of counterhegemonic trajectories of urban development, and

examples of urban practices and discourses that challenge the hegemonic manifestation of compact urbanism in Oslo. Shifting towards a relational perspective of the compact city allows not only *another compact urbanism* to be perceived as possible, but shows that coeval trajectories of compact urbanism are already present in fragmented ways throughout different cities. Understanding alternative trajectories of compact urbanism in Oslo as relational, context-contingent and unpredictable endeavours, my research emphasises topologies of difference to which alternative trajectories of compact urbanism aspire.

List of papers

Paper I:

Kjærås, K. (2021). Towards a relational conception of the compact city. *Urban Studies* 58(6): 1176-1192.

Paper II:

Kjærås, K. Learning urban density: The politics of urban densification in Oslo. Revise and resubmit received May 4, 2021, under revision: *Urban Studies.*

Paper III:

Kjærås*, K. and Haarstad**, H. A geography of repoliticisation: Popularising alternative housing models in Oslo. Major revisions received May 23, 2021, under revision: *Political Geography* (Kjærås* 80%, Haarstad** 20%)*.*

Paper IV:

Schrage*, J. and Kjærås**, K. How do cities challenge patterns of demand? Characterising the local governance of climate change in Nordic cities. Major revisions received April 21, 2021, under revision: *Environment and Planning C: Politics and Space* (Schrage* 60%, Kjærås** 40%).

Paper V:

Haarstad*, H., Kjærås*, K., Røe*, P. G. and Tveiten*, K. Diversifying the compact city: A renewed agenda for geographical research. In review: *Dialogues in Human Geography.* (Haarstad* 25%, Kjærås* 25%, Røe* 25%, Tveiten* 25%).

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1   Introduction

Since the 1990s urban sustainability has become a prominent goal in international policy making and global policy discourses have encouraged people to live in cities for the betterment of the environment (Angelo and Wachsmuth, 2020; Parnell, 2016). During this period, compact city policies have proliferated and the nature of urban density has turned "from a social and environmental evil to a positive social and environmental good" (Tonkiss, 2013, p. 37). Positioned against urban sprawl and the expansion of low-density suburban development, compact city policy has been defined as a comprehensive urban development approach aimed to concentrate and optimise human settlements (Burton, 2000; Westerink et al., 2013). While ongoing debates have questioned the environmental, economic and social sustainability of compact urbanism, cities globally have adopted a broad variety of compact city approaches (Angelo and Wachsmuth, 2020). In this same period, cities have become desirable for people and for economic investment (Sassen, 1991; Harvey, 2000). However, following from this trend there are signs that indicate that urban life—and especially sustainable urban life—is becoming increasingly unattainable for many. A breadth of literature provides evidence that cities are responsible for over 70 per cent of global energy use (Creutzig et al., 2016a, 2016b; IPCC, 2014; Moran et al., 2018), urban life associated with dense areas is not necessarily more climate friendly (Charmes and Keil, 2015; Heinonen et al., 2013; Ottelin et al., 2015) and current urbanisation processes are corresponding with increases in inequality (Sampson, 2017; Wachsmuth et al., 2016).

For Scandinavian cities, many of which are seen to lead transformations towards urban sustainability, these contradictions are significant. In Oslo, compact city development makes up the overarching land use strategy, supported by urban densification strategies and an urban containment boundary protecting a recreational and nature reserve surrounding the city (Tiitu et al., 2021). Composing the primary development strategy in Oslo for the last three decades, Næss et al. (2011) describe compact city policy as hegemonic, stating that Oslo "has managed to combine high

growth in population and the building stock with low encroachments on natural and cultivated areas and a moderate traffic growth" (p. 135).

In Oslo, which is home to approximately 700 000 people, urban planning research and practice have focused on how compact city policies support sustainable mobility and protect surrounding nature and arable land (Tiitu et al., 2021). For example, Næss carried out several studies (e.g., Næss, 2012; Tiitu et al., 2021; Næss et al., 2011) on the relationships between compact city policies and travel behaviour, arguing that Oslo is largely succeeding in its compact city approach. However, Norwegian research also indicates factors where urban sustainability and compact city policies are in potential conflict, such as long-distance travel, (Holden and Norland, 2005), public health (Millstein and Hofstad, 2017) and social sustainability (Cavicchis and Cucca, 2020; Schmidt, 2014). Wessel and Lunke (2019) show that first-time parents leave inner-city Oslo for low-rise housing in the suburbs. Whereas compact city policies in Oslo may be viewed as successful, many central issues pertaining to urban sustainability remain unresolved.

While Oslo is an affluent city, it is also experiencing issues, namely, increasing inequality and housing unaffordability (Galster and Wessel, 2019; Turner and Wessel, 2019), segregation (Brattbakk and Wessel, 2013; Cavicchis and Cucca, 2020; Lunggren and Andersen 2014; Wessel, 2000) and gentrification (Hjorthol and Bjørnskau, 2005; Huse, 2014; Kadasia et al., 2020). The turn towards densification and compact city policies corresponds with several societal and urban shifts related to rising inequality. Since the 1980s, population growth, economic growth and rising inequality have occurred in Oslo (Wessel, 2013). Following the turn towards urban entrepreneurial strategies and increased interurban competition (Andersen and Skrede, 2017; Harvey, 1989), Oslo's economic strategy has transitioned towards post-industrial development (Andersen and Røe, 2017; Wessel, 2013). During this period, the housing system in Norway was liberalised and Oslo housing prices has increased substantially since the 1990s (Nordahl, 2014; Tranøy et al., 2020). Yet today, Oslo generally receives high liveability scores (Mouratidis, 2018).

This thesis makes a case that compact city policies should be viewed in light of these complex trajectories of urban life and development. Negating any simple

delineation between urban design and other policies, compact city strategies are viewed herein as embedded within a nexus of social, economic, cultural and environmental politics, and democratic governance structures.

With my research, I have developed a critical approach to compact urbanism in Oslo. I carried out a multi-sited case study focusing on how urban actors in Oslo engage with problems arising in the compact city nexus. In particular, I am interested in understanding how policies and practices from elsewhere influence urban actors' attempts to diverge from established development trajectories. If there are alternative compact urbanism trajectories, how are these alternatives translated, learned and legitimised?

Since critical approaches are sometimes scrutinised for narrating the inevitability of the hegemonic system that they analyse, I have produced a study that does not preclude opportunities for social change. For example, the correlation between rising property prices and increasing inner-city density is often seen as an *inevitable* consequence of compact city strategies. However, cities like Vienna that have recently regulated property prices in certain urban zones (City of Vienna, 2019) call into question the inevitability of the relation between urban built densities and property prices. From this perspective, proposing alternatives within the compact city nexus (which I explain in chapter 3) does not necessarily entail a full-scale rejection of 'the compact city', but a willingness to question the particular policies and practices that guide compact city approaches. Thus, in my endeavour to develop what I have termed *a critical geography of compact urbanism,* I have drawn extensively on methodologies and theories of difference and relationality.

To research alternative trajectories of compact urbanism in Oslo, I have utilised Massey's (2015 [2005]) relational conceptualisations of space, Deleuze's (2016 [1968]) ontology of difference, comparative urbanism, policy mobilities studies and a Gramscian conceptualisation of counterhegemonic relations. Building on approaches focused on the multiplicity of coeval trajectories that exists (Massey, 2015), I have tried to be sensitive to the nature of agency in a field dominated by particular power relations and persuasive discourses (e.g., the environmental benefits of densification). In particular, I have engaged policy mobilities literature in an attempt to understand

compact urbanism in relational terms—as an assembling of a range of (often contradictory) policies, spaces, actors and trajectories of urban development and urban life. The policy mobilities literature emphasises the interconnected nature of policymaking, providing insight into how policies and ideas are translated and learned across contexts (McCann and Ward, 2011; McFarlane, 2011; Peck and Theodore, 2015). This literature often confirms interurban exchanges as conservative in nature—affirming established power relations rather than challenging them (Bunnell, 2015; Peck and Theodore, 2015). Researching how alternating trajectories are interconnected across scalar configurations, my research engages with how to best study global relations of urban policy and place making.

Engaging theories that understand difference as affirmative, contingent and relational has enabled a research project focused on how alternating stories of compact urbanism in Oslo are made apparent, coherent and subversive. I understand difference as ontologically primary and generative. However, empirically, difference is best understood as that which exceeds representation while simultaneously being a generative engine for transformation (Cockayne et al., 2017; Deleuze, 2016 [1968]). By focusing on how urban actors seek to forge alternative regulations, laws, practices and alliances that could enable more sustainable trajectories, I have been interested in understanding how urban actors engage in counterhegemonic relations. The goal of this research project may therefore be described as contributing to a better understanding of 'how cities learn difference'. In other words, the conceptualisation of difference used herein seeks understanding of the form of urban learning that influences societal shifts and changes in urban trajectories.

1.1   Research questions

To operationalise my research project, I have formulated three research questions that are framed within an overarching question:

How are alternative trajectories of compact urbanism assembled in Oslo?

Subquestions:

- *What practices and discourses are part of forming alternative trajectories of compact urbanism in Oslo?*
- *How do urban actors learn, translate and legitimise alternative trajectories of compact urbanism?*
- *How can we understand the urban politics of difference in compact urbanism?*

With these questions I set out to describe how urban actors negotiate compact urbanism in Oslo, and the discourses, policies and practices they employ in their attempts to diverge from established development trajectories and associated urban politics of such activity. Because little research has addressed alternative trajectories within compact urbanism, my work is both descriptive and analytical. The overarching research question is purposefully broad. In asking how alternative trajectories of compact urbanism are assembled in Oslo, my goal was to illuminate the relational processes that bring together alternative discourses, practices and urban actors.

The way I define 'alternative trajectories' is based on a critical reading of Massey (2015) and Deleuze (2016) and influenced by ideas on counterhegemonic relations, policy mobilities studies and comparative urbanism literature. While this conceptual understanding is described in chapter 2, empirically, alternative trajectories can be understood as pertaining to practices, politics, policies and discourses that intend to alter social, economic and ecological relations of compact urbanism.

Through researching how alternative trajectories of compact urbanism are assembled and become influential in Oslo, I have developed a critical geography of compact urbanism. In this process, I have developed a spatial critique of compact city policies, analysed alternative conceptualisations of urban density and explored how alternative trajectories of urban housing find space for articulation and legitimation. I have accomplished this by focusing on spatial renderings of compact urbanism, hegemonic and counterhegemonic discourses of urban density and the articulation and popularisation of alternative housing schemes in Oslo. I have also contributed to ongoing debates about how cities can account for consumption emissions in their

governance approaches and have reviewed existing compact city literature with the purpose of setting an agenda for future research.

The following section will give a summary of the papers comprising my research. In chapter 2, I describe and discuss my overarching theoretical framework. In chapter 3, I outline my research approaches and describe my methodological design and research process choices. Finally, in chapter 4, I discuss my main findings and highlight three specific contributions.

1.2   Summary of papers

The papers that comprise this thesis are both theoretical and empirical. The first three provide the empirical thrust of my work, describing my original, empirical fieldwork. The first two papers are single-authored, while the third is co-authored with my supervisor, Håvard Haarstad. The fourth paper, a collaboration with Jesse Schrage, is a critical analysis of consumption emissions in Nordic cities and proposes a social practice-oriented approach to urban climate governance. The fifth paper, which further develops the agenda for compact city research, is a collaboration with Per Gunnar Røe, Håvard Haarstad and Kristian Tveiten.

Paper I

Kjærås, K. (2021). Towards a relational conception of the compact city. *Urban Studies,* 58(6): 1176-1192.

In this paper I argue that existing compact city policies are in danger of narrowing the scope of urban sustainability, rendering societal transformation towards low-carbon and greater social equality less attainable. I critique compact city literature and practice for their emphases on urban form and territorial boundaries for guiding sustainability measures, and argue that this approach ignores significant socio-environmental consequences. The fundamental assumptions that guide current compact city approaches entail: 1) an assumed correlation between urban form and urban life (e.g., Newman and Kenworthy's (1989) argument that higher urban densities correlate with less car use), and 2) the local or regional scalar configuration of compact city policies, such as when cities measure their greenhouse gas emissions by accounting for territorial emissions, while leaving out their indirect emissions.

Consequently, compact city approaches often ignore relations e.g., between income and emissions, or between particular financial models and urban housing typologies. In this paper, I argue that attending to these critiques requires a spatial recontextualisation of compact city strategies. To achieve this, I use relational theory by applying the concepts of topography and topology, and draw on insights from policy mobilities studies, assemblage theory and urban political ecology. Working towards a relational conceptualisation of the compact city, I argue, can advance a critical geography of compact urbanism in which the discursive and material constitution of the city are approached more progressively. I use the case of Oslo's involvement in the EU urban policy network, 'Sub>Urban: Reinventing the Fringe', and the concrete work that followed from this network in Hovinbyen to explore such a relational conceptualisation. Using this case study, I develop three critical perspectives to advance theorisation beyond traditional frameworks: (1) the relational topographies of the compact city; (2) the relational intensities of the compact city; and (3) the planetary constitution of the compact city. Overall, the goal of this paper is to prompt researchers, policy makers and planners to ask different questions of the compact city and explore alternative regulations, laws, practices and alliances that might enable more sustainable trajectories.

Paper II

Kjærås, K. Learning urban density: The politics of urban densification in Oslo.

Revise and resubmit received May 4, 2021, under revision: *Urban Studies.*

In this paper, I analyse the politics of urban density in Oslo. This paper contributes to a critical geography of compact urbanism with an analysis of discursive positions on urban density, exploring how urban density is and could be assembled. While urban densification is a favoured political strategy for many cities, urban density also seems to exaggerate many of the problems that it proposes to solve (e.g., urban gentrification, rising emissions, affordability). Critiquing the naturalised assumptions afforded by urban densification strategies, I argue that they disguise a political realm related to for example financial models, housing typologies and socio-ecological aesthetics. Seeking to disentangle perspectives and approaches to urban densification, this paper applies a

relational approach to urban density and a Gramscian approach to hegemonic and counterhegemonic relations. To analyse the politics of Oslo's urban density, discourse analysis of 28 interviews were triangulated against 173 newspaper articles. The data was categorised according to the categories: hegemonic discourses, counterhegemonic discourses, problem formulations and subject positions. The resulting analysis describes the common sense of densities in Oslo (i.e., the hegemonic position) where discourses on entrepreneurialism, market-based homeownership, and technical environmentalism legitimise a neoliberal approach to densification and four counterhegemonic discursive positions: democratic urbanisation, new social economy, urban humanism and urban social ecology. These four positions all adopt different spatio-temporal approaches compared with the hegemonic position on urban density, ultimately attributing a different value set to how urban density should be achieved and perceived. The spatio-temporal differences between the hegemonic and counterhegemonic discourses are significant. How the counterhegemonic positions are translated into actionable knowledge relies on a constitutive process whereby the problems accrued through neoliberal densities, and the alternatives sought through counterhegemonic articulation, are made legible.

Paper III

Kjærås*, K. and Haarstad**, H. A geography of repoliticisation: Popularising alternative housing models in Oslo. Major revisions received May 23, 2021, under revision: *Political Geography* (Kjærås* 80%, Haarstad** 20%).

In this paper, we analyse the role of a proposed 'third housing sector' in politicising the question of housing in Oslo. Conceptually, this political initiative provides a way of thinking about how housing can be organised and owned differently from neoliberal market-based solutions. Contributing to the discussion of how alternatives are made legible and politically feasible, this paper argues that politicisation processes should be understood spatially. Drawing on theories of post-politicisation and policy mobility, this paper contributes to understanding constitutive processes of transformation. Consistent with paper I and II, theories of difference provide a significant part of shaping a critical approach to social change. In analysing the role of the emerging third

housing sector in Oslo we focus on the mobilisation and rearticulation of a genealogy of failure of housing in Oslo and some of the alternative housing solutions brought together in the city. Discussing this emerging geographical referencescape of housing as a distinctly spatial process of politicisation we show how arguments and positions gain legitimacy by situating references to other situations and places in a multiplicity of local and foreign arenas. While this paper does not discuss the role of compact city policies or urban density in great depth the housing discussion in Oslo is situated within the compact city nexus, as shown in paper II.

Paper IV
Schrage*, J. and Kjærås**, K. How do cities challenge patterns of demand? Characterising the local governance of climate change in Nordic cities. Major revisions received April 21, 2021, under revision: *Environment and Planning C: Politics and Space* (Schrage* 60%, Kjærås** 40%).

In this paper, we analyse how and to what extent 10 Nordic cities target everyday demand patterns in their climate governance policies. Contributing to a critical perspective on the planetary constitution of cities, this paper reveals how urban consumption largely escapes existing urban climate governance approaches. While increasing attention is given to accounting for Scope 3 emissions, cities find it difficult to address emissions that occur beyond their territorial boundaries. Through a policy study of 10 high-consumption cities and their climate plans and strategies, we categorise their climate measures according to their impacts on changing everyday consumption practices. Utilizing an intervention-in-practice framework, we reveal that most climate measures rely on non-committal measures in the domains of mobility and housing, as well as household self-governance. In fact, the lack of governance tools for addressing patterns of demand was voiced by city officials. This paper concludes by discussing how an intervention-in-practice framework can complement approaches already adopted by cities to govern urban emissions reductions.

Paper V

Haarstad*, H., Kjærås*, K., Røe*, P. G. and Tveiten*, K. Diversifying the compact city: A renewed agenda for geographical research. In review: *Dialogues in Human Geography.* (Haarstad* 25%, Kjærås* 25%, Røe* 25% and Tveiten* 25%).

Advancing a renewed agenda for geographical research, this paper 'diversifies' compact urbanism with a critical literature review on the relation between compact cities and urban sustainability. We review recent academic discussions pertaining to compact city theory, the urban sustainability literature and the critical urban research within human geography and urban studies. Contributing to the agenda outlined in paper 1, this paper argues that the compact city has primarily been approached as a territorially bound physical urban form, often neglecting the social, political and ecological implications of compact urbanisation and urban life. Building on perspectives and concepts from scholarship in urban studies and human geography this paper highlights that existing compact urbanism is commonly part of ideological projects of urban growth and renewal; has significant but contradictory implications for justice; and is contextualized, lived and resisted by urban residents in densification sites. Arguing for diversifying the compact city conceptually and empirically we chart three thematic avenues for advancing compact city research and rearticulate compact urbanism as a strategy for transformation towards sustainability. Our three entry points for advancing a new agenda for compact urbanism are: (1) commoning the compact city, (2) metabolism of compact cities, and (3) antagonism in the compact city.

2 Theoretical Approaches

Through my research I want to understand how cities learn to act differently on issues pertaining to compact urbanism and how they influence each other in their attempts to diverge from established development trajectories. Researching how alternative trajectories arise presents a series of theoretical and methodological demands. This chapter will explain my interest in understanding 'how cities learn difference' by drawing on a broad literature, from Massey's (2015) critique of modern conceptualisations of space, to Deleuze's (2016) ontology of difference, comparative urbanism, policy mobilities studies and a Gramscian conceptualisation of counterhegemonic relations.

While phrases like learning, translation and difference are colloquial, they hold specific ontological and epistemological meanings in my work. For example, 'learning' is understood in a Gramscian sense, as the ways in which we come to understand the world as a lived activity, that is, as part of ongoing relations between material praxes and discursive expressions. 'Difference' holds an equally complex connotation, being understood as affirmative, contingent and relational. I understand difference as ontologically primary and generative, yet disguised in representation. To think about 'difference' may therefore be understood as thinking about that which exceeds representation. Researching how urban actors pursue alternative compact urbanism trajectories is derived from particular ontological and epistemological positions that I will explain below. While my papers engage a broad range of theories, I present my overarching theoretical framework in this chapter. This framework is first and foremost concerned with understanding the nature of social change in a global world, where cities provide significant nodes of interconnection and interdependence. Theoretically, the study of compact city policy can be understood as a process of social transformations within a global setting. The complexity of social relations in how urban actors pursue alternative compact urban trajectories with unique contingencies and relations can be said to be 'learned' across local and global scales.

Because social change poses qualitative questions of difference—e.g., 'what will be different?', 'how will such difference come about and be organised?'—this chapter starts with a consideration of Deleuze's ontology of difference. Second, I build on

Deleuze's perspective through Massey's relational approach to space and her framework for understanding contemporary globalisation. Together, these theories advance a perspective on how difference is produced in the world. I then turn to urban theory and clarify my position on cities and urbanisation in relation to social change, explaining my position on the nature of contradictions. In section 2.4, I describe the policy mobilities literature and its contributions to explaining cities' interdependence and interconnection, while debating this literature's discussion of alternative trajectories. In section 2.5, I expand on these discussions by positioning my research in relation to counterhegemonic theory. Building on Gramsci's theorisation about counterhegemonic relations, the details of my position have been influenced by Massey and Deleuze, as well as Katz's (1996) theory of 'betweenness'. Finally, I explain my approach to urban actors and describe the concepts 'learning' and 'translation', which are central to my research and provide analytic tools for operationalising my theoretical approach.

2.1 An affirmative ontology of difference

The nature of difference plays a significant role in my work. My thinking on difference has been guided by a sense that it often slips from view, escaping articulation. What remains appears to mirror difference, yet is devoid of meaning. Simultaneously, I understand difference as fundamental to politics, or what Swyngedouw (2017) and others would call 'the political'. However, I reject Laclau and Mouffe's (1985) negative ontology of difference. Difference *affirms* the possibility of other political horizons—a multiplicity of coeval trajectories (Massey, 2015). It is these characteristics of difference—simultaneously exceeding representation while also being a generative force of transformation—that makes difference conceptually relevant for understanding how alternative trajectories of compact urbanism are assembled.

Human geographers have engaged with difference in great depth through different ontological and epistemological frameworks (e.g., Fincher and Jacobs, 1998; Gibson-Graham, 1996; Harvey, 1996; Jacobs, 2000; Katz, 1996; Pratt, 1998; Staeheli, 2008; Valentine, 2008; Young, 1990, 1986). Difference takes on multiple uses and forms within geography, from a focus on exclusion to the socio-spatial production of

differences, while also being an important signifier for subaltern, postmodern and feminist theorisation. Yet, as Cockayne et al. (2017) argue, geographers seldom reflect upon the nature of difference in itself. My theoretical endeavour begins with fundamental questions of difference, by turning to Deleuze and his conceptualisation of difference-in-itself.

Deleuze writes against the established terrain of Western philosophy, which means writing against Hegel's dialectic. In *Difference and Repetition* (2016 [1968]), he presents his theory of difference, rejecting Leibniz's dualistic account of identity and difference. Deleuze critiques the principle of identity as a primary concept that difference is constructed in relation to, simultaneously rejecting difference as a negative conceptualisation—*that it is that which it is not*. Leibniz's account of difference took on such a negative conceptualisation, constructed as an identity/difference binary. Leibniz identified two things as identical if they shared the same properties (Bennett, 2001). According to this logic, difference is secondary to identity. In Deleuzian terms, relations of difference produce identity and are the ontological origin of identity, not the other way around. Escaping Leibniz's dualistic account, Deleuze's theorisation is an ontological argument, constructing an affirmative conceptualisation of difference. Difference is ontologically primary and generative in nature.

In my approach, Deleuze's affirmative approach to difference is central in that it allows for a relational and context-contingent approach. In working towards a coeval and affirmative approach to social change, Deleuze's theorisation affords a conceptualisation of alternative trajectories that focuses on differentiation as the reorganisation of internal differences. The need for a constitutive outside becomes obsolete (Cockayne et al., 2017).

Working against traditional conceptualisations of universalisation and representation, Deleuze works through the relation between difference and repetition. He argues that to move beyond the reduction of difference, one must overcome four illusions that in turn reflect back on traditional conceptualisations of representation, identity and universalisation (Deleuze, 2016). These four illusions clarify how difference escapes clear delineation through representation.

The first illusion involves the reduction of difference to identity in concept. Deleuze (2016) states, "[w]hen difference is subordinated by the thinking subject to the identity of the concept (even where this identity is synthetic), difference in thought disappears" (p. 350). Discussions within subaltern theorisation provide an example. Gopal (2004) approaches the tension between heterogeneity and incommensurability in subaltern theorisation and strategically asks: "What if the subaltern upset our generous expectation of 'complete alterity' by articulating 'rational' or even merely non-religious views of her own, however?" (p. 158). Questioning the autonomous distinction of a subaltern condition, Gopal recognises the continuous and mutual implication for all aspects of society, hegemonic or not. While speaking to subjective identities, this account is in line with Deleuze's critique of the first illusion because it places difference as internal to being, not as derived from an external other, as in the difference between identities.

The second illusion is the reduction of difference to resemblance. In this illusion, as Deleuze (2016) explains, "difference necessarily tends to be cancelled in the quality which covers it, while at the same time, inequality tends to be equalised within the extension in which it is distributed" (p. 350). Deleuze (2016) describes this illusion as the reduction of difference, "to the similar within perception, allowing it to be experienced only on condition that there is an assimilation of diversity taken as raw material for the identical concept" (p. 350). This point is implicitly spatial and relational in nature. As I will argue below, this second illusion of difference may be productively engaged through critical geographical inquiry.

The third illusion involves the reduction of difference to opposition and reflects Deleuze's (2016) negation of difference as a negative concept. He states, "[h]istory progresses not by negation and the negation of negation, but by deciding problems and affirming differences" (p. 352). Defining problems is for Deleuze, as it is for Lefebvre (2003 [1970]), a way towards determining productive difference. This point, I will argue, is highly relevant to a critical academia, which tends to get stuck in critique as a form of negative differentiation. Chakrabarty's (2000) identification of History 1 and History 2 exemplifies the potential consequences of critical academic endeavours. While History 1s reinforce the reproduction of hegemony by augmenting its

inevitability, History 2s "are those 'multiple possibilities' or 'subaltern pasts' that 'may be under the institutional domination of the logic of capital and exist in proximate relationship to it' but do not belong to its 'life process''' (Gidwani, 2009, p. 69). Chakrabarty's critique of History 1s demonstrates the reinforcing trust in critique and recognition. History 2s becomes for Chakrabarty a way forward as they disrupt and challenge the encompassing arguments of hegemonic narratives. Yet, Chakrabarty's approach is circumscribed by its binary distinction and its lack of fragmentary unification, bringing us to Deleuze's fourth illusion.

The fourth illusion of difference involves the reduction of "difference to the analogy of judgement" (Deleuze, 2016, p. 353). This illusion relates to the analogous genera world that is determined through representation. Deleuze critiques how differences are assimilated within the logic of the context in which they are made to appear. Discussions relating to relational comparative practice (Katz, 1996; Hart, 2018) and relational and cosmopolitan orientations towards counter-globalisation and fragmentation (Mignolo, 2000, 2005; Featherstone, 2008; Gidwani, 2006; McFarlane, 2011, 2018; Jeffrey and McFarlane, 2008), are examples of approaches that breach this illusion.

For Deleuze, breaking these illusions necessarily involves challenging the formative and qualitative characteristics of difference. To understand the urban learning that influences societal shifts and changes the trajectories of current modes of urbanisation and urban livelihoods, Deleuze's ontology provides a distinct starting point for engaging perspectives that advance a multiplicity of possible horizons (Jacobs, 2012). This starting point does not take for granted that alternative trajectories can easily be made legible and coherent through their empirical presentation. Rather, alternative trajectories are 'in the making' and tend towards the affirmative potential of difference. While a Deleuzian approach to difference presents a particular approach to societal transformation, where affirmative difference holds a significant role in making another world seem reasonable, legible and possible, Massey's work contributes to situating this affirmative approach to difference *in the world*. In particular, Massey's relational approach to globalisation provides an important contribution for understanding the current conjuncture of urban development.

2.2 Globalisation and relational perspectives

Globalisation has spurred an interest in how the world can be understood as interconnected and relational. From Deleuze's writing to the invention of the Internet, we are presented with the world as a web of relations rather than clear hierarchies of forces and distinct cultures and places. As we come to learn it, the world is increasingly imagined through horizontal interrelations. However, globalisation has also informed a rather contradictory sense of agency and autonomy, where the global state of affairs has made local (national or urban) action ameliorative rather than alternate. Globalisation processes are often seen as deterministic and agency seen as the ability to make the best of situations (Gibson, 1998). Connected to these ideas of agency and autonomy are conditions popularly described as post-political or post-democratic, that is, the loss of real political alternatives and the separation of political economy and democracy (Crouch, 2004; Streeck, 2016). Alternative trajectories appear as impossible endeavours, especially as the global economy externalises accountability. Here I draw on the relational turn in geography to address this contemporary conjuncture, starting with Massey's fundamental critique of space. For my research, Massey's relational approach to difference allows for a conceptualisation of alternative trajectories within and through hegemonic agendas.

For Massey (2015), a relational perspective provides an approach to understanding the mutual implication of places and phenomena. Globalisation, in her terms, is not a deterministic process. Rather, the particular neoliberal globalisation trajectory reproduces its own inevitability through specific, narrow conceptualisations of space and difference. Massey's relational perspectives offer ways of thinking about interdependence that render counterhegemonic globalisation possible.

While Massey refrains from engaging Deleuze's theorisation of difference, her relational critique provides a reorientation of affirmative difference as necessarily spatial—a dimension seemingly overlooked by Deleuze (at least in *Difference and Repetition*). In *For Space* (2015 [2005]), Massey presents a comprehensive critique of how contemporary philosophy understands space. According to Massey, time has been favoured as the dimension of change and opportunity. Massey (2015) critiques both Bergson's and the Gersonian-Deleuzian approach as reducing space to "a discrete

multiplicity" (p. 22) where geographical difference is understood as "constituted through isolation and separation" (p. 68). Massey (2015) expands on this perspective, stating that it (perhaps unintentionally) suggests that "[g]eographical variation is preconstituted. First the differences between places exist, and then those different places come into contact. Differences are the consequence of internal characteristics" (p. 68). Spatialisation from this logic leads to homogenisation. This "temporal convening of space" (Massey, 2015, p. 69), even as discrete multiplicity, excludes recognition of space as "the dimension of a multiplicity of durations" (Massey, 2015, p. 24).

Massey's (2015) answer is a relational approach to space, where the coming together of relations in places produce "the constant emergence of uniqueness" (p. 68). Massey borrows the term coevalness from Fabian (1983) to help theorise a relational understanding of space:

> Recognising spatiality involves (could involve) recognising coevalness, the existence of trajectories which have at least some degree of autonomy from each other (which are not simply alignable into one linear story). … On this reading, the spatial, crucially, is the realm of the configuration of potentially dissonant (or concordant) narratives. Places, rather than being locations of coherence, become the foci of the meeting and the nonmeeting of the previously unrelated and thus integral to the generation of novelty (Massey, 2015, p. 71).

Massey's relational approach emphasises that relations between places produce difference. Hence, globalisation need not be a homogenising process, but could instead be used to alter current neoliberalisation processes.

2.3 Social change in an urbanising world

The 1970s and 1980s saw a profound shift in cities' role in national and global economies. As Harvey (1989) outlined in his seminal article 'Managerialism to Entrepreneurialism', cities took on a new role in what he described as the transition towards urban entrepreneurial governance. The change in society–state–market relations during this period saw the need for new roles, economic models and modes of governance (Jessop, 1998). Cities and urban regions played a specific role in

restructuring these socio-economic relations and became significant actors in attracting and competing for capital, resources and jobs (Harvey, 1989).

This shift corresponds with Lefebvre's (2003) thesis on planetary urbanisation, in which he describes the turn from capitalism rooted in industrialisation to capitalism based in urbanisation. Lefebvre argues that the urban (compared with conjunctures such as 'the state', or 'industrialisation') was becoming a central entry point for encountering (understanding and changing) the contemporary condition. Peck et al. (2009) reaches similar conclusions in defining cities as "critical nodes" and "points of tension" (p. 57) for neoliberalisation.

Overall, the turn towards interurban competition that Harvey (1989) identified has signalled a means for understanding the dynamics that have shaped global relations since this time. Increasing mobility of capital, resources and jobs has left national and urban autonomy dependent upon their abilities to compete with a multiplicity of attractive places elsewhere (Harvey, 1989). A breadth of research has outlined how cities have developed in light of these events (e.g., Brenner, 1999; Cook and Ward, 2013; Hall and Hubbard, 1996; Mazar, 2018; Swyngedouw, 2005).

Regarding urban sustainability agendas, entrepreneurial governance strategies have been part of the world in which urban sustainability trajectories have unfolded. Since the 1990s, calls for action on climate and environmental issues have taken a uniquely urban turn, as cities and urbanisation shifted from being seen as 'sustainability problems' to 'sustainability solutions' (Angelo and Wachsmuth, 2020). While the 1970s saw an interest in reworking the economy–ecology relationship, the following decades witnessed a move favouring ecological modernisation (Dryzek, 2013 [1997]; Hajer, 1995; Hodson and Marvin, 2017). As global climate discourses changed towards local action and multi-level governance approaches without radical change in society–nature relations, cities emerged as a locus for change. For cities attempting to position themselves globally, including ecological policies within neoliberal trajectories allowed for 'sustainability fixes', that is, ensuring a partial stabilisation of the contradictions embedded within these urban strategies while simultaneously giving urban governance a green profile (While et al., 2004). Compact city policies found their legitimation through this shift, particularly through the idea of concentrating

development, making cities liveable and attractive (Rosol, 2013), reducing emission from transport, and protecting arable land and nature (Burton, 2002; Westerink et al., 2013).

While the ways in which urban entrepreneurial strategies and sustainability agendas have merged have been duly documented and critiqued within academic circles (Castán Broto, 2017; Hodson and Marvin, 2017; Jonas et al., 2011; Long and Rice, 2019; McCann, 2017; Rapoport and Hult, 2017; Rosol et al., 2017; Rice et al., 2020; Swyngedouw, 2009; While et al., 2004), urban sustainability strategies have remained influential in global policy circles (Angelo and Wachsmuth, 2020; McCann, 2017; Long and Rice, 2019; Rapoport and Hult, 2017). However, the language of sustainability has changed and as Hodson and Marvin (2017) point out, a set of fragmented trajectories are forming, such as climate urbanism (Long and Rice, 2019), smart urbanism (Haarstad, 2017), nature-based solutions (Frantzeskaki, 2019) and eco-cities (Chang, 2017; Rapoport and Hult, 2017). While such urban trajectories emphasise different problems and solutions, their growth orientation remains rather consistent (Hodson and Marvin, 2017). Compact city policies and densification strategies often remain implicitly or explicitly part of these urban sustainability agendas. However, a common trend within these urban sustainability trajectories is that social problems are marginalised (Hodson and Marvin, 2017; Long and Rice, 2019). For example, the gentrification literature has outlined the social consequences of green urban strategies, such as green infrastructure and climate risk management (Anguelovski et al., 2018).

While human geography and urban studies research is often critical of articulations of urban sustainability and the promise of urban action in the name of sustainability, it also articulates the potential for how urban action may rework and rearticulate the hegemonic urban sustainability paradigm in a more just and sustainable direction. As Harvey (1989) also outlined, the progress of capitalist urbanisation provides a potentially productive dialectic for societal change:

> The problem is to devise a geopolitical strategy of inter-urban linkage that mitigates inter-urban competition and shifts political horizons way from the locality and into a more generalisable challenge to capitalist uneven

development. […] a critical perspective on urban entrepreneurialism indicates not only its negative impacts but its potentiality for transformation into a progressive urban corporatism, armed with a keen geopolitical sense of how to build alliances and linkages across space in such a way as to mitigate if not challenge the hegemonic dynamic of capitalist accumulation to dominate the historical geography of social life (p. 16).

Harvey's hope for progressive global action is not without evidence, and recent decades have seen several global counter-movements with social and ecological agendas (Harvey, 2012; Purcell, 2013), as well as myriad urban networks with hopeful agendas (Grandin and Haarstad, 2020). Viewing the effort to create alliances and linkages across space in a dialectical light provides some headway toward understanding both the contradictory nature of these relations and the diverging literature on this subject.

Understanding urban relations as contradictory may provide a constructive route for critically approaching the potential for societal change through urban interventions. While being careful not to imbue this dynamic with deterministic qualities, urban dynamics (see e.g., McFarlane's 2020 discussion on de/re-densification), remains important to understand and engage with (Ollman, 2015). The 'displacement' of emissions and social inequality through current forms of globalisation allows contradictory urban sustainability policies to remain 'in disguise'. As Wyly et al. (2010) note "one of the most effective tactics of neoliberalism involves the statistical disappearance of its costs and victims" (p. 2605). Arguing for greater consideration of the politics of measurements, Wyly et al. (2010) illuminate the potential for bringing environmental and social inequality trajectories into conversations with 'successes' achieved elsewhere. Within my research, these notions inspired me to attend to the relational geographies that make and unmake the city, and to the potential conjunctures, alliances and relations that might construct more sustainable trajectories.

2.4   Alternative urban policy circuits

Building on, among others, Massey's relational approach, policy mobilities studies have emphasised the interconnected nature of policymaking, especially the processes, practices and conditions that makes cities global nodes of interaction (McCann, 2011).

Alliances among cities are seen as potentially challenging the inaction by nation states and their international fora. Collective urban action and organisation have placed cities as frontrunners in processes of advancing transformative action on issues such as climate change (Castán Broto, 2017). However, cities' roles in progressing structural change remains contested terrain.

Policy mobilities research has analysed how political ideas and policies move between places, across spaces and scales, the actors and technologies that move them, and how these policies and ideas are translated and mutate along the way (McCann and Ward, 2011; Peck and Theodore, 2015). While the movement of ideas, planning models and people between cities are not new phenomena, the nature and intensity of inter-city linkages and alliances have changed (Harris and Moore, 2013). Technologies, conferences, study tours, models, best practices and a range of agents including consultancies, think-tanks, experts, activists, municipalities and intergovernmental institutions have become focal points for studying the global policy knowledge circuit (Baker and McCann, 2020; Baker et al., 2016; Clarke, 2012a; Healey, 2013; Ward, 2018).

These studies often confirm the idea that interurban exchanges are conservative in nature, and affirm established power relations rather than challenge them. As Massey (2015) acknowledge, although the potentials to produce different global relations exist, they are dominated by specific power dynamics. For example, Massey (2011) describes the agreement established between Caracas and London in 2007 as an explicit attempt at creating alternative global relations that would counter hegemonic market relations. London provided Caracas technical assistance and expertise on urban planning issues, while Caracas sold London oil at a 20 per cent reduced cost, which subsidised transit fares for the poorest in London. With a goal of using international relations toward redistributive ends, this agreement—while short-lived—illustrates how neoliberal agendas of global exchange may be altered.

As my purpose is to understand how cities construct alternative trajectories, it is relevant to address how the policy mobilities literature engages with difference. This literature has been critiqued for "reducing inter-referencing effects to neoliberalisation from above" (Bunnell, 2015, p. 1983). Bunnell (2015) also notes that while policy

mobilities studies have employed methodological and theoretical tools that open research spaces for understanding multiple trajectories, alliances and genealogies of inter-city learning:

> the dominant picture remains one in which, at any given moment, cities undergo neoliberalisation in relation to imagined antecedent success stories, and what is mobilised is almost invariably 'neoliberal', even if it transforms, mutates and hybridises along the way (p. 1989).

Bunnell's critique is significant in that it points to a dominant (academic) narrative of globalisation as neoliberalisation: that is, the willingness to reduce spatial difference to prove a coherent critique of the succession towards neoliberalisation. In Deleuzian terms, policy mobilities studies may be accused of reducing "difference to the analogy of judgement" (Deleuze, 2016, p. 353). Bunnell's critique poses important questions regarding how researchers 'see' difference. While an implicit aim of policy mobilities research is to move away from predetermined explanatory frames, Bunnell critiques this research for adhering to precisely these frames.

Questions of subaltern mobilisation have been raised within the policy mobilities literature. For example, in *Mobile Urbanism,* McCann and Ward (2011) state that:

> the existing literature has largely addressed the role of elites – actors within the state at various scales, business coalitions, professional organizations, transnational institutions, think thanks, and consultants – in shaping policies and setting them in motion across the globe. This work is necessary, yet it might be built on and extended by the study of how nonelites, or 'subaltern' groups, and social movements inhabit and redirect existing global informational infrastructures and circuits of persuasion to upturn established policies and mobilize alternatives (p. 102).

In the same book, McCann and Ward (2011) also acknowledge that actors with different ideologies from the neoliberal or governmental norms can potentially "use the same global circuits of policy knowledge to develop alternative assemblages of policy and power" (p. xxv). This draws attention to the radical potential within such mobilisation. Building on Massey's (2011; 2015) work on counterhegemonic

globalisation, Harris and Moore (2013) submit a call to "open up and explore alternative circuits of urban knowledge" (p. 1505), stating that:

> This can involve forms of what Purcell (2008: 153) terms 'fast resistance transfer', where subaltern or oppositional groups replicate the global scans and exchanges of more formal policymakers, often inhabiting similar channels and technologies. […] Counterhegemonic circuits can also involve strategies of emancipatory urban comparison that are used to identify and foreground issues of social injustice and formulate alternative imaginative geographies of the urban (p. 1505).

While Harris and Moore assume that alternative discourses are mobilised in ways similar to discourses adhering to dominating ideologies, Peck and Theodore (2010) wonder whether this is the case,

> Do such alt-models travel differently to those that (aspire to) reproduce dominant paradigms? This question, which may be an open one for now, calls attention to the transformative potential of (urban contestation), raising the possibility that the new circuits of transitional policy development might be appropriated for progressive ends (see Leitner et al., 2007). As Ferguson (2009) has recently argued, the distended networks of neoliberal policy experimentation may in fact be prone to capture and retasking, sometimes in surprising ways. Again, policy control at a distance is an incomplete and contradictory process. There is potential for alt-models to circulate in these spaces too (p. 171).

Peck and Theodore's (2010) proposition calls attention to the transformative potential of the urban condition. For my research, it has been important to both build a capacity to 'see' difference and develop a methodology sensitive to the mobilisation of alternative ideas, policies and practices.

2.5   Counterhegemonic relations

As described previously, I am interested in understanding how alternatives are assembled, and in the nature of counterhegemonic relations in compact urbanism. The Gramscian term 'counterhegemony' has been used by scholars like Laclau and Mouffe (1985) and Massey (2011). For Gramsci, hegemony is an expression of sedimented

power relations and organises consent through ideas and practices that are perceived as 'common sense'. In contrast, counterhegemony seeks to replace existing hegemonic relations by reworking them from within (Im, 1991). I understand Gramsci's hegemony/counterhegemony in relational and affirmative terms, as a non-teleological positive dialectic (Hart, 2018; Ruddick, 2008) in which discourses and practices reinforce existing relations or produce active constituent processes (Hoare and Smith, 1971; Im, 1991).

From such a perspective, transformation is embedded within the relational and affirmative dialectic of hegemonic and counterhegemonic struggle. Significant from a Gramscian perspective is the understanding that a successful counterhegemonic transformation does not occur as an inevitable result of capitalism's inherent contradictions, but rather as a result of patient, tedious, inventive and sacrificial work *within* existing hegemonic relations. Such simultaneous processes of destruction and construction take form as fragmented and contextual projects that can be articulated as a common collective will over time (Im, 1991).

Counterhegemonic relations rely on the continuous translation of discourses into practices (and vice versa), where the ways in which specific discourses legitimise and mobilise specific subject positions matters to how counterhegemonic relations succeed in progressing transformative action. Gramsci outlined this in his conceptualisation of "the war of position" (Hoare and Smith, 1971, p. 239) involving the emancipation of the subaltern classes by their self-realised capacity to govern and change relations of position (Stoddart, 2007). The subject can here be understood as an "activity" (Dubet, 1994, p. 32 in Rutland, 2013, p. 998), which "[comes] into being at the intersection of multiple, potentially contradictory sets of social relations [… and] the negotiation, or management, of such contradictions can create conditions of possibility for resistance – collective or otherwise" (Rutland, 2013, p. 997, referencing Dubet, 1994).

Counterhegemonic relations may thus be understood as fragmented. Such an understanding of difference is consistent with Deleuze's rejection of the difference/identity dualism suggested by Leibniz. By thinking of difference—in this case counterhegemonic relations—as partial (residual or not) allows for a more open-

ended geography of mobilisation, in which differences are assembled, deconstructed and reassembled. Their 'essence' is only expressed in their co-functioning as a whole.

However, it should also be noted that there are significant differences between a Deluzian societal change project and Laclau and Mouffe's neo-Gramscian project. While Deleuze is critical of the state-in-general (i.e., he advocates for non-hegemonic politics) (Purcell, 2011), Laclau and Mouffe favour progressive hegemony, in Gramsci's term "expansive hegemony" or in Laclau's terms "radical democratic pluralist hegemony" (Smith, 1998, p. 181). As Purcell (2011) argues, they differ in their anarchist/non-anarchist nature. While I align my thinking with a Gramscian approach here, I argue that Massey's discussion of autonomy and equivalence is a useful bridge between the Deluzian conception of difference and change towards a Gramscian end. Massey (2015, p. 182) states:

> The potential, then, is for the movement beyond the local to be rather one of extension and meeting along lines of constructed equivalence with elements of the internal multiplicities of other local struggles […] equivalence 'does not simply establish "an alliance" between given interests, but modifies the very identity of the forces engaging in that alliance' […] 'alliances holding together differences whose negotiations are never complete, and is not expected to be so' […] the—potentially politically productive—tension between equivalence and autonomy (the continuation of distinctiveness within a constructed relatedness).

This approach recognises the mutual implication of all places and their inherent interdependence as a starting point for considering how change comes about and how progressive hegemonies may encourage pluralist societies. Purcell (2011) presents a similar argument in his "networks of equivalence" concept, in which he imagines "broad coalitions that bring together many different struggles, movements, and groups" (p. 515). Here 'a polyvocal concert' provides a figurative image for how forceful counterhegemonic movements may come about.

In my research, counterhegemonic relations are a way of simultaneously working with, against and through existing structures. As such, the notion of interstitial difference becomes useful. From an interstitial perspective, difference, and hence

societal transformation may be viewed beyond a binary distinction. *Interstitial* is best understood as representing that which is in between. From a Deleluzian perspective it corresponds with notions of escape, where the relationality (between e.g., hegemonic and counterhegemonic ideas) creates a space for productive tension. In her conceptualisation of minor theory, Katz (1996) presents the notion of 'betweenness' as the foundation for working towards the production of difference without reaching for a binary outside. Challenging major knowledge production within geography, Katz (1996) insists that "[she does] not want to fasten only on the absences, exclusions, and silences" (p. 487). Rejecting a binary division between the hegemonic and counterhegemonic knowledge produced, Katz provides a route towards working with the minor from within the major. The minor's transformative gist is not necessarily its goal to establish a complete alternative, or replacing a hegemonic system, but rather redrawing its fundamental composition through the major. The minor works as "subversion, escape, transformation" where deterritorialisation allows for "a becoming minor" (Katz, 1996, p. 491). Katz (1996) states, "[o]ne cannot 'translate' it into the major, so to speak "without destroying it"' (p. 491). Work with this tension appears dangerous because the lure of hegemonic mastery looms at every turn, yet it also suggests the inevitably careful spatiality of producing difference—working at twilight.

2.6   Urban actors and the nature of agency

The orientations discussed above allow for a specific focus on urban actors. While the literature discussed may seem to suggest understanding 'cities as actors', I will attempt to make this diffuse description of agency more concrete. In my research, I approach agency by examining the activities in which urban actors engage and the power geometries within which these activities are situated.

As cities have become more influential within the global economy, specific people, organisations, coalitions, groups and institutions exercise more weight than others, and engage in different interurban relations. The power geometry of interurban relations may be seen as assembling discourses and practices, subjects and objects through strategic, casual and mundane activities (Massey, 1993; McCann, 2008). Subjectivity may here be attributed to these networked relations' nature and form, and not as prefigured roles or positions. Understanding, as did Dubet (1994), the subject as

activity becomes a way to appreciate the complexity of who people are as they engage in different actor networks. This conceptualisation of urban actors encourages a focus on what people do, and less on who they represent.

I take from Harvey (1996) the notion that the locus of agency is everywhere. While it may seem contradictory to focus on alternative trajectories and locate the transformative potential everywhere—not at the margins—this is precisely the significant distinction I draw from Katz's (1996) conceptualisation of minor theory. To locate the transformative gist *within* the major is to disentangle agency from established notions of representation, universality and identity. Agency's political potential lies precisely in acts of subverting given and signified roles, understandings and values attributed within the current system. For example, Paccoud (2019) draws the notion of the 'state revolutionary' from Badiou to signify how (even) people within government can be the subjects of revolutionary politics. Paccoud further criticises the thin logic of *who* the authentic political subjects are or need to be. While Harvey (1996) places the origin of such thinking in the Christian tradition of suffering, Paccoud (2019) identifies the narrow conceptualisation of agency with "the fixing of places" (p. 340)—of a state/non-state binary where revolutionary politics are seen to lay *outside* the democratic state.

To distribute agency freely is necessarily subject to the differential limitations of people's situations and to the systems which reproduces these situations. Nevertheless, it provides a non-teleological approach to identities and to the unpredictable capacity of human will and organisation. While people's self-realised capacity to change who they are (their position and identity in relation to others) (Stoddard, 2007) is a significant aspect of identifying agency, agency is necessarily a collective endeavour. Harvey (1996) argues that:

> Struggle can never locate itself exclusively or even primarily at one moment within the social process […] Politics must engage with *all* moments of the social process simultaneously, establishing its own counter-coherence within and correspondence rules between discourses, institutions, social relations, power politics, and the imaginary and material practice (p. 107).

Based on this reasoning, Harvey identifies agency collectively as a question of political commitment. I draw from these approaches to agency the understanding that transformative actions are far from linear projections.

2.7   Learning translation

In my research, I have paid special attention to how discourses, ideas, policies and practices are learned and translated. I have not deliberated on these concepts in great depth in the papers; therefore, I explain here how I understand these terms and how I see them as useful analytic tools for advancing an understanding of the discourses and practices that shape alternative trajectories of compact urbanism.

Within comparative urbanism discussions, learning and translation have been advanced as progressive analytic tools (e.g., McFarlane, 2011). Associating learning with translation, Jazeel (2016) states that translation entails "'learning to live another form of life' immersing oneself in other life-worlds with humility" (p. 659). Learning and translation may thus be understood not only as useful concepts on their own, but as intimately related to each other.

To understand how urban actors construct alternative compact urbanism trajectories, learning and translation are meaningful concepts for linking interurban exchanges and urban actors' activities. Drawing on the policy mobilities literature, learning and translation should necessarily be placed within discursive and material formations, (e.g., the power geometries and practices of particular institutions). Simultaneously, the policy mobilities literature's contribution to challenging the diffusion model (Latour, 1986, 1987), places learning and translation as embedded practices in which the search for origins is second to understanding the processes that guides knowledge production in inter-urban networks. As McFarlane (2011) states, "translation emphasizes the materialities and spatialities through which knowledge moves and seeks to unpack how they make a difference to learning, whether through hindering, facilitating, amplifying, distorting, contesting, or radically repackaging knowledge" (p. 17).

I find it noteworthy to consider how author and poet Jorge Luis Borges understands translation as provoking critical scrutiny of the necessity and nature of *origins* (Levine, 2013). If we borrow from Jazeel the notion that translation entails

'learning to live another form of life', then it entails an immersive practice in which the 'translator' comes into focus in their own right. Who translates, with what purpose and effect, through what form, and from within what type of "referencescape" (McCann, 2017, p. 1821) become more important than their fidelity to the original or 'true' intention of a model or policy idea. Translation thus becomes a *practice of addition and subtraction* in which 'creative infidelity' can be an aspiration, not a crime (Levine, 2013).

In constructing alternative trajectories, translation can be viewed as a subversive practice that performs the task of consciously displacing (Katz, 1996) hegemonic relations. With reference to the discussion of difference above, translation understood in this fashion allows an escape from negation by being understood as a constitutive process. Overall, these notions of learning and translation informed my critical methodological approach to comparison, as did the framing I took from McFarlane (2011), that is, the notion of *a critical geography.*

Overall, this chapter (ch. 2) has outlined my overarching theoretical approach for studying how alternative compact urbanism trajectories are assembled in Oslo. While the papers engage specific theoretical debates, here I have outlined overarching theoretical perspectives that guided my thinking throughout the research process. Starting with Deleuze and Massey, this chapter has explained my perspective on societal change and the interconnectedness of cities. My approach to difference and relationality provides a specific lens for engaging with urban policy mobilities and counterhegemonic relations. Similarly, my ontological and epistemological framework affords a particular approach to urban actors as well as agency, learning and translation. The next section on methodology advances some of these theoretical discussion for the purpose of research.

3   Approaching Research

Being part of the research project 'European cities as actors in climate and energy transformation' (2016–2020), my initial intention was to follow the work of European inter-city networks. This project was funded by the Trond Mohn Foundation to better understand how urban sustainability agendas are mobilised, translated and adopted in European cities. As a member of this research group (which was led by Håvard Haarstad), my research lays within this project's overarching scope. However, as other researchers of comparative urbanism and policy mobility have noted (Robinson, 2011, 2015), studying mobility does not necessarily entail following the interactions, policies and networks wherever they go (i.e., travelling around with politicians, policy makers and activists). Rather, it concerns the perspectives and approaches guiding the research. Adhering to a multi-sited approach while choosing Oslo as a case city was part of my initial decision to 'stay put', seeking depth by cutting across established networks and actor groups.

Building upon relational perspectives and theories of difference, I have attempted to critically engage the interconnected nature of contemporary urbanism. While the urban studies literature has contributed to refreshing discussions about urban research methodologies, many questions remain regarding how to account for units of analysis as contingent, differentiated and embedded within specific power geometries. For example, policy mobilities researchers have made critical remarks that established policy networks are in danger of 'locking in' the nature of research. In the forward to their book *Fast Policy* Peck and Theodore (2015) recognise the danger of

> slipping into a form of sampling, as it were, on the dependent variable, and merely affirming some anticipated account of policy hypermobility, as articulated by the most powerful players (many of whom has interest in promoting such narratives). We had to avoid becoming dupes of the policy networks themselves, getting hooked on the catchiest policymaking tunes, or becoming enrolled into the choral societies that tend to form around favoured programs of reform (p. xxi).

Peck and Theodore's critical approach to the epistemological realms of policy networks and these networks' topologies of power provided a significant point of

departure for my own research and informed my decision to study compact urbanism *in* Oslo. As I expand on below, this influenced my decision to adopt Robinson's (2015) 'arriving at' approach. In seeking to understand how actors in Oslo attempt to diverge from established development trajectories I wanted to stay sensitive to the mobilisation of ideas and practices that assumed an a priori weak positionality. While choosing a specific city (rather than several cities) does not guarantee meeting this aim, sticking with Oslo allowed me to conduct research that cut across networks, actor groups, city departments and different knowledge institutions.

These considerations represent some early and significant steps in my research design. In this methodology chapter, I further expand on the significant approaches, events and reflections that guided my research. Since one of my goals is to critically approach how mobilisation, translation and adoption of alternative policy trajectories occurs, this chapter begins with a theoretical discussion of significant methodological questions in order to explicitly describe, explain and reflect on my research process.

I begin this chapter by outlining how and why compact urbanism became my topic of interest, and how I have approached studying alternative trajectories of compact urbanism in Oslo. I then explain the discursive focus of my research. In section 3.3, I describe my approach to urban research and position my project in relation to comparative urbanism, focusing on how policy mobilities studies and related discussions have challenged the ways in which critical urban research is carried out. Describing Oslo as my chosen case city I explain my research design in more depth and describe my sampling strategy in section 3.5 and 3.6. In section 3.7, I outline the empirical nature of my research and reflect on my positionality. Finally, in section 3.8, I describe my modes of analysis.

3.1   Studying alternative trajectories of compact urbanism

My research on compact urbanism is the outcome of an entangled empirical and theoretical dialogue. In approaching how urban actors seek to diverge from existing trajectories, I wanted to situate my research in reference to a development trajectory placed firmly within an urban sustainability discourse, while also presenting problems that challenge the legitimacy of the trajectory itself. After reviewing the compact city literature and speaking with those involved in urban development in Oslo, Copenhagen

and Malmö through the Nordic Sustainable Cities network, compact urbanism arose as a policy strategy that encompassed these contradictions: for example, addressing an urban sustainability agenda while sitting uncomfortably within discussions of affordability, liveability and climate emissions.

In approaching compact urbanism, I aspired to stay attuned to the political realm in which compact city strategies are situated. As such, I wanted to place compact city policies, most often defined according to normative goals around urban form and the concentration of development, within the nexus of relations that frame these policies. Below, I have illustrated how I have thought about compact city policies throughout my research. In Figure 1 the centre circle quadrants show the four main strategies
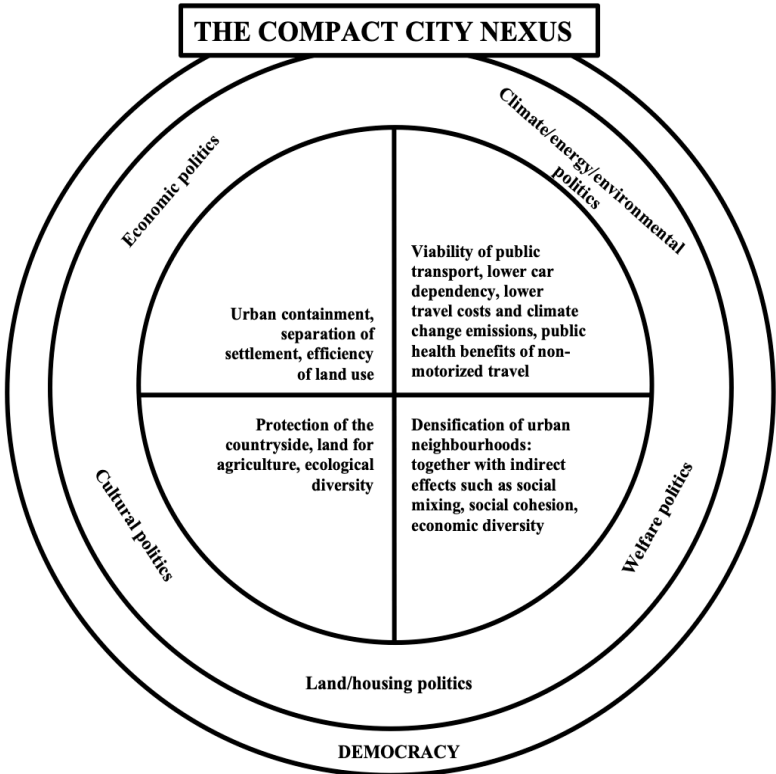

Figure 1 The Compact City Nexus (source: an elaboration on Hansen et al., 2015 and Westerink et al., 2013).

associated with compact city policies (based on Hansen et al., 2015 and Westerink et al., 2013); in the middle circle are five realms of politics that play roles in framing both

compact city policy discourses and how compact cities are built, perceived and lived; and in the outer circle democracy is encompassed to illustrate how compact city policies are placed within democratic governance institutions and power relations. This figure can be viewed both as an outcome and a starting point for my research. It evolved during the project. For example, while the inner quadrants are based on established compact city characteristics, the middle circle arose more directly from my research focus, that is, to generally describe the significant political areas to which I have paid attention. For my research, this 'Compact City Nexus' characterisation has served as an overview, as I sifted through the details during my research process.

However, this figure does not consider any geographical dimensions, which were a significant focus of my work. The figure should be interpreted as an abstract illustration. For example, paper II describes the ways in which counterhegemonic discourses attempt to rearticulate the nature of the middle circle and, to some extent, the outer circle, while being less concerned with reformulating the goals directly associated with compact city policies in the inner quadrants. Paper III also deals directly with the middle circle, while the compact city nexus as a whole serve as a backdrop for motivating an engagement with housing policies.

3.2   Discursive focus

I have conceptualised alternative trajectories of compact urbanism as pertaining to struggles of a simultaneous discursive and material nature. Urban actors who seek to alter compact city trajectories engage in discursive struggles that make up the logic of compact city approaches, and material struggles that construct the lived realities of compact urbanism and development. I have been particularly interested in practices and processes that intersect these struggles at moments when material and discursive relations inform action. To explain this, I have researched moments when urban actors find a space in which to act on their interest, altering compact urbanism trajectories in Oslo. As I will explain below, this focus has also influenced my sampling strategy.

The way I have approached these moments (when urban actors act on their interest to alter compact city trajectories in Oslo) has been informed by how I understand our epistemological dispositive as constructivist, that is, ''what is subjective in understanding, becomes objective through action'' (Cox, 1992, p. 145).

This means that I understand how we come to know the world as constructivist (i.e., it is up for debate). However, I hold a materialist ontology and therefore argue that there are better and worse ways of understanding the world. While I kept keen attention to the material relations of compact urbanism, discursive struggles can be considered my primary vantage point. There are several reasons for this. In understanding how alternative trajectories of compact urbanism form in Oslo, my starting point is that these acts are likely to 'fail', become marginalised, and have potentially little material effect over the short term. Paying close attention to the discursive articulation, translation and formation of these alternative trajectories provides a research strategy for understanding these acts in their constitutive processes. Second, my understanding of counterhegemony closely attends to the conscious articulation of 'failures' within existing compact city strategies, as a part of how urban actors come to understand their roles in altering the status quo. Lastly, I have been motivated to enrich the qualitative character of alternative trajectories beyond 'utopian' frames of reference; I consider a focus on discursive articulations to be productive for this purpose.

I take from Foucault (1972, 1977) the notion of power as the productive will of discourse: that is, defining, narrowing, enabling and legitimising truth, meaning and action. Providing conceptualisation of both self and society, discourses form social practice by structuring thought. For my purpose, toward understanding how actors diverge from established trajectories, Laclau and Mouffe's (1985) discursive approach has been useful, as they emphasise the hegemonic struggle of discourse in which discursive articulations are always contingent. As a partial fixation of meaning, discourses can be viewed as providing stability for social relations and thus give directionality to society in a specific trajectory. From this, discourses can be understood as necessary for coordinated action and organisation.

While Laclau and Mouffe's (1985) discourse theory influenced my research approach, my understanding of difference and change differs in that I understand antagonism in less binary terms than did Laclau and Mouffe. They derive their understanding from a negative political ontology of difference, where antagonisms form through articulation of 'us' versus 'them'. Drawing on Hardt's (1993) reading of Deleuze, I focus less on how oppositions are forged and more on how escape routes

are made legible and possible. Such a position comes from my adherence to Deleuze's positive ontology of difference. As explained by Hardt (1993) in his description of Deleuze's nuanced and grounded position on antagonism,

> [o]nce we stop clouding the issue with crude opposition and recognize instead the specificity of an antagonism, we can begin to bring out finer nuances in our terminology. For example, when I pose the question of the foundations of poststructuralist thought I mean to contest the claim that this thought is properly characterized as antifoundationalism. To pose the issue as an exclusive opposition is, in effect, to credit the enemy with too much force, with too much theoretical terrain. Poststructuralism does critique a certain notion of foundation, but only to affirm another notion that is more adequate to its ends. Against a transcendental foundation we find an immanent one; against a given, teleological foundation we find a material, open one (p. xv).

Thus, Hardt explains Deleuze's notion of escape. As the reflections provided within my research design will show, this nuanced and grounded position is significant for carrying out an affirmative approach to difference in research. Such an approach to difference, allows for a differentiation of trajectories, without posing such alternatives as negations and complete oppositions. Explained simply, it acknowledges that 'the enemy' might have a role in an alternative trajectory, however fundamentally different their role may be. In my research, I have attended to the specificity of antagonisms, such as in paper II where I distinguish the different counterhegemonic positions, or in paper III where we focus on how counterhegemonic positions are mobilised. Researching alternative trajectories, Deleuze's notion of escape provides a significant point of departure for understanding how alternative discourses are constructed, gain legitimacy and become subversive.

3.3   Relational comparison and the nature of urban research

In my research, comparison is as an empirical topic of interest—i.e., I have attempted to understand how policies and practices from elsewhere influence urban actors' attempts to diverge from established development trajectories—while also remaining an explicit "mode of thought" (Clark, 2012b, p. 797). My goal here is to show how I

consider a conscious approach to comparison to be part of geography's critical research arsenal. In my research, this dual focus on comparison as a mode of thought and as a concrete empirical focus has contributed to the critical reflexivity I have achieved throughout, and to the nature of the empirical findings and conceptual approach to compact urbanism arising from my work. Here I reflect on my understanding of relation comparison and its relevance to my research.

I start with Hart's (2018) open, non-teleological approach to comparison as a critical research strategy. She states,

> I argue that the focus of relational comparison is on *how* key processes are constituted in relation to one another through power-laden practices in the multiple, interconnected arenas of everyday life; and that 'clarifying these connections and mutual processes of constitution – as well as slippages, openings, and contradictions – helps to generate new understandings of the possibilities for social change' (Hart, 2018, p. 374–375).

Hart's approach is conjunctural in that it aims to understand the mutual implication of places within spatio-historical trajectories *as well as* the multiple, contradictory and constitutive processes residing within these relations. Consistent with Hart, I draw my relational understanding from Massey. In contradiction to Hart, I build on Deleuze to consider notions of difference. Nevertheless, for thinking critically about comparison, Hart's (2018) approach provides a relevant place to start for considering how implicit and explicit comparative gestures elide or illuminate differences when we (as individuals or researchers) make sense of the world.

Generally, comparison can be understood as a commonplace practice for manoeuvring, destroying and creating categories and classifications to make sense of messy events and processes. Formally, comparative approaches encompass a range of comparative research typologies, from encompassing, individualizing, universalizing, and variation-finding approaches (Tilly, 1984), to multiple-oriented comparative approaches (Nijman, 2007). These approaches have in common an adherence to the systematised study of similarities and/or differences between cases. My work does not pertain to these formal comparative approaches. While it may appear paradoxical that I then situate my research within a relational comparative tradition, I hope to illuminate

how and why I consider the critical discussions pertaining to implicit and explicit modes of comparison relevant for my work.

Since the 1970s, comparative studies have been disputed, particularly with reference to the postmodern critique of encompassing universals and the relational implication of 'all' places within globalisation (Peacock, 2002). In recent years, the comparative nature of urban studies has been similarly critiqued and the field has turned into a contested methodological landscape (Lees, 2012; Nijman, 2007, 2015; McFarlane, 2010; Peck, 2015; Robinson, 2016, 2005; Ward, 2008), somewhat mirroring earlier debates within anthropology (Gingrich and Fox, 2002; Marcus and Fischer, 1999 [1986]). As I explain below, these debates do not merely concern the nature of comparative urban research, they also concern the constitution of theory and methodology in urban research.

A relatively easy target within urban studies has been the reliance on particular cities for encompassing (or totalising) theories of cities and urbanisation processes. This discussion of *encompassing universals* was influenced by a postcolonial critique of the Eurocentric grounding of urban theory and the prevalence of cities such as Paris and London, to which other cities have been compared (Bunnell, 2015; Robinson, 2015). Similarly, Dear (2005) illustrates how urban theories arising from the Chicago and Los Angeles schools represent two highly influential urban epistemologies. Robinson (2006; 2016) has argued that these genealogies of urban theory not only structure research projects, but they also influence our imagining of what cities are and can be. In Deleuzian terms, this critique reflects the fourth illusion of difference: that difference is reduced by the genera-world in which it is placed. In her work, especially in *Ordinary Cities* (2006), Robinson challenge the ways urban research distinguishes comparable cities, such as the categories of countries and places that qualify as *comparable*. Similarly, Hart's (2018) agenda for relational comparison strategically works against encompassing approaches that assign empirical variation as particular aspects of an already predefined totality. Rather, Hart (2018) states,

> [c]onstitutive differences glossed over by encompassing approaches are not only crucial to any project of forging alliances across registers of difference. They are central as well to identifying slippages, openings, and

contradictions, and to illuminating what sorts of changes are possible in specific spatio-historical conjunctures (p. 381).

Hart's quote reflects the ways in which theories structure 'ways of seeing' and that encompassing theories easily elude the discovery of significant differences. As my purpose was to identify alternative trajectories, this critique provides an impetus for working consciously against encompassing approaches. As Lees (2012) argues in regard to gentrification research, "[w]e need to think again about the comparative value of different theoretical perspectives" (p. 158). Lees also points out that alternative comparative frames can be developed from any city and not only those typically viewed as marginalised in the urban studies literature.

A second critique pertains to recognising the interconnected nature of all places. This recognition has made researchers question the nature of comparative studies. Considering the intensity of external relations between places, how can research best delimit comparable units of analysis? As Peacock (2002) states, "globalization poses a challenge for the comparative method, in so far as that method is premised on the assumption that one can define cultures as distinct and independent units" (p. 45). This critique reflects Deleuze's (2016) first illusion where "difference in thought disappears" (p. 350). In practice, this means comparable categories and classifications might change. For example, in their study of the political economy of Montreal and Toronto, Boudreau et al. (2007) argue that these cities are analysed more accurately through international comparisons according to their embeddedness within the global economy rather than through their contextualisation as large cities within a Canadian context. Similarly, Derudder et al. (2007) argue for comparing cities according to the intensity of external relations within which they are implicated. The interconnected nature of places may thus force basic questions regarding urban research, which presents a call for methodological innovation (Jazeel, 2018; Robinson, 2015). These critiques influenced how I have bound off my research by studying Oslo through other places and with careful attention to the interconnectedness of politics and political practice within Oslo.

Throughout this process, I have been wary of claims about the singularity of compact urbanism in Oslo, especially regarding the alternative trajectories I have

uncovered. Similar to Peck (2015), I have been attentive to the untranslatable hue of subaltern/other geographies vis-a-vis existing urban theory, which Peck (2015) describes as "[t]urns toward particularism, deconstruction and case-study singularity" (p. 163). While he acknowledges that these studies, "have enabled the opening up of new spaces in and for urban theory, and new ways of thinking about urban theory, which is now being practiced across a more variegated terrain and in more diverse registers", he argues that there is

> a growing need to explore alternative modes of conceptual abstraction and theoretical reconstruction. It cannot be sufficient to hold singular cases at ambivalent distance from supposedly 'offshore' theories. [...] It must also occur across scales, positioning the urban scale itself, and working to locate cities not just within lateral grids of difference, in the 'planar' dimension, but in relational and conjunctural terms as well (p. 162–163).

I read Peck's concern, not as a simple critique of these studies, but as a critique of the generalisability that can be achieved. While this may be a question of language, style and terminology, it is also a question of intention and of what *difference* entails in urban geographical research.

Peck's (2015) central critique is that these singular studies have distanced themselves from the established academic terrain to the extent that it becomes hard to learn across differences (i.e., leading potentially to fragmentation by enforcing binary constructions of incompatibility). In pursuit of difference and diversity, Peck (2015) questions the ability of such work to provide basis for commonalities and connections across/in difference and argues for a methodological strategy "that seeks to problematize 'location in the colonial matrix of power'" (p. 178). Consistent with Nijman (2015), I hold that alternative theorisations do not require a complete distanciation from existing theories, but rather that these theories would benefit from an ongoing dialectic of inductive and deductive inquiry. It is precisely this continuous dialogue—interstitial in nature—that enables alternative frames of reference. The impulse to completely reject existing theorisation and practice is one I have tried to avoid throughout my research. I assert that it remains much more difficult and fruitful

to attempt to keep inductive and deductive questions in constant tension within the same legitimate research realm.

The significance of these critiques within urban studies is that they have not merely targeted comparative studies, but question fundamental methodological assumptions guiding urban research. They provide a justification for relational approaches, such as policy mobilities studies, and simultaneously emphasise the remaining fundamental methodological considerations, even within relational studies. For Hart (2018), these impositions prompt her interest in studying concrete situations and processes through their multiple relations and mutual implication. For my own research, these discussions have provided a point of departure. Considering comparison as a mode of thought situates my research design as an entangled theoretical and methodological endeavour, in which I have attempted to critically approach the implicit comparisons that form my understanding of compact urbanism. Similarly, Hart's notion of relational comparisons has influenced my interest in working against totalising and generalising theories while simultaneously engaging critical theory. While this, for my research, has not meant drawing comparisons across north-south divides, it has inspired my critical investigation into the multiple relations and mutual implications of compact urbanism in Oslo. Situating compact urbanism within existing power geometries I have attempted to pay attention to constitutive differences, their potential alliances and how they provide openings for social change.

3.4 'Actually existing' comparative urbanism

As described above, in my research, the primary function of comparative urbanism is as an object of study. Clarke (2012b) suggests that 'actually existing comparative urbanism' compares across cities and places, which researchers find both justifiable and unjustifiable. As a phenomenon, these interconnected patterns of urban epistemologies and their material relations is one reason why policy mobilities studies have lately become a prominent research field (McCann, 2008; McCann and Ward, 2011; Peck and Theodore, 2015, 2012; Ward, 2006).

Policy mobilities research has come a long way in researching real-world comparative urbanism. Following policies across cities and scales while keeping a keen eye on the territorial and relational tension of policy formation, this research field has

encouraged theoretical and methodological innovation (McCann and Ward, 2011; Peck and Theodore, 2015). Understanding the constitution of places and policies through their relations with 'multiple elsewheres', policy mobilities research has grappled with the challenges outlined above, often leaving the traditional 'case study' behind.

Policy mobilities research has largely adopted a 'follow the policy approach', one that examines how policies are mobilised, translated within and between contexts and 'made local' (Peck and Theodore, 2012). Following from an assemblage ontology, the field has opened a space for novel methodological strategies to study conjunctural spatial phenomena. There has been a willingness to experiment with conceptual and practical methodological considerations. In fact, policy mobilities research has openly called for different approaches to how the interrelated constitution of places, policies and events can be studied, beyond following their mobilisation, mutation and translation. For example, Peck and Theodore (2010) question how methodological strategies can "[come] to terms with the new ontologies, registers, and modalities of the policymaking process" (p. 171).

While the speed and movement of specific policies have been of interest within this field (e.g., Peck and Theodore, 2015), researchers have also acknowledged the need for an in-depth understanding of policy phenomenon through means other than mapping and tracing policy movement, translation and mutation. As Robinson (2011) points out, topographical policy mobility maps "might look a bit like a map of the Internet!" (p. 27). Robinson's metaphor is an oversimplification; indeed, many studies have proved useful for distinguishing the particularities of *where* people go, *who* travels and *what* exactly is being brought *around.* For example, in Prince's (2010) study of the globalisation of the creative industry concept, he unravels a differentiated geography of diverging development trajectories of 'creative industry policies' managed, translated and constructed by a diverse set of actors. Following the ways in which policies mutate, assemble and differentiate may be viewed as an important project of demystifying processes of globalisation, countering narratives of homogenisation and simplified structure-agency accounts.

However, it is important to emphasise that following policies around is not the endpoint of this research, but remains a means for researching the production of such

movement and different development trajectories. Furthermore, following fast-moving policies presents a practical problem for researchers. Developing sufficient depth and rigour can be difficult if one is constantly chasing the next conference or municipal meeting in *a* city around the world. For my research, which is associated with a climate centre, involving both personal and professional concerns over extensive academic travel, following policies around is also an ethical question regarding sound research. These challenges spurred my interest in researching fast-moving policies *slowly* or finding grounded ways to study cities' interconnected and contingent nature.

3.5 'Arriving at' and sites of urban translation

Robinson (2015) has suggested a methodology attuned to how policymakers 'arrive at' their specific policies: "I propose to move beyond a focus on what is moving (tracing the trajectories of a policy document, an idea, a policy consultant) and look instead at how policymakers compose their ideas amidst myriad influences from elsewhere" (p. 831). Toward this aim, Robinson argues for developing a spatial vocabulary that is capable of more accurately describing how policies *come together* locally. While Hart (2018) rejects Robinson's Deleuzian foundations, their empirical approach—largely aspired from Massey's (2015) idea of places' 'throwntogetherness'—is in many ways similar. Hart's (2018) relational comparative approach proposes

> starting with what seem to be important *processes* and *practices* rather than
> with any sort of bounded unit – be it nation, city, village, or whatever – and
> engaging in an initial round of abstraction of theorizing. What are typically
> seen as bounded 'units of analysis' are often more usefully understood as
> vantage points from which to try to begin to grasp the coming together and
> interconnections of what (at least initially) appear as key processes (p. 389).

While I have chosen to 'stick with' Oslo as my vantage point throughout this thesis, I have consciously worked against territorially bounded analytical units, focusing on compact urbanism's processes and practices. While Hart might disagree, I find Robinson's 'arriving at' approach to be an in-depth way of approaching the multiple relations and mutual implications of compact urbanism. In particular, I have found Robinson's topological understanding useful for directing the nature of my research. She writes that,

[t]opological spatialities – concerned less with tracing physical mobilities and connections and more with exploring the spatialities of presencing and proximity, accounting for the interminglings of interiority and exteriority, or exploring how institutions and agents might secure influences at a distance – are, I would suggest, crucial if we are to be able to investigate many of the spatial dynamics operative in determining policy outcomes (Robinson, 2015, p. 831).

Recognising multiple policy development sites within (and outside) Oslo, this spatial understanding has guided my approach to how urban actors attempt to forge alternative compact urbanism trajectories. Empirically, this means that I have focused on a range of 'sites of urban translation' across the compact city nexus in Oslo. With this phrase, I mean cases (e.g., practices and events pertaining to the Sub>Urban policy network, or processes pertaining to specific urban development projects) in which there has been a conscious intent to challenge the hegemonic trajectory of compact urbanism. Here, urban translation points to my emphasis on the spatial dynamics influencing how policy and politics come together.

Studying *several* sites of urban translation arose from a comparative strategy of studying through these sites to gain a deeper understanding of the spatio-historical conjuncture within which they are situated—aiming to understand the interconnection of often dissociated contradictions (Ollman, 2015)—and identifying, how and from where generative change may take place.

3.6 Sampling alternatives in an interconnected world

As outlined above, I have studied 'sites of urban translation' that intend to challenge the current trajectory of compact urbanism. Here, *intention* is important, as I do not assume that these sites, or the actors engaged in them, agree on how compact urbanism should (or could) be challenged. As my research shows, both their epistemological worlds and spatio-termporal imaginations differ. By sampling 'alternatives', I have thought through some critical discussions within the policy mobilities literature and been informed by the theoretical discussion of difference described above.

Similar to Peck and Theodore (2010), I do not take for granted that subaltern ideas 'travel' like hegemonic ideas. However, I reject neither that they can follow

similar patterns or that they can mutate and be translated in hegemonic or counterhegemonic directions. As such, I do not understand counterhegemonic ideas to have a 'true' essence that can be followed and traced; rather I assert that it is the ways politics and policies are 'arrived at' that determine their identity (i.e., the way their internal relations are forged).

The intention of 'seeing' the mobilisation of counterhegemonic ideas across established and informal terrains has had methodological consequences, especially for my sampling strategy. Choosing a sampling strategy and defining analytical units (i.e., 'sites of urban translation') became an ongoing process. Defining these sites was challenging because a relational approach recognises their plastic nature. While such an acknowledgement can seem to liberate the researcher, the active delimitation of these units holds ethical and theoretical implications. Peacock asks (2002) "how does one avoid defining artificial boundaries that may enhance scholarly and scientific clarity and depth but distorts realities of world movement?" (p. 47). Peacock's question is relevant in that it assumes the inevitable constructivist act of bounding analytical units. As such, this construction is in itself a comparative act of choosing what fits inside or outside the categorical group under study. Grasping the complexity of compact urbanism became an early and significant point of empirical and theoretical engagement for identifying urban translation sites. For example, the choice to include work pertaining to 'the third housing sector' was made after considering how housing was arising as a contradiction of the compact city, a notion increasingly emphasised by a broad range of actors.

While I have paid attention to how different epistemological communities understand and mobilise alternative compact urbanism trajectories, I have stayed fairly close to formal policy processes. As my research is focused on alternative trajectories, with an emphasis on politics of difference, this choice deserves some explanation. Spivak's (1999, 2003, 2005) critique and ongoing engagement with subaltern questions provides a starting place, as she questions the epistemic possibility of representing, speaking and writing from a subaltern position. Spivak (2005) defines the subaltern as, "where social lines of mobility, being elsewhere, do not permit the formation of a recognisable basis of action" (p. 476). As such, the researcher is in danger of

reproducing 'the same' in the name of 'the other'. My choices were largely guided by the theoretical notions of difference (as relational and affirmative) outlined above, with an emphasis on counterhegemonic activity: that is, how actors act within existing power geometries. In contrast to studies focused on actors who place themselves in opposition to existing trajectories, I have deliberately sought out actors across different epistemic communities who seek to engage existing trajectories from within. For example, architects have represented a group of actors who are sensitive to a multiplicity of trajectories, but who nonetheless engage such positions from within formal roles. While I have interviewed actors, who can be described as belonging to more traditional oppositional forms (e.g., activists), they have also engaged with existing compact urbanism trajectories and not sought to establish complete alternatives. I do not understand alternative trajectories to be grounded in specific individuals or groups, but as arising from interconnections between different actors. The urban translation sites I have chosen have therefore constructed the boundaries for grounding my study of how alternative trajectories are formulated, produced, mutated and assimilated.

3.7   Conducting research in Oslo

Oslo is a city with which I am fairly well acquainted. It is also a city for which I hold great affection. While I grew up only a two-hour drive from Oslo, I was in my 20s before I got to know this city. Growing up in a small rural community, the everyday urban life of Oslo was worlds away. I knew only fragments of Oslo, such as the main shopping street Karl Johan, the Royal Palace, the central mall 'Oslo City', the National Museum, the Munch Museum and the 'Ekerbergsletta' soccer fields south of the city. Representing the map of an outsider, Oslo was to me, during my upbringing, a place to visit. However, my sister, who now works as an urban planner for the City of Oslo, has lived here for the past 15 years. In many ways, I became familiar with Oslo through her. Shortly before I was to move from Vancouver to Oslo, my sister gave me the book *Tøyengata* by geographer Tone Huse. In this book, Huse (2011) narrates the urban lives of Tøyengata, which is a street in a working class, immigrant neighbourhood in inner-city Oslo. This neighbourhood is developing into a gentrified, middle-class area and remains a primary example of inner-city gentrification in Oslo. Reading this book in

conjunction with Venkatesh's (2008) *Gang Leader for a Day*—a personal account of Venkatesh's intimate and long-term engagement with one of Chicago's toughest housing projects in the 1990s—placed these widely different narrations of urban lives, city planning and state intervention within the same frame of reference. I gained a familiarity with Oslo's urban politics and development through such comparative references that also arose through my studies in geography at Simon Fraser University. When I followed in my sister's footsteps and moved to Oslo in 2011 to earn my master's degree in human geography at the University of Oslo, the city became my home for a little over two years. During these years, my fragmented familiarity with Oslo was pieced together anew to form a lived experience of the city. Since this time, I have visited Oslo frequently and spent considerable time debating its politics and planning with friends and family.

Since starting work on this Ph.D., several aspects of my professional and personal networks have gradually merged. People whom I became friends with during my studies are now employed within the scope of urban planning and development in Oslo. Thus, although Oslo remains a small city, it also reflects the increasing legitimacy that human geography has gained within urban planning and urban policy. My positionality in this research project may therefore be described as hybrid in form. In many ways, I remain an outsider, as I belong to an institution typically not engaged in research on Oslo and live in a city often pitted against Oslo both in regard to identity and positionality. However, my connections, my familiarity with Oslo, my specific Norwegian dialect and my educational background position me as a legitimate insider. During my research, I have been treated as both an insider and outsider. My familiarity with Oslo has remained an advantage, providing me with an ease in travelling around, a familiarity with names and places and access to forums and understandings that I might not otherwise have had. My ability to withdraw from these contexts and stand at an arm's length from the opinions and understandings of those with whom I might work in the future, or know personally, has given me a critical distance from the urban planning and politics of a city for which I care deeply.

My choice to study compact urbanism with a focus on housing, arose during my undergraduate studies in Vancouver. Since I left Vancouver, many of my friends there

have sought futures elsewhere. While this may represent the nature of contemporary studies, I know some found it difficult to secure a future in Vancouver. The particularity of Vancouver's compact city approach, with a specific focus on liveability, has seen an increasing segment of the middle class priced out of this housing market. In fact, when I visited Vancouver for a research stay in early 2020, I found that this trajectory had escalated since I'd finished my studies. My time in Vancouver and experiences with the dual realities of that city—a place globally renowned for its green and liveable urbanism—became a motivation for gaining a deeper understanding of the contradictions inherent in urban sustainability agendas.

Similarly, my personal choice to live an urban life and not move 'back' to the countryside (whatever that might mean) has meant being motivated to find sustainable ways of living in the city, and continuous debates with family over the nature and qualities embedded within rural and/or urban livelihoods. As such, my thematic choice is personal in that I am motivated to enrich the discussion of what urban sustainability should and could entail. As fraught as the urban/rural binary is with oversimplifications and ideological dispositions, it also serves as a pertinent reminder that for me, an urban or a rural livelihood remains a choice. For many people globally, migrating to cities remains a means for a hopeful survival, in a world where rural imaginaries are increasingly vanishing.

3.8 Multi-sited fieldwork within and outside Oslo

The multi-sited nature of my fieldwork has taken me beyond Oslo's municipal boundaries to cities including Berlin, Malmö, Copenhagen, and London. Hence, the multi-sited approach has profoundly shaped my research within Oslo. To understand how actors in Oslo arrive at alternative trajectories of compact urbanism I chose three interconnected sites of urban translation in which actors engage in urban policies and discourses from 'multiple elsewheres'. Delineating these sites was arbitrary and cut across different epistemological communities within the compact city nexus. These sites were selected based on a purposive sampling strategy, to reach different contradictions of compact urbanism in which actors strategised to alter development trajectories. Within these sites, informants, documents, newspaper articles and

participatory observation events were sampled based on a combination of purposive and snowball sampling.

3.8.1   Sites

The three study sites were:

- The URBACT network 'Sub>Urban: Reinventing the fringe' and the compact city approach in Hovinbyen
- The third housing sector policy
- Selected concrete projects and discursive events that contribute to affordable and low-carbon urban living in Oslo

While these sites overlap empirically, they delimited my research project and allowed me to study Oslo's compact city nexus during my three-year fieldwork period, since concrete projects and policy development have much longer timespans.

The URBACT network Sub>Urban and the compact city approach in Hovinbyen

Oslo's participation in the EU urban policy network 'Sub>Urban: Reinventing the Fringe' was part of Oslo's conscious effort to develop an approach for the urban densification of Hovinbyen. The network ran from September 2015 until May 2018. Hovinbyen has been designated as Oslo's area with the greatest potential for absorbing future population growth (City of Oslo, 2018). Following from this network, the city has continued working with the conceptual development of a compact city approach in Hovinbyen, through conferences and concrete projects. My emphasis in studying Hovinbyen and the Sub>Urban network has been understanding how actors mobilise and learn ideas around compact city making, and in how this networked approach to developing Hovinbyen shapes the materialisation of Hovinbyen as a compact city.

The third housing sector

The third housing sector is a policy under development in Oslo to alleviate the housing unaffordability in Oslo by providing a third option to municipal and liberal-market housing. Because the policy is under development, the third housing sector has become an umbrella term for a range of fragmented initiatives to construct alternatives to the contemporary urban housing model in Oslo and in Norway generally. The fragmented

work that can loosely be defined as adhering to the third housing sector involves a variety of alternative economic models and living typologies, and alternative organisational models for remaking urban housing solutions. In this work, policies, people and ideas from elsewhere have been mobilised to show existing alternatives to how housing can be organised in Oslo. This work has engaged architects, local planners, governmental officials and activists in conjunctive arenas such as public neighbourhood projects, the formalisation of squatter housing blocks, architectural exhibitions, conferences, reports and a range of informal spaces. My interest in this work is understanding how the throwntogetherness of Oslo's contemporary urban housing situation is negotiated, and the alternative approaches that arise within the compact city nexus.

Selection of concrete projects and discursive events

The selected of concrete projects and events include both concrete projects to challenge how low-carbon and affordable compact city projects can be achieved and discursive events to politicise the current compact city nexus in Oslo. These projects include: (1) Hauskvartalet, a project formalising a squatter housing development through an urban ecological approach; (2) an artist residency project in Hovinbyen, which seeks to provide artists with affordable housing; and (3) Skedsmogata 35, a development project to provide combined housing and workspaces in the city. The discursive events include both Showing (Visning), an exhibition at the architecture museum in Oslo to politicise the current compact city nexus, and a range of conferences and events on compact city and housing themes.

3.8.2   Fieldwork

Travel to other cities primarily occurred during the early phase of my research as part of an explorative comparative approach to distinguish relevant analytical units and become acquainted with how urban actors attempt to diverge from established trajectories. For example, my first trips to Oslo, Copenhagen, Stavanger and Malmö in 2017 was informed by my intention to follow the 'Nordic sustainable cities' policy network, which was initiated by Nordic Innovation—an office organised under the intergovernmental body 'The Nordic Council of Ministers'—whose aim is to

strengthen Nordic region cooperation. While I decided to 'leave' this network, which would have narrowed my research scope to essentially evaluating and conceptualising how this network's actors worked towards urban sustainability, it did focus my attention on the contradictions within compact urbanism and was a direct inspiration for paper IV, which I wrote in collaboration with Jesse Schrage. During the same period, I focused my attention on Hauskvartalet, an urban ecological quarter that had developed from an occupied green anarchist quarter that was sold by the City of Oslo to a private developer in 2016. The architects involved in the iteration of ideas for Hauskvartalet inspired my trip to Berlin, where I interviewed architects working with 'baugruppen' (self-organised building groups) housing projects. From there, the organisational and economic models for housing became a form of 'opening' or 'slippage' to study the potential for altering compact urbanism. While seemingly invisible in their physical manifestations, how alternative economic and organisational models for housing in the compact city differ became a significant research focus.

Since 2016, I have been interested in the European URBACT network 'Sub>Urban: Reinventing the fringe', which sought to rearticulate the sprawling suburban areas accrued through post-war development. However, it was not until I chose to focus on Oslo that I made this network and the case study of Hovinbyen a research site. In speaking with informants in Oslo, it became clear that Hovinbyen and the network Sub>Urban had a role in gathering urban actors attempting to alter the city's current urban development trajectory. As I began delineating these sites, their various interconnections became clear. For example, the artist housing project planned for in Hovinbyen, was developed in collaboration with architects who had worked on Hauskvartalet. This project also became identified as a potential pilot project in the City of Oslo's preliminary third housing sector strategy. However, it's initiation, was a collaboration forged through the activities in the Sub>Urban network.

In 2018, I travelled with a key informant to Berlin for a conference, which deepened my understanding of how housing and compact urbanism processes differed between Oslo and Berlin. It also clarified how these processes were similar (e.g., the contradictions that both cities were struggling to overcome). In my third article this understanding was a reference point for thinking through how actors in Oslo

conceptualised housing failure, while also remaining a concrete counterhegemonic move by the actors in 'Reduce the Rent'. Most importantly, this trip to Berlin gave me an inside view of the informal ways urban learning is informed by personal networks. This insight was confirmed throughout my research as informants' explanations of choices for bringing in references to specific cities or study trip locations were often based on their personal connections and familiarity. In 2019, I also travelled to London and Copenhagen to interview actors working with urban housing. While it proved difficult to reach informants in both cities, the few meetings I had were productive for interpreting my three sites in Oslo through different lenses.

Below I have listed my travel beyond Oslo during my research. My trips to Oslo are not listed because I visited Oslo almost monthly during the 2017-2018 spring and fall terms, and frequently during 2019.

Period	Destination
January 2017	Malmö
January 2017	Copenhagen
February 2017	Copenhagen
May 2017	Berlin
September 2017	Stavanger
June 2018	Berlin
August 2019	Copenhagen
September 2019	London

Table 1 Travel for research

The methods that guided my research are semi-structured interviews, (participatory) observation in conferences and meetings, and analyses of newspaper articles and policy documents. These traditional qualitative methods were useful for helping me understand how urban actors navigate the political terrain to forge alternatives within the compact city nexus. My fieldwork emphasis has been learning how different actors work and think across different epistemological communities, especially in their efforts to gather alternative knowledge about how compact urbanism can be achieved.

Interviews

From January 2017 to October 2019, I carried out 50 interviews with 49 informants. In collaboration with Jesse Schrage, I also carried out 10 phone interviews with 10 informants for paper IV. Some interviews were group interviews and some interviewees were interviewed more than once. I have been in frequent contact with one key informant over the last three years, while two other key informants gave me extensive insight into those with whom I should speak. All interviews were semi-structured and I adjusted questions according to their roles and the projects in which the actors were involved (Appendix 1). In these interviews, I was especially interested in how actors learn and translate knowledge, ideas, models and examples from other places. I was also interested in understanding how they articulate the problems and solutions for making the city sustainable.

I spoke with a broad range of actors engaged in compact urbanism processes in Oslo, including financial actors, developers, activists, architects and planners. Some interviews were exploratory and expert-oriented (i.e., they guided my conceptualisation of how to understand compact urbanism processes and practices). Others were more directly linked to the urban translation sites described above and sought to explore how actors navigated the compact city nexus and their roles and practices in altering existing trajectories. From these interviews, I gained the greatest insight into how urban actors learn from multiple elsewheres. I interviewed many architects. This was a result of the rather dynamic role many architects had in my three study sites. Approximately half my interviews were recorder and transcribed, while the others were documented through extensive notes.

Reaching informants were fairly easy and different urban actors were generally willing and interested in speaking with me. I did, however, receive some rejections, primarily from politicians and large organisation leaders. I attempted to take part in a study trip that was organised on behalf of the City of Oslo and in a roundtable housing discussion. However, I was prevented from attending these events due to the municipality's concern that this would give me privileged access over other researchers.

Semi-structured interviews			
#	**Role**	**City**	**Type of organisation**
1	Activist	Oslo	Local group
2	Architect	Oslo	Architecture firm
3	Architect	Oslo	Architecture firm
4	Architect	Oslo	Architecture firm
5	Architect	Oslo	Architecture firm
6	Architect	Oslo	Architecture firm
7	Architect	Oslo	Architecture firm
8	Architect	Oslo	Architecture firm
9	Architect	Oslo	Architecture firm
10	Project leader	Oslo	Network
11	City district governor	Oslo	City of Oslo
12	Activist/entrepreneur	Oslo	Local organisation
13	Special advisor/project leader	Oslo	City of Oslo
14	Project leader	Oslo	Network
15	Leader/economist	Oslo	Bank
16	Political advisor	Oslo	City of Oslo
17	Special advisor	Oslo	City of Oslo
18	Special advisor	Oslo	City of Oslo
19	Project leader	Oslo	Developer
20	Economist	Oslo	Bank
21	Planner	Oslo	PBE, City of Oslo
22	Planner	Oslo	PBE, City of Oslo
23	Project leader	Oslo	Developer
24	Project leader	Oslo	Developer
25	Leader/ artist	Oslo	Artist organisation
26	Invited speaker/architect	Oslo	Independent (from Vienna)
27	Planner	Oslo	Architecture firm
28	Architect	Oslo	Architecture firm
29	Architect/author	Oslo	Independent / Husbanken
30	Architect	Oslo	Architecture firm 8
31	Historian	Oslo	Developer
32	Project leader	Oslo	Developer
33	Leader	Oslo	Developer
34	Project leader/curator	Oslo	National museum
35	Activist/initiator	Oslo	Protest movement
36	Leader	Oslo	EBY, City of Oslo

37	Advisor	London	City of London
38	Planner	Copenhagen	City of Copenhagen
39	Planner	Copenhagen	City of Copenhagen
40	Planner	Copenhagen	Architecture firm
41	Architect	Copenhagen	Architecture firm
42	Invited speaker/architect	Berlin	Architecture firm (from Berlin)
43	Architect	Berlin	Architecture firm
44	Architect	Berlin	Architecture firm
45	Architect	Berlin	Architecture firm
46	Architect	Berlin	Architecture firm
47	Planner	Malmö	City of Malmö
48	Project leader	Malmö	City of Malmö
49	Architect	Malmö	Architecture firm
Phone interviews conducted in collaboration with Jesse Schrage for paper IV			
1	Leader	Stockholm	City of Stockholm
2	City official	Oslo	City of Oslo
3	Coordinator	Malmö	City of Malmö
4	Senior specialist	Turku	City of Turku
5	Specialist	Reykjavik	City of Reykjavik
6	Project leader	Copenhagen	City of Copenhagen
7	Leader	Aarhus	City of Aarhus
8	Expert	Helsinki	City of Helsinki
9	Senior advisor	Bergen	City of Bergen
10	Coordinator	Gothenburg	City of Gothenburg

Table 2 List of interviews

Conferences and meetings

Public events served as an important arena for recruiting informants and better understanding how a broad range of actors engage with compact urbanism. I was able to participate in several conferences and meetings related to compact urbanism in general, and the three urban translation sites in particular. These events informed my work and have been important for understanding how different actors translate and contribute comparative knowledge and examples.

Conferences and meetings			
Date	**Name**	**Place**	**Relevance**
20.02.2017	*Workshop*: Nørrebrosjæl [The soul of Nørrebro] (City of Copenhagen)	Copenhagen	Explorative

04.04.2017	*Workshop*: Eksport av nordiske byløsninger [Exporting Nordic urban solutions] (Nordic Innovation, Design and Architecture Norway)	Oslo	Translation/export
07.09.2017	*Lecture and debate*: Et sted å bo [A place to live] (National Museum of Architecture)	Oslo	Housing
07.09.2017	*Exhibition*: Et sted å være: Norsk samtidsarkitektur 2011-2016 [A place to be: Norwegian contemporary architecture 2011-2016] (National Museum of Architecture]	Oslo	Housing/ Hauskvartalet
26.09.2017	*Conference*: Smart meet human: The Nordic Model in Urban Development (Nordic Edge)	Stavanger	Compact urbanism
14.03.2018	*Conference*: Drammenskonferansen: sosiale bokvaliteter og grønn mobilitet [The Drammen Conference: Social home quality and green mobility] (Drammenskonferansen)	Drammen	Housing
30.05.2018	*Conference*: Sub>urban (URBACT, City of Oslo)	Oslo	Sub>urban/ Hovinbyen
30.05.2018	*Event*: x til bolig [x to housing] (Rom)	Oslo	Housing
30.05.2018	*Event*: Levende lokaler [Lively venues] (Design and Architecture Norway)	Oslo	Explorative
05.06.2018	*Event*: Bolig til alle [Housing for all] (Norwegian Institute for Urban and Regional Research, Oslo Metropolitan University and The House of Literature)	Oslo	Housing
21- 24.06.2018	*Conference*: Make City (Make City)	Berlin	Compact urbanism
16.08.2018	Event: Ny Oslomodell for bolig [New Oslo Model for Housing] (Gamle Oslo Labor Party)	Oslo	Housing
17.08.2018	Exhibition opening: Kunstnerbolig [Artist housing] (Young Artist Society)	Oslo	Housing /Hovinbyen
29.08.2018	*Event*: Plan og bygningsloven 3.0 Ivaretar loven dagens samfunnsbehov? [The Plan and Building Act 3.0 Does the law secure todays societal needs? (Norwegian Institute for Urban and Regional Research, Oslo Metropolitan University, The House of Literature)	Oslo	Compact urbanism
30.08.2018	*Conference*: Boligkonferanse [Housing conference] (OBOS [Housing developer])	Oslo	Housing
19.09.2018	*Event:* Politisk pub: på tide med ny boligpolitikk [Political pub: About time with a new housing politics] (Manifest Tankesmie) (recording)	Oslo	Housing

20.09.2018	*Event:* Hva ville Gerhardsen gjort? [What would Gerhardsen have done?] (Mimir Kristianson, Bergen Public Library)	Bergen	Housing
26.09.2018	*Debate:* Vi trenger en ny byutviklingspolitikk i Oslo [We need new housing politics in Oslo] (INTBAU Norway, Skarpsno Gimle og Frogner Vel)	Oslo	Compact urbanism
27.09.2018	*Event:* Betaby: Hovinbyen konsept [Betacity: Concept for Hovinbyen] (Pådriv)	Oslo	Hovinbyen
27.09.2018	*Event:* Visning utenfra: Wien [Showing from the outside: Vienna] (National Museum of Architecture)	Oslo	Showing/ Housing
28.09.2018	*Exhibition:* Viewing [Showing] (National Museum of Architecture)		Showing/ Hauskvartalet
01.11.2018	*Event:* Visning innenfra: Hva er alternativene til dagens boligbygging? [Showing from the inside: What are the alternatives to today housing construction] (National Museum of Architecture)	Oslo	Showing/ Housing
14-15.10.2019	*Conference:* Hovinbyenkonferansen [Conference for Hovinbyen] (City of Oslo)	Oslo	Hovinbyen
30-31.10.2019	*Conference:* Storbykonferansen [City conference] (Oslo Metropolitan University)	Oslo	Housing/ Compact urbanism

Table 3 List of participation in conferences and events

Policy documents, plans and reports

Policy documents, political strategies, plans and reports have been important to my fieldwork. These documents served as a way to become acquainted with the considerations, policies and frameworks that structure compact urbanism and urban governance generally, and a source of analytical insight into discursive construction of specific perspectives and policies. See Appendix 2 for a list of important policy documents, plans and reports. In paper IV, urban climate policy documents from 10 Nordic cities were the main analytical source.

Newspaper articles, social media and websites

Newspaper articles, social media and websites were important for keeping up with events and developments. In particular, I used newspaper articles to gain perspectives that were missing from my interviews and to triangulate findings. For papers, II and III

I used a structured selection of newspaper articles to conduct a more comprehensive analysis of urban density and housing in Oslo.

	Newspaper article selection
Paper II	173 newspaper articles collected through the search: (kompakt by* OR fortetting*) AND (Oslo OR Hovinbyen OR Hauskvartalet) AND (bolig* OR klima*) during 29.04.2017–29.04.2020 in 10 central newspapers and magazines (Aftenposten, Arkitektur N, Morgenbladet, Dagbladet, VG, Dag og Tid, Finansavisen, Kapital, Dagsavisen, Klassekampen).
Paper III	176 newspaper articles were collected through two searches 'tredje boligsektor' and 'boligpolitikk and (Zurich or Amsterdam or København or Europa or Wien or London or England or Danmark or Berlin)' in central Norwegian newspapers and magazines (Aftenposten, Arkitetur N, Dag og Tid, Dagbladet, Dagsavisen, Kapital, Klassekampen, Morgenbladet, VG, Vårt Land) during 01.01.2012–10.11.2020.

Table 4 Overview of newspaper article selection

3.9   Modes of analysis

My research process was an ongoing dialectic between inductive and deductive reasoning, in the sense that my theoretical and empirical investigations were part of an interwoven practice by reading theoretical perspectives, data, existing research, events, stories and fragmented ideas through each other. For example, whereas paper I is theoretical and was an important step in informing my critical spatial orientation to the compact city, paper II provides a more substantial empirical analysis that simultaneously builds on and informs this spatial approach.

Methodologically, my analytical modes were discursive and include both traditional qualitative coding strategies and more structured categorisation methods. Discursive approaches are common within social sciences, as they strive to understand how knowledge patterns are institutionalised and materialise in practice, and how discourses are situated within power geometries (Jørgensen and Phillips, 2002). My approach to discourse considers the relationship between material relations and meaning structures as an ongoing struggle that is never properly resolved. As exemplified in paper II, my concern is not merely with representations (e.g., of housing as 'a commodity' or 'a right'), but the processes and practices that make housing

materialise as 'a right' or as 'a commodity'. From such an understanding, discursive struggles encompass material relations in a similar way to how material struggles encompass discursive relations. However, I have not carried out a detailed textual analysis (e.g., of the kind that Fairclough suggests in his discursive approach). Though I conducted a discourse analysis based on Laclau and Mouffe's terminology in paper II, I used more traditional qualitative coding strategies for the analyses in my other papers. In shifting, sorting and categorising my data (Cloke et al., 2010 [2004]), I have stayed sensitive to the discursive constructions that inform meaning-making and practice.

By placing my research within a critical geographic tradition, my analytical approach has focused on abstraction as a significant research generalisation tool. As such, it carries inherent dangers of oversimplification, determinism and overextension (Cloke et al., 2010, p. 294–295). However, abstraction is also a necessary tool for the advancement of theory and conceptual understanding. In categorising my data, I have endeavoured to maintain a critical reflexivity of the coding process' inductive and deductive dialectic. In researching alternatives and their constitutive geographies this dialectic has provided a means for questioning established interpretations and explanatory logics within my research field. For example, in paper 2, the construction of hegemonic and counterhegemonic discourses relies on several rounds of abstraction. The identification of specific categories represents an ongoing engagement with levels of abstraction in which specific events are understood in relation to more general trends and frameworks. Identifying a neoliberal metadiscourse as structuring the hegemonic approach to urban density in Oslo represents one such (perhaps uncontroversial) choice. Here, several lines of commonality were investigated to ensure that a neoliberal metadiscourse was the most appropriate. I considered attributing homeownership a metadiscursive role, but this failed to encompass the technical environmental discourse.

3.9.1 Analysing interviews

Analysing interviews has been an ongoing process, as my research strategy and semi-structured interviews have been flexible. Answers to certain questions have guided new questions and inspired reinterpretations of interview notes and transcriptions. The

interview process can thus be understood as circular, as it folds in on itself through an ongoing process of exploration, investigation and interpretation. In particular, my early interviews were conducted in a variety of contexts and informed my reflexivity as a researcher. How I organised, categorised and judged knowledge in my field—in other words, my preconceived notions—were challenged through ongoing discussions with different actors. I have often found myself utterly convinced of new insights after conducting an interview, only to critically question these 'newfound truths' once I have distanced myself from the interview context. Rewriting notes, listening to recordings and transcribing interviews have therefore been important practices for critically and reflexively approaching my research informants' positions. For example, informants' negative expressions about urban density in relation to sustainability challenged my familiarity with the urban sustainability debates. These informants' positions instilled an unsettled undertone in my research. I needed to reject the implicit categorisation of these perspectives as a form of NIMBYism and instead articulate new categories to better explain these discursive positions. Such considerations were central in informing my critical approach to compact urbanism and guided my relational approach to understanding hegemonic and counterhegemonic positions within the compact city nexus.

I have coded my interview material several times with descriptive and analytic codes. I coded the material separately for each of my three main papers, although some of the material and codes overlap. For descriptive coding, I paid attention to different contexts and themes. In paper I, for example, I used descriptive codes such as 'Sub>urban network', 'Hovinbyen' and 'Oslo' (context); 'affordable housing', 'density', 'compact city'. These codes helped organise my material.

I also used analytic codes to interpret my material. In paper II, I coded my material according to codes such as 'housing', 'economic', 'democratic', 'urban' and 'ecological'. I grouped the perspectives within each code according to four categories: hegemonic discourses, counterhegemonic discourses, problem formulations, and subject positions. For example, the 'urban humanist discourse' came about via a critique, mainly by architects, of urban housing and neoliberal urbanism. In this

context, the discursive struggle was identified through the notions of 'quality of life' and 'dignity'.

While the coding process was similar in paper I–III, in paper II, I carried out a discourse analysis which was more abstract and systematised than in the other two papers. Yet, my attention to discourse remains consistent throughout these three papers. In Paper III, I coded the interview material with specific attention to how actors framed the issue of housing and urban development, their understanding of a third housing sector, the references they brought into the conversation from other contexts and cities and their subject position. Notes from participatory observation in conferences and meetings informed my interview analysis, but was primarily complementary and used to triangulate the findings. In paper IV, interviews served as a strategy for triangulating understandings from document analyses.

3.9.2 Analysing documents and newspaper articles

Document analysis has served as an important analytical focus throughout my research process. Central policy documents, reports, plans and newspaper articles were gathered throughout the research process for papers I–III. They both informed my work's thematic focus and served as a direct point of analysis. In papers I and IV analysis of policy documents, plans and reports provided a central focus, although in differing ways. In paper I, central documents pertaining to the Sub>Urban network and Hovinbyen were coded and categorised in conjunction with the transcribed interviews. In paper IV, analysis of the climate strategy reports from 10 Nordic cities (Stockholm, Gothenburg, Malmö, Helsinki, Turku, Aarhus, Copenhagen, Reykjavik, Oslo and Bergen) served as the baseline for identifying the policy analysis. In papers II and III, structured analysis of newspaper articles was conducted. Similar categories and approximately similar codes to those that were used to analyse the interview material were used to analyse these newspaper articles. In these newspaper articles, however, I paid attention to the political affiliations of specific positions, and traced positions across a broad group of actors.

3.9.3 Quantitative analysis

While my analytical strategy is primarily qualitative, paper IV employed a quantitative policy analysis strategy. Here, climate policy measures (gathered from climate policy reports) were used as the baseline to map and evaluate both *policy density* (i.e., policies' efficacy) (Knill et al., 2012) and *policy intensity* (i.e., the depth of policies' interventions) (Hausknost et al., 2018). This strategy was guided by policy categories based on their affiliations within sectors (e.g., housing), policy instruments (e.g., land use planning) and their intervention depth (i.e., 3 categories defined according to a social practice perspective). I am primarily a qualitative researcher, thus, collaborating with a quantitative researcher led to several discussions about the nature of categorisation within qualitative and quantitative research. While Schrage carried out the main analyses, I informed the categorisation of different policies and the analysis direction and delimitation.

For papers II and III, I also used Statistics Norway datasets to calculate changes in Oslo housing prices and dwelling size.

4 Main Findings: Towards a Critical Geography of Compact Urbanism

In summarising my research findings, I aim to give meaning to my thesis title: *A critical geography of compact urbanism: Urban politics of difference in Oslo*. To better understand how cities learn difference, I have critically approached social change within a framework of socio-spatial production while remaining sensitive to how alternative trajectories are brought together. If compact city policies are hegemonic in urban sustainability discourses today, then there is significant potential in giving voice to politics that render more sustainable trajectories of urban life and development.

By moving beyond (often implicit) conceptualisations of difference as already complete (identity), local (essentialist), and existing as negative antagonisms (e.g., capitalism versus socialism), I have worked towards a relational understanding of how cities learn difference. Using a Spivakian metaphor (see Katz, 1996), I have attempted to *squeeze* critical urban studies through the pores of a Deleuzian ontology of difference, assisted by Massey's relational approach. The result is a critical geography of compact urbanism in Oslo, in which I remained focused on how alternative practices and discourses *affirm* the possibility for other political horizons.

Understanding alternative trajectories of compact urbanism in Oslo as relational, context-contingent and unpredictable activities, my research emphasises the topologies of difference to which these alternatives aspire. These topologies are anticipatory expressions of the urban politics of difference that are developing within the hegemonic trajectory of Oslo's compact city. Affirming the possibility of those practices, policies and discourses that could produce different pathways for urban life.

By looking to the overlaps among counterhegemonic relations and minor gestures it is possible to understand how successful, failed and partially achieved projects, ideas, alliances and practices take part in laying the ground for a more sustainable compact urbanism in Oslo. That said, alternative trajectories demand more than the specific practices and discourses outlined herein. Concrete, detailed engagement with the particularity of organisational and distributional models, economic infrastructures and democratic structures remains tedious and pertinent tasks for the learning involved in assembling alternative trajectories of the compact city.

My research shows how a range of counterhegemonic urban practices and discourses are challenging the hegemonic manifestation of compact urbanism in Oslo. Through my research, I have contributed to improved understanding of how alternative trajectories of compact urbanism in Oslo are assembled by focusing on the spatial renderings of sustainability in compact urbanism, the hegemonic and counterhegemonic discourses of urban density, and the articulation and popularisation of alternative housing schemes. I have also contributed to ongoing debates about how cities can consider patterns of demand in their governance approaches and have reviewed existing compact city literature toward setting an agenda for future research.

By understanding the city as a territorially bound urban form, established notions of compact urbanism tend to ignore urbanisation as a multiscalar and relational process that carry social and ecological implications for sustainable transformation (papers I and V). By developing a relational approach to compact urbanism, my research shows the relevance of researchers, policymakers and planners who ask different questions of the compact city and who explore alternative regulations, laws, practices and alliances that might enable more sustainable cities (papers I–V). For example, architects and other urban actors in Oslo who are taking on new roles (as e.g., urban developers), are challenging their given position and act on their interest in developing more just urban housing projects. Using a relational approach, I have illuminated contradictions within compact urbanism, positioning these contradictions within the same interdependent and interrelated world. Throughout my work, I have analysed how urban actors: question the implicit nature of compact urbanism by engaging in comparative learning about contemporary and historical policies, practices and ways of urban life in other cities (papers I and III); learn to identify the politics of compact urbanisation by questioning and proposing alternatives to the compact city's socio-economic and socio-ecological organisation (paper I, II and III); and, engage with the material interdependence and co-determination of urban life in (compact) cities (papers 1 and IV). As also outlined in paper V, my relational approach invites consideration for how compact urbanism can be rearticulated to advance sustainable transformations. Cumulatively, these five papers outline how shifting towards a relational perspective on the compact city allows *another compact urbanism* to not

only be perceived as possible, but to show that coeval trajectories of different compact urbanisms are already present in fragmented ways throughout different cities.

The research questions presented in Chapter 1, are addressed throughout the body of my research papers. The research question, *What practices and discourses are part of forming alternative trajectories of compact urbanism in Oslo?* is discussed in my first three papers. A study of counterhegemonic discourses of urban density are presented in my second paper, with a comprehensive description of the various discourses that have been brought together in Oslo. In contrast, Paper I and III contain a more detailed discussion of the spatial practices that shape how and what alternatives are mobilised and assembled in Oslo.

The second question *How do urban actors learn, translate and legitimise alternative trajectories of compact urbanism?* is addressed within paper I–III. My research here shows that urban actors learn alternative trajectories by translating information and experiences from other contexts and in doing so, both critically reframe their own context and legitimise alternative developments. This learning is fragmented, multidirectional, and includes the mutation and differentiation of trajectories. As discussed in papers II and III, translations of policies, practices, models and discourses also demand that different actors renegotiate their positions and roles. In paper II, this is exemplified by how architects adopt new roles (e.g., as developers). In paper III, we discuss how a potential non-market housing sector in Oslo demands a rearticulation of the meaning and value attributed to homeownership, and the idea of what it means to 'live well' in a city.

The last question, *How can we understand the urban politics of difference in compact urbanism?* is considered in Paper II and III, and also discussed in Paper I and V. As my research shows, the urban politics of difference in compact urbanism is productively understood relationally. The politics of difference in compact urbanism may be understood as referring to those conjunctures that address the contradictions within the compact city without rendering them through narrow conceptualisation of difference. The politics of urban density presents such a central conjuncture for readdressing the socio-economic and socio-ecological organisation of urban life and development (paper II).

4.1 Three research insights

4.1.1 Alternative trajectories of compact urbanism are fragmented

Counterhegemonic relations play a unique role for understanding the coeval production of difference. In researching how urban actors work to alter discourses and actions leading towards compact urbanism, I have remained attentive to the plastic, fragmentary nature of counterhegemonic relations. Rather than assuming that a range of alternate ideas reflect a whole, my research shows that alternative compact urbanism trajectories are fragmentary and multidirectional.

The fragmentary nature of compact urbanism's alternative articulations and the counterhegemonic relations that support and construct them indicates a lack of mastery (see Katz, 1996). Whomever engages with so-called counterhegemonic relations must necessarily recognise that alternative trajectories are not linear, reliable or consistent. In Paper II, the four counterhegemonic discourses of urban density illustrate how their fragmentary quality makes them depend upon hegemonic relations. In particular, this can be exemplified by how urban density is learned as specific problems. In themselves these discourses and practices will not provide legitimisation and they are articulated through and within the hegemonic manifestation of compact urbanism. Viewing these alternating relations as fragmentary does not mean they exist *outside* existing relations, but rather that their quality is undetermined in the concept, purpose and practice that explains their relations within a larger whole.

While not necessarily making a formative difference to the reality of hegemonic relations, viewing alternative trajectories as fragmentary and multidirectional provides an important step in avoiding essentialist and deterministic accounts of how compact urbanism can be assembled differently. The counterhegemonic discourses of compact urbanism I have identified in my research are fragmentary in that they build their directionality on: pieces of historical policies; parts of policies and ideas from other cities and places; resistance to the status quo; and, ongoing reordering and tinkering with policies, ideas and practices (paper II and III). The difference that these counterhegemonic discourses and practices entail is not constructed in their particular components, but through the whole, they could potentially be part of—i.e., their co-functioning—as illustrated in paper I by the artist housing project for young artists in

Hovinbyen. As shown in papers II and III, however, these counterhegemonic discourses and practices are multidirectional and their co-functioning with other ideas, policies and practices cannot be taken for granted. In paper III, we show how the third housing sector in Oslo is a placeholder for myriad housing struggles and alternative housing practices, ideas and policies. The multidirectional character of these practices, policies and models used by urban actors is exemplified by how they mobilise a conjunction of multiple historic and foreign housing policies and models. While the historic models have a role in translating foreign models to the local context, they are on their own only partial solutions that may also be used to other ends.

Within my research, conceptualisations of counterhegemonic relations guide understanding of the struggles pertaining to bring about another compact urbanism. While these relations are subjected to Deleuze's four illusions of difference—as identity, through assimilation, opposition and the whole in which they take part— alternative trajectories can also partly escape via their fragmentary and multidirectional qualities. For example, from a hegemonic position, fragments become subject to assimilation within the dominant discourse, whether as waste, being ignored or being put to use within existing structures. From a counterhegemonic position, fragments present a potential for repurposing and, while they may be discarded as waste, they can also be put to use in diverging directions. In paper I, the activities brought forth through the network 'Sub>Urban' and the related activities in Hovinbyen show that alternative trajectories exist as reflections, interventions and intentions, but lack a sufficient overarching framework or concrete organisation models, strategies, alliances and legal frameworks to cohere to a legible urban strategy. For example, while the community-oriented circular economy initiative Vollebekk Industries proposes alternative models for the productive activities within compact cities, their translation within Oslo's emerging 'consumption-based emission accounting policy' is marked by their temporary and novel nature—as an exception.

For research seeking to understand alternative policy and development pathways (see e.g., Massey, 2011; Purcell, 2008; Bunnell, 2015), and for research within the established policy mobilities literature (McCann and Ward, 2011; Peck and Theodore, 2015), the fragmentary nature of alternative trajectories is an important

consideration for critically approaching the mobilisation, translation, adoption and failure of counterhegemonic relations.

4.1.2 Alternative trajectories of compact urbanism mutate and differentiate

Peck et al. (2009) argue that neoliberal urbanism "is both predicated on and realized through uneven spatial development—its 'natural state' is characterized by an intensely variegated and persistently unstable topography" (p. 52). Similarly, my research shows that alternative compact urbanism trajectories mutate and differentiate in context-contingent and unpredictable ways. The difference between hegemonic and counterhegemonic relations is that the latter lack an ideological coherence, or a socio-material infrastructure to assimilates their discursive and material expressions. The consequence of this difference—between hegemonic and counterhegemonic relations—is that counterhegemonic relations lack unity and are often understood as existing in, and referring to, different worlds of meaning and socio-spatial production. These relations become identified through their context-specific characteristics, while hegemonic relations become identified through their general characteristics. However, as Peck et al. (2009) also show with reference to neoliberal urbanism, this is a grand simplification, as neoliberalisation is a context-contingent and differentiating process.

In my research I have highlighted how alternative compact urbanism trajectories produce referencescapes for potential socio-economic and socio-ecological differentiation by mutating and being translated in multiple terrains for different purposes and through different means (e.g., in different cities, by different actors) (papers I and III). Significantly, this implies that these alternative courses of development are equally dependent on their uneven, contradictory production for reproducing societal directionality.

The mutation and differentiation of alternative trajectories signify the affirmative structuring upon which counterhegemonic relations depend to construct legitimacy, understanding and actionable knowledge. In paper III, this is exemplified by how urban actors ground their struggles in the reality of Oslo's housing system. The action group 'Reduce the Housing Rent' (Reduser Husleia) rearticulates what the failure of housing in Oslo means to renters in Oslo by displaying bug infestations, inflated rents, and mouldy apartment walls. However, their struggles and alternatives

are translations of similar struggles in other cities and partly overlap with the goals of actors like 'The Housing Rebellion' (Boligopprøret) and the City of Oslo. For example, the argument that a third housing sector in Oslo should be not-for-profit has also been advanced by urban actors on other grounds and via different models from cities such as Copenhagen, Vienna and Zurich.

This coeval quality of counterhegemonic discourses and practices allow these relations to build both general and context-contingent articulations that can consolidate as more coherent alternatives over time. For example, the ways in which historical housing policies provide a 'bridge' for contextualising and translating housing models and policies from other cities (paper III) illustrates the performativity of the existing institutional landscape. While such context contingency in Oslo often provides grounds for assimilating alternative housing models within established development approaches, my work depicts its potential progressive articulations.

Paper III also illustrates how urban actors reach similar ends while sticking to their specific situation. The emerging geographical referencescape of housing that we outline in this paper illustrates not only the spatiality of politicisation, but the multiple terrains upon which the politics of housing in Oslo is constructed. Paper II shows how counterhegemonic discourses of urban density are constructed through similar, yet differently articulated perspectives. These counterhegemonic discourses are partly constructed through the problems that arise through neoliberal densities (see e.g., Harper, 2019) and build on an active translation of policies, practices and ideas from elsewhere (past or present) by urban actors.

Peck et al. (2009) show that neoliberalism reproduces itself through context-contingent alterations. My research shows that alternative trajectories also rely on mutation and differentiation. The significant difference is that alternative trajectories do not afford an overarching, legible logic and thereby exists within different worlds in which their potential interdependence and co-functioning is easily lost. Thus, progressively altering compact urbanisation in Oslo requires the construction of 'topologies of difference' that move alternative trajectories towards meaning, legibility and logic without being assimilated within the hegemonic approach.

Depicting geographies of compact urbanism's alternative articulations, my research contributes to the policy mobilities literature through its emphasis on how alternatives are translated, mutated and learned. For policy mobilities studies, my research suggests that studying the translation and mobilisation of alternative trajectories demands researchers to be particularly careful about how sampling strategies and case boundaries are constructed. The unpredictable and incongruent topographies of counterhegemonic practices and discourses suggests that their mutation and differentiation may be a challenge for research. Studying alternative trajectories require researchers to trace unpredictable alterations, while working against the essentialisation of these development paths and remaining critically attuned to their potential assimilation within hegemonic projects.

4.1.3 Urban density expresses central contradictions of contemporary urbanism

My engagement with the politics of urban density in Oslo provides analysis of how current urban sustainability agendas merge with the politics of urbanisation and urban life. In my research, urban density provides a focus for advancing a critical approach to compact urbanism by opening up discussion of urban life beyond a narrow focus on urban form. While urban densification processes today often represent strategies for achieving higher built densities, urban density is a concept which invites consideration for the lived realities of cities. In my research urban density can be seen to express central contradictions in contemporary urbanism (e.g., housing [papers I, II and III] and environmental sustainability [papers I and II]), while simultaneously providing a pertinent conjuncture for readdressing these contradictions.

Urban density is receiving increasing interest by researchers and has been emerging as a focus for research (Charmes and Keil, 2015; Chen et al., 2020; Keil, 2020; McFarlane, 2020, 2016; Robinson and Attuyer, 2020). My research contributes to this field by showing how urban density expresses particular economic, social and ecological relations (papers I–V). The geographies of these relations hold significance for the sustainability of contemporary urbanism. For example, paper I and V considers how urban density has been ascribed a broad variety of qualities, that however, tends toward limiting perspectives on cities to specific territorial and physical urban forms. To focus on the politics of urban density may advance understanding of urban life and

how issues of social and environmental justice are entangled with urban densification projects.

McFarlane (2020) calls for "identifying and documenting those actors and discourses that *interrogate* [the terms of urban density], and which offer alternative visions of de/re-densification" (p. 321); my research responds to this call with empirical and conceptual approaches (papers I–V), and highlights political and democratic struggles within current urban densification processes, such as the skewed power-relations favouring property owners and developers (Paper II).

In paper I the politics of urban density are approached through topological and topographical renderings of the compact city. Using a relational approach, the intensive and extensive politics of compact urbanisation are explored. This paper illuminates how the work associated with the European city network 'Sub>Urban' and the local Oslo case (in Hovinbyen) explore and challenge urban density's qualitative character. Questioning for whom and with what purpose and global consequences, this paper highlights the specific economic, social and ecological relations constructing Oslo's compact urbanisation.

The goal of paper II was to explore the politics of urban density by outlining its hegemonic and counterhegemonic discourses by analysing urban densification processes through a relational perspective. I emphasise that approaching urban density can be understood as involving learning processes where actors critically frame the problems of urban density in relation to existing and alternative urban densification schemes. This learning process entails the translation, differentiation, failure and mutation of alternative articulations of urban density. While existing research has debated the politics of hegemonic urban densification schemes, less attention has been given to how actors negotiate alternative articulations of urban density within established frameworks.

Describing the discourses that position urban densification as a legitimate, sound course for sustainable development, paper II describes the counterhegemonic discourses that seek to construct alternative pathways for urban densification strategies. Illustrating how questions about urban density reveal a nexus of politics beyond urban form, a typology of hegemonic and counterhegemonic urban density discourses is

advanced. Outlining these discourses entail discussions of different values, positions and socio-economic and socio-ecological perspectives that support them, and the accompanying practices and ways of urban life. In common, these alternative discourses emphasise other socio-spatial imaginaries of urban density than the geographies often associated with urban densification process in compact cities. For example, the Urban Social Ecology discourse renders urban density as a problem of socio-ecological organisation and imagines a rearticulation of urban densification processes where local/collective organisation and urban metabolism guides decision-making.

Analysing urban densification processes and the politics of urban density hold significance for understanding cities and urbanisation. Studying urban densification provides consideration for the specific ideologies, practices, models and actors that take part in transforming the city. Expressing central contradictions in contemporary urbanism, urban density is a plastic concept that invites discussion of the politics that may readdress these contradictions. Understanding how more sustainable cities may be assembled requires policy makers and researchers to be sensitive to the lived experiences of urban density and learn from the comparative practices that expose coeval trajectories of compact urbanism.

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6 Appendix

Appendix 1 – General Thematic Interview guide

1. Role and work
   - Description of their role and the work they do
   - Description of their group, work, or role
2. Projects and processes
   - Description of the specific projects they are working on
   - The processual characteristics of this project
   - Unique and differentiated features?
3. Relations and positions
   - How do they eplain their position
   - Who do they associate with
   - Who are they dependent on?
       i. What does this dependence do?
4. Methods, strategies and tactics?
   - Reflection on the type of methods they employ in this work
   - Reflection on the strategies they work with
5. Collaboration and networks
   - Who do they collaborate with and why?
   - Innovation?
   - Informal and formal network they are associated with
6. Learning and translation
   - How do they learn and where do they learn from?
   - How do they inform learning?
   - Important elements of conceptual and practical translation?
7. Obstacles and challenges
   - What is difficult?
   - What does resistance do?
8. Conceptual aim
   - What type of city would they like to see materialize?
   - How is this city made?
   - How is collaboration and efficiency achieved?
   - Ethics/value system

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Paper I

Article

Towards a relational conception of the compact city

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Abstract

Compact city strategies have become central to the development of urban sustainability politics. Cities across the globe are pursuing high-density, mixed-use developments and energy-efficient transportation systems. However, the correlation between compact city strategies and achieved sustainability is largely taken for granted in public and academic debates. Providing a spatial critique of the theory guiding compact city policy and practice, this article demonstrates how the prioritisation of urban form and territorial boundaries in measuring sustainability ultimately ignores the societal and environmental effects and foundations of current compact city approaches. Building upon this critique, I argue for a relational orientation that can attune research and practice to the compact city's intensive and extensive constitution and consequently to its actual and potential (re)production. Analysing Oslo's involvement in the EU network 'Sub>Urban: Reinventing the Fringe', and work that has followed from this network, the article develops three critical perspectives to advance compact city theorisation beyond traditional frameworks: (1) the relational topographies of the compact city; (2) the relational intensities of the compact city; and (3) the planetary constitution of the compact city. In doing so, a critical geography of how the compact city is produced – discursively and materially – is proposed.

Keywords

compact city, relationality, sustainability, topography, topology

摘要

紧凑城市战略已经成为城市可持续发展政治的核心。全球各地的城市都在追求高密度、多用途开发和节能交通系统。然而，在公共和学术辩论中，紧凑城市战略和实现可持续性之间的相关性在很大程度上被认为是理所当然的。本文对指导紧凑城市政策和实践的理论进行了空间批判，展示了在衡量可持续性时，城市形态和地域边界的优先排序如何最终忽略了当前紧凑城市方法的社会和环境影响及基础。在这个批判的基础上，我主张一种关系取向，这种取向可以使研究和实践与紧凑城市的密集和广泛的构成相协调，从而与它的实际和潜在（再）生产相协调。我们分析奥斯陆参与欧盟网络"Sub.Urban：重塑边缘 (Reinventing the Fringe)"的情况，以及由此网络而来的工作，并在此基础上提出了三个批判性的观点，以推进紧凑城市理论超越传统框架：(1)紧凑城市的关系拓扑学；(2)紧凑城市的关联度；(3)紧凑城市的全球结构。以此为基础，我们提出了一个关于紧凑城市（在论述上和物质上）如何产生的批判地理学。

关键词

紧凑城市、关系性、可持续性、地形学，拓扑学

Introduction

The relevance of compact city strategies has been actualised by the growing consensus that cities play an inevitable role in progressing sustainable transformations on a global scale (Creutzig et al., 2016a; Seto et al., 2014). The compact city has gained prominence, as it represents an alliance between ecological and economic perspectives where 'the demand for reducing the ecological footprint can be realigned with cost-efficiency in spatial and sectoral planning' (Knudsen, 2018: 67). This so-called 'eco-spatial consensus' is legitimised by the idea that 'the climate imperative demands a denser settlement pattern' (Knudsen, 2018: 67, 71), and is brought forth through the notion of the compact city. Largely conceptualised through spatial design, the compact city emphasises urban form as a determining factor in shaping sustainable societies and adheres to concrete growth boundaries to curtail sprawl (Westerink et al., 2013).

In contemporary debate, the compact city model has been legitimised through the idea of sustainable development and 'the question of the contribution that certain urban forms might make to lower energy consumption and lower pollution levels' (Jabareen, 2006: 38). Enabling efficient land use by providing dense clustering and mixes of housing, work, services and amenities, compact city strategies are understood as a precondition for lowering CO_2 emissions and creating sustainable mobility patterns (Ewing and Cervero, 2010; Næss et al., 2017; Newman and Kenworthy, 1989, 1999, 2015).

However, several strands of critique challenge the relationship between compact city development and sustainability. Criticism concerns affordability, social and environmental sustainability, the political economy of urban models, just and inclusive city-making and the carbon footprint of compact urban developments (Burton, 2000; Echenique et al., 2012; Gibbs et al., 2013; Holgersen and Malm, 2015; Moran et al., 2018; Neuman, 2005; Ottelin et al., 2019). These critiques indicate that compact city strategies cannot be removed from the social, political, economic and environmental contexts in which they are situated.

Arguably, these issues expose the fact that compact city theory and practice ultimately overlook the societal and environmental effects and foundations currently constituting this approach.[1] As such, this article problematises two key areas, proposing that compact city strategies: (1) place excessive prioritisation on urban form in determining sustainability; and (2) operate within inadequate boundary systems of evaluating achieved sustainability.

I argue that advancing theory and practice beyond these limitations requires an ontological shift within compact city theorisation. Such fundamental reorientation of the constitutive relations of compact city strategies remains largely unexplored. In the existing critiques, which will be outlined below, engagement too often takes the form of the detrimental inevitability of neoliberal urbanism, or as arguments for adding another element to already existing theorisations. To move compact city theory and practice beyond these critiques, this article utilises relational theorisation, particularly the conceptual tools of topography and topology. This approach makes visible the problematic (i.e. Euclidean) spatial understanding currently guiding compact city approaches, and provides the foundation for advancing a critical geography of how the compact city is produced, discursively and materially.[2] Working towards such a

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relational theorisation advances the argument that there is no *true* compact city. The sustainability of the compact city is ultimately a matter of its extensive and intensive constitution.

This relational conception of the compact city is explored empirically through analysis of Oslo's involvement in the EU urban policy network 'Sub>urban: Reinventing the fringe' (see URBACT, 2018) and the concrete work following this network in Hovinbyen, Oslo. The 'Sub>urban' network was part of the URBACT III knowledge exchange programme, which ran from September 2015 until May 2018 (see URBACT, n.d.). Oslo's engagement within the 'Sub>urban' network can be seen as an embedded aspect of the city's compact city strategy. Hovinbyen, a post-war area east of the city centre, was chosen as the local case to work with in the network because it had previously served as a case area for Oslo's participation in a Eurocities network. From a compact city perspective, the area of Hovinbyen has the greatest potential for absorbing future population growth (Oslo kommune, 2018). Today, the area has about 40,000 inhabitants and is responsible for about 55,000 jobs. The planned densification of the area will add an estimated 30,000–40,000 housing units and 50,000–100,000 new jobs (Oslo kommune, 2016). With Oslo's population expected to rise from approximately 670,000 to 770,000 in 2030, and another 80,000 inhabitants in the following decade (Oslo kommune, 2018), Hovinbyen could play a central role in accounting for this growth.

The case presented herein is part of an ongoing qualitative research project examining how Oslo is developing its compact city strategies. This empirical research is based on interviews with stakeholders both within and outside the municipality, participant observation at network events and document analysis at the municipal, network and

European levels from 2017 to 2019. While the 'Sub>urban' network extends across nine European cities, fieldwork has only been carried out in Oslo. To overcome the sometimes-ephemeral participation by network actors, interviews and document analyses were complemented by participant observation at network events in Oslo. Overall, this case provides empirical and conceptual insight into the current contradictions within compact city strategies and unveils the relevance of developing a relational approach to compact city theory and practice.

Critique of compact city theorisation

The 'compact city' comprises a range of perspectives on, and measures of, city-making that have been successfully mobilised within the contemporary advent of sustainable development (Burton, 2002; Lee et al., 2015). The compact city can be characterised by dense and mixed clustering of housing, social services, shops, amenities and jobs, within an integrated system supporting efficient use of land and energy. It also entails the designation of green belts as boundaries for development, to ensure environmental and agricultural protection (Westerink et al., 2013). Engrained in compact city theorisation are the associated intricate systems and functions that support diversity, vitality and quality of life (Beatley, 2000; Burton, 2000; Jenks et al., 1996; Williams et al., 2000). More generally, the compact city can be described with reference to four approximate points, as outlined by Westerink et al. (2013: 474–475):

> Urban containment, separation of settlements, efficiency of land use.
>
> Viability of public transport, lower car dependency, lower travel costs and climate change

- emissions, public health benefits of non-motorised travel.
- Protection of the countryside, land for agriculture, ecological diversity.
- Densification of urban neighbourhoods: together with indirect effects such as social mixing, social cohesion, economic diversity, etc.

These four points reveal how the idea of the compact city builds upon modern conceptualisations of space, in which prioritisation of urban form is fundamental for designating use and, ultimately, sustainability. Urban form can be defined as land use patterns, mobility systems and other ecological and urban design features making up the physical structure and spatial arrangement of human settlement (Seto et al., 2014; see also Wentz et al., 2018). Furthermore, the model assumes a traditionalist conceptualisation of the city (see Brenner and Schmid, 2014) in which it is possible to operate within a clearly defined system boundary for urban life and development. While Westerink et al. (2013) recognises that, as a spatial model, the compact city is 'not stable over time' (Hajer and Zonneveld, 2000: 341) and has been adapted to include socio-economic aspects, the Euclidean conceptualisation of space remains central in compact city theory.

Next, I will delineate this spatial critique of compact city theorisation. This discussion does not attempt to encompass the entirety of the compact city approach but aims to outline central weaknesses currently limiting compact city strategies. These weaknesses can be organised according to two main critiques, namely that compact city strategies: (1) place excessive prioritisation on urban form in determining sustainability; and (2) operate within inadequate boundary systems for evaluating achieved sustainability. While these critiques may appear to undermine the idea of the compact city altogether, that does not reflect the project of this article. As I later propose a relational reconceptualisation of the compact city, I contend that a compact city approach holds potential for achieving sustainability by curtailing sprawl and intensifying relations through physical proximity. Yet, the central argument of this article contends that the current manner in which compact city strategies are legitimised according to sustainability objectives does not sufficiently account for the societal and environmental effects and foundations these cities constitute.

First, the argument that compact city theory places excessive prioritisation on urban form in determining sustainability can be traced to Newman and Kenworthy's (1989, 1999, 2015) work on the relationship between automobile dependence and density. Their work has been influential in legitimising compact cities as a form of sustainable development, based on their argument regarding the relationship between urban form and emissions (Ewing et al., 2018). Newman and Kenworthy's work is most widely disseminated through a graph (Newman and Kenworthy, 1989: 128) showing the negatively correlated relationship between gasoline use and population density. As Ewing et al. (2018: 167) state, '[d]ata points lie so close to a negative exponential curve that it seems to represent a universal truth'. However, this simplified relationship between density and gasoline use has been criticised (Ewing and Cervero, 2010; Ewing et al., 2018).

In their recent review, Ewing et al. (2018) present a comprehensive critique of Newman and Kenworthy's (1989) original thesis. They describe how other dimensions, such as income, fuel prices, highway capacity, location accessibility, street connectivity and land use mix, are not accounted for, or are reduced to an implicit measure of density (Ewing et al., 2018). Some of these factors (such as location accessibility, street connectivity and land use mix) are brought into compact city discourse through the emphasis on urban form and associated categories. In

fact, a variety of attributive measures has been suggested by various research to enable a more comprehensive approach to the compact city (see e.g. Burton, 2002; Lee et al., 2015). However, other factors (such as income) reveal a blind field of compact city theorisation. Opening up theorisations of the compact city to such factors ultimately challenges the logic driving Newman and Kenworthy's (1989) correlative association between built form and emissions.

As such, the question of urban form outlines a disguised yet engrained logic within compact city theory, that is, the idea that urban form is a key determinant of urban life. This idea points to a long-going dispute within urban theory, as found with reference to debates regarding the American movement *new urbanism* (Fainstein, 2000; Harvey, 1997; McCann and Ward, 2010), and ongoing quests to develop sustainable urban forms (Burton, 2000). In fact, both compact city and new urbanist ideals are rooted in the notion of the traditional city; the idea that proximity and diversity support healthy economies and sustainable livelihoods (Burton, 2000; Gibbs et al., 2013; Neuman, 2005; Tunström and Bradley, 2015; Westerink et al., 2013). While the assimilation of views and interest driving the new urbanist agenda has undergone substantial criticism due to their particular assumption of the relation between physical form and quality of life (Fainstein, 2000; Harvey, 1997), the literature on the compact city has adopted a more nuanced approach, largely avoiding structural criticism of this relationship.

In the compact city literature, the relationship between urban form and social sustainability has been found to be inconclusive and dependent upon other variables (Bramley et al., 2009; Dempsey et al., 2012; Miles et al., 2012; Mouratidis, 2018, 2019). Similarly, studies of urban form and environmental sustainability show that compact urban form affords the possibility of reducing certain emissions, but that it is constrained on its own since 'urban form does not control behaviour' (Milder, 2012: 281; see also Williams et al., 2000). While urban form alone exhibits considerable limitations in informing a measure of environmental and social sustainability, it remains a prioritised variable within compact city approaches.

The second overarching critique of compact city theory presented in this article is the problematic assumptions made in compact city approaches about the boundary systems for evaluating achieved sustainability. While critical urban theory has scrutinised compact city strategies for being aligned with and driving neoliberal urbanism, pointing to the socio-economic foundations and impacts of compact city projects and agendas, such structural criticism has, to a lesser extent, influenced the ways in which the sustainability of compact city projects and strategies has been evaluated.

Compact urban developments are often critiqued for driving urban growth agendas and spurring entrepreneurial strategies and post-industrial urbanisation (Brenner and Theodore, 2002, 2005; Holgersen, 2015; Holgersen and Malm, 2015). Such critique is representative of conceptualisations of contemporary city-making as caught up in processes of neoliberal globalisation, enabling increases in urban investments and land speculation (Allmendinger and Haughton, 2010; Blomley, 2004; Brenner and Theodore, 2002, 2005; Haughton et al., 2013). On the one hand, such perspectives can be seen as critiques of contemporary urban governance and neoliberal globalisation rather than of compact city models per se. On the other hand, the way in which sustainability ambitions have been fixed to the urban scale (Holgersen and Malm, 2015; Jessop, 2006;

While et al., 2004) justifies a research agenda focusing on the way in which compact city approaches are forged with reference to specific socio-economic policies. For example, recent urban housing research suggests a significant relationship between particular financial models and urban housing typologies (Blackwell and Kohl, 2018).

Contextualising compact city strategies within such structural frameworks highlights the hazard of defining clear system boundaries when evaluating the sustainability of compact city strategies. An example can be given by looking to the evaluation of the relationship between compact cities and greenhouse gas (GHG) emissions. In general, system boundaries are commonly defined according to functional, administrative or morphological city boundaries (Seto et al., 2014). In measuring a city's GHG emissions, administrative boundaries typically figure strongly (accounting for territorial emissions). However, in their recent publication, Moran et al. (2018) show that by including indirect emissions when accounting for area emissions, a substantial portion of global emissions can be attributed to a small number of cities. Attributing income (as opposed to urban form or geographic location) as having the highest correlation with increased emissions in urban areas, Moran et al. (2018: 5) state that '[i]n most countries … even the most footprint-intensive suburbs are outshone by the scale of consumption in urban centres'. By including scope 3 emissions (a consumption-based accounting approach)[3] in a city's carbon footprint, Moran et al. (2018) argue that a city's attributed emissions can increase two to three times above the city's direct emissions and that these emissions cluster in affluent cities and neighbourhoods. Moran et al.'s (2018) argument highlights the structural correlation between cities, income and GHG emissions that is not captured by measuring sustainability according to traditional system boundaries. Similarly, a study of the 20 largest cities in Finland showed that '(1) income and personal carbon footprint increase with increasing population, density, and the compactness of a city, and (2) the decrease in emissions caused by reduced motor fuel consumption is not strong enough to compensate for this' (Ottelin et al., 2019: 33).

Overall, this article argues that compact city theorisation is restrained by its spatial imagination. The critiques outlined emphasise the limited ability of Euclidean notions of space to capture the relationship between compact cities and achieved sustainability. First, urban form alone is limited in its ability to determine the GHG emissions or social sustainability associated with urban livelihoods. Second, and building on this, the system boundary issue of measured sustainability in compact city developments enforces a paradox between the built environment, urban livelihoods and their global footprint. In finding solutions for sustainable urban livelihoods, such discussions need to bridge the gaps between socio-economic structures and globalised relations, and between governance arrangements and concrete solutions sought 'on the ground'. To account for these weaknesses, I suggest that a relational orientation can be useful for attuning research and practice to compact cities' actual and potential (re)production.

Towards a relational conception of compact cities

Relational orientations within geography and urban studies understand cities as constituted through the social, material and political relations in which they take part (Heynen, 2014; Jacobs, 2012a). These perspectives provide a means for approaching

the compact city's discursive and material constitution in its extensive and intensive dimensions. Here, I make use of topography and topology to develop a relational framework for the compact city. These conceptual tools allow for articulating space as simultaneously real and conceptual (Martin and Secor, 2014; Lefebvre, 1991 [1974]), while neither the topographical nor the topological maps neatly onto either. Whereas topology provides a structural framework for relational theorisation, topography provides a framework for connecting, counting and comparing real and conceptual elements and places (Jacobs, 2012a; Katz, 2001; McFarlane, 2016; Martin and Secor, 2014). As such, topography can provide a language for describing the comparative geographies within and between places as well as the more general distribution of relations across Euclidean space, while topology can provide the means for describing the spatial operation of these same relations as well as the way these relations manifest with real discursive and material effects and foundations (McFarlane, 2016).

Following McFarlane (2016), this article understands topography and topology as two different, yet intrinsic, spatial registers; rejecting a binary understanding of the two. As such, topography and topology are conceptual tools for working through the extensive *and* the intensive dimensions of the compact city, with the ambition of understanding its political, social, economic and ecological expressions and configurations. For the purpose of developing such a relational conception of the compact city, I build on three partly overlapping theoretical fields that engage topographical and/or topological approaches in urban studies.

The first theoretical field represents a growing body of literature on what Jacobs (2012a: 413) calls 'new urban topographies of relationality'. This research looks to cities as global relational nodes where increasing mobility and speed of knowledge, policies and expertise produce new geographies of urban development. As cities increasingly take part in a wide variety of networks, with the purpose of exchanging knowledge and experience across local contexts (McCann, 2008; McCann and Ward, 2011), new institutional spaces for policy development evolve (Haarstad, 2016; Oosterlynck and González, 2013). The policy mobilities literature has been at the forefront of highlighting the active production that goes into mobilising, mutating and assembling ideas and policies between and within cities (McCann, 2008; McCann and Ward, 2011, 2012; Peck and Theodore, 2015; Ward, 2006).

The research produced by the policy mobilities literature has highlighted that cities and city actors make a range of comparative gestures that academics would find both justifiable and unjustifiable (Clarke, 2012). While policy mobilities studies generally highlight the repetition of neoliberal policies in their work (Peck and Theodore, 2015; Peck et al., 2009), recent methodological critiques of these studies emphasise the potential for unpacking the naturalised narratives of urbanisation through these relational topographies, and consequently potentially produce radically different urban geographies (Bunnell, 2015; Jacobs, 2012b; Peck, 2015; Robinson, 2011, 2016). This critique outlines the methodological and theoretical limitations of working with a purely affirmative frame in relational case studies, as they easily collapse (potential) counter-topographies (Katz, 2001) into blindfields. While undoubtedly imbued with specific power relations, topographical networks provide an important ground for actors *to do* topography, that is, to carry 'out a detailed examination of some part of the material world … in order to understand its salient features and their mutual and broader relationships' (Katz, 2001: 1228). Topography as such has no necessary end in

affirming or countering dominant discursive truths, yet '[t]opographies provide the ground – literally and figuratively – for developing a critique of the social relations sedimented into space and for scrutinising the material social practices at all geographic scales through which place is produced' (Katz, 2001: 1229). For compact city strategies, these relational topographies provide a critical frame for understanding the discursive and material construction of compact city policies and actions.

A second avenue of relational theorisation encompasses approaches that understand the city itself as assemblage (McFarlane, 2011). This perspective represents a shift from attributing relevance to individual elements, to attributing relevance to the *cofunctioning* of individual elements as assemblages (McFarlane, 2011). McFarlane (2011: 653) explains that, 'urban actors, forms, or processes are defined less by a pregiven definition and more by the assemblages they enter and reconstitute. The individual elements define the assemblage by their cofunctioning.' Thus, cofunctioning provides a language for reconceptualising the placement of urban form within the compact city thesis. Rather than being a constitutive and predefined element, urban form can be defined according to its actual and potential *cofunctioning* with reference to other elements, such as income, welfare policies, housing politics or carbon footprints.

McFarlane's (2016) topological approach to urban density holds potential for conceptualising the cofunctioning of elements within the compact city. While urban density is often discussed with reference to 'building heights', 'people per square metre' and other topographic and volumetric accounts, McFarlane (2016: 638) argues that:

> density is never just a set of topographical calculations of people to urban form (housing,

infrastructure, and services). Instead, density topographies are always already interpreted as particular kinds of problems requiring particular kinds of solutions, and these interpretations have spatial imaginations and are often deeply ideological and contested.

This makes density a topological problem which 'cannot be conceived or acted upon in and of itself, because it is always a relation to other issues, spaces and actors' (McFarlane, 2016: 630).

From a topological conceptualisation, density can be understood as an expression of the cofunctioning of various elements and lived realities that constitutes the compact city. Distinctive from the topographical and volumetric densities typically applied within compact city theory, topological densities entail consideration for the articulation of the intensive heterogeneities (or homogeneities) that enable particular forms of urban life (McFarlane, 2016). As such, a topological understanding of urban density can provide a critical lens into the politics of the compact city's intensive and extensive relations. Where McFarlane (2016) emphasises densities as intensive heterogeneities, this article applies a more general terminology of *relational intensities* and their *planetary constitution* to advance the development of a critical geography of the compact city.

A third relational perspective comprises the extensive materialist (Harvey, 1996; Merrifield, 1993) approach provided by urban political ecology. Affording a lens for analysing (un)sustainable spatialities of the compact city, urban political ecology allows for the conceptualisation of compact city strategies beyond territorial boundaries. The relevance of this perspective results from acknowledging the relations of dependence between places; that is, sustainable practices in one place are constituted by (potentially unsustainable) practices elsewhere (Edwards

and Bulkeley, 2017; Heynen et al., 2006; Swyngedouw, 2006; Swyngedouw and Kaika, 2000). These uneven geographies are relational in the way that the advancement of socio-environmental qualities in one place produces other places too. Swyngedouw (2006: 105) states that '[t]hese disparate processes trace the global geographic mappings that flow through the urban and "produce" cities as palimpsests of densely layered bodily, local, national and global – but geographically depressingly uneven – socio-ecological and technonatural processes'. This uneven production of urban geographies is operationalised through the concept of socio-ecological *co-determination* (Swyngedouw, 2006).

Swyngedouw's attention to the relational constitution of cities and nature situates the idea of the compact city within a framework of its active (re)production of structures, natures, economies, livelihoods and opportunities within and beyond its territorial realms. For the constitution of compact cities, urban political ecology's application of socio-ecological co-determination finds revived relevance through Brenner and Schmid's (2014, 2015) use of Lefebvre's (2003 [1970]) perspective on the planetary processes of urbanisation. Different from acknowledging that urbanisation is a global phenomenon, a planetary perspective understands urbanisation to be the social condition of our time. While relations of co-determination are part of global flows in varying and differing ways, their planetary constitution is a reflection of the fact that the way in which a city urbanises matters to far-off places with no obvious connection to this specific city. Such a planetary perspective represents a simultaneously topological and topographical approach in which the concrete and abstract relationality of all places must be viewed in conjunction with each other.

The following analysis brings these relational theorisations into dialogue with qualitative research carried out in Oslo, with the aim of advancing compact city theorisation beyond traditional frameworks. Building upon the theory presented, the analysis is structured using three critical frameworks: (1) the relational topographies of the compact city; (2) the relational intensities of the compact city; and (3) the planetary constitution of the compact city. This analysis shows that the work pertaining to the 'Sub>urban' network in Hovinbyen is attuned to a relational conception of the compact city, yet the moves that have been made are partial and fragmented. For example, while Oslo's participation in the 'Sub>urban' network shows a conscious move towards learning across different contexts and the work pertaining to the concrete projects pays attention to the qualitatively different intensities that could constitute the compact city, a planetary perspective is missing and different actors frame the compact city within a local or regional perspective.

The relational topographies of the compact city

The stated purpose of the 'Sub>urban' network was to redevelop urban fringe areas typically developed after the Second World War, which were characterised by monofunctional use and low-density development (Van Tuijl and Verhaert, 2016). With each of the participating cities working with local cases through the network, the idea was to share ideas, experience and knowledge on how to transform fringe areas into compact city areas and, as such, offer an alternative to sprawl. Overall, this network exemplifies the way in which the new urban topographies of relationality are formally addressed through political institutional networks and activity. However, such formal network activity did not ensure a cohesive shift in how actors approached their understanding

of the compact city. In fact, a network approach seemed to allow for a more discursively uneven landscape, ultimately unearthing the idea of a 'true' compact city.

On the one hand, the compact city perspectives guiding the work within the 'Sub>urban' network can be seen as reflective of the compact city policies of the European Union (Van Tuijl and Verhaert, 2016). On the other hand, many of the reflections and actions brought together within the 'Sub>urban' network and in Hovinbyen reflected sometimes conflicting and even radical intentions in the name of compact city-making. The grounded nature of the 'Sub>urban' network, with a multiplicity of local actors in a transnational framework, suggests that such a fragmented network structure encompassed diverging agendas and strategies. Actors found ground to question the discursive cohesion of the compact city by forging new relational topographies through the network.

The relational topographies created provided space to challenge the future of Hovinbyen. The work initiated through the network arguably contributed to establishing a different 'referencescape' (McCann, 2017: 1821) for the compact city in Oslo. Here, the municipality's willingness to 'create a space to think differently' (Plan-og bygningsetaten, 2018: 18) through temporary use and a process-oriented focus was significant in unmaking the discursive consensus of the compact city. This creative space was enforced by the political mandate of the network itself. As one local planner stated, 'we could do many things without following the line of hierarchy'.

The connections made between rather divergent cities through the network allowed common challenges to be identified across differences. As a local planner argued, 'regardless of how different you are [as cities], you are struggling with much of the same. You are struggling with participation; you are struggling with establishing good neighbourhoods.' Similarly, a city adviser discussed how study trips to the other participating cities in the network challenged naturalised assumptions regarding, for example, housing provision. The adviser emphasised how similar housing projects situated in different national and urban contexts produced radically different livelihoods.

By *doing* topography, actors unearthed the idea of a 'true' compact city and were able to re-evaluate how they 'defined the compact city' (local planner). Unpacking the naturalised narratives of the compact city and establishing new lines of comparison provided ground for challenging collective references guiding the development of Hovinbyen.

The relational intensities of the compact city

These discursive and differentiated topographies of the compact city were further developed through concrete projects and workshops within the network. Two workshops on the topics of the 'productive city' and 'artists as a productive force in urban development' presented a range of local and international examples of the ways in which Hovinbyen could be reimagined as a compact city. As such, the relational topographies, developed through the network, initiated discursive space for challenging how the compact city could be produced differently. Such spaces encompassed critical dialogue on the type of densities that ought to drive the future development of Hovinbyen as a compact city. Density unravelled as a 'topological problem' (McFarlane, 2016: 634), and the relational intensities desired in Hovinbyen unfolded as political questions.

The temporary programming of the Vollebekk area in Hovinbyen is the first

example of how the relational intensities of Hovinbyen were brought into critical dialogue. An empty building, named *Vollebekk Industries*, provided space for actors to challenge the future constitution of Hovinbyen as a compact city. Building on the workshop held on the 'productive city', Vollebekk Industries was based on a circular economy approach and the local community was invited to initiate social entrepreneurial projects and initiatives.

Vollebekk Industries emphasised that different densities could be established in Hovinbyen, that is, the densities of manual workers, social entrepreneurs, small-scale industrial and residential infrastructures, artistic production, recycling and upcycling schemes, circular economic models, etc. These densities were understood as potentially producing a more environmentally sustainable compact city. Challenging the common perceptions of what the compact city ought to entail, a local planner stated that it is 'not just offices, housing, business and the service sector that make up the dense city'. However, Vollebekk Industries only alluded to the relational intensities that could constitute these qualitatively different densities in Hovinbyen. Because of the temporary aspect of the project, Vollebekk Industries remains ephemeral in character. While expressing an imaginary of potentially more environmentally just densities of the compact city, it did not address the cofunctioning of factors that could enforce its continuation beyond the present state of exception (as a temporary project).

The second case provides greater insight into the cofunctioning of individual elements, which may ensure more long-term shifts in the relational intensities enacted in the compact city of Hovinbyen. The project 'Artist Housing in Hovinbyen' arose as a direct result of the process-oriented focus of the 'Sub>urban' network and was

established as a tri-part collaboration between the 'Young Artist Society', an architecture firm and the municipality of Oslo. Artistic involvement in the development of Hovinbyen had been an early focus by the municipality, and the artistic community had voiced its critique regarding the use of artists and art in preparing the area for further development. Artist-driven urban development was described as the use of temporary infrastructure for artistic activity and practice – mirroring events typically occurring during gentrification. A critical discourse developed, questioning how Hovinbyen could be a place of long-term artistic production (Plan-og bygningsetaten, 2018: 69). The question of artistic production in Hovinbyen augmented a discussion of the structural dimensions of the compact city and brought forth an emerging politics of urban density in Oslo where affordability and housing policy were brought into the discussion.

The artist housing project presented a model for integrated affordable housing and studios for young artists in Hovinbyen. The project emphasised the need for alternative housing models for artists due to the group's generally low and unstable incomes and the curtailing of urban underutilised spaces, such as old industrial buildings, typically occupied by artists through affordable rental agreements. Drawing inspiration from historical artist housing projects in Oslo, the model also drew on flexible building structures, the legal structures of building societies (a fragment of Norway's post-war housing politics) and the municipal opportunity to provide long-term leasehold agreements on municipal-owned property (which is not typically used for housing provision currently). The project was planned as a non-commercial venture that would provide long-term rental agreements for tenants. The concrete elements of this project resulted

from the active presencing of Norway's post-war housing politics and alternative European housing models in combination with modern wood construction techniques.

The topological makeup of the 'artist housing project' highlights how the cofunctioning of the unconventional factors, when brought into play, conceptualised an ideologically, economically and politically different kind of urban density. Whereas urban form remained largely unchallenged, urban life was reimagined when density was conceptualised as a 'topological problem' (McFarlane, 2016: 634) of housing politics, land ownership and organisation models. The structural conditions for achieving differential densities in Hovinbyen were rendered legible. This project, still in its planning stages, has recently been suggested as a potential pilot for Oslo's political ambition of realising a 'third housing sector' (Oslo kommune, 2019: 141).

In the same way as the topographical approach provides a way of analytically navigating the relative and concrete constitution of the compact city, this topological perspective provides a language for reassembling the political constitution of the compact city in question. However, the political question of planning for 'more socially [and environmentally] just densities' (McFarlane, 2016: 631) cannot be viewed without reference to externalised relations, that is, their planetary constitution.

The planetary constitution of the compact city

Moving towards a planetary perspective of the compact city represents a shift from viewing the city as a contained entity with localised or regional effects, to viewing the city as an active creator of places, lifestyles and emissions in multiple elsewheres. The co-determination of the compact city of Hovinbyen represents both real and abstract relations to a myriad of other places. The contours of such a conceptual shift have been largely absent from the 'Sub>urban' network and from Hovinbyen more generally. However, and with reference to GHG emissions, trans-local relations have recently become a prioritised consideration within the city of Oslo.

Within the 'Sub>urban' network, territorial perspectives on the compact city dominated. For example, the lead experts in the network, Van Tuijl and Verhaert, wrote that 'reinventing the fringe means simultaneously thinking about the consequences of new plans and ambitions on two levels: the level of the city region and the local level of the intervention site and its immediate vicinity' (Belman et al., 2018: 7). This quote depicts how the scope of urban development was conceptualised with reference to local and regional scales. This territorial logic enforces the perspective that compact city solutions providing housing, tertiary sector jobs and services are more sustainable than, for example, industrial- and small-scale production. As such, the circular economy and the productive city solutions activated through the temporary initiatives in the 'Sub>urban' network find less substantial ground for legitimation through an environmental perspective. This logic is enforced by production-based emissions accounting, commonly used by cities to calculate their emissions. The coupling of production-based emissions accounting and the territorial demarcation of compact city strategies disguises the unequal relations of emissions that are produced from a planetary perspective.

In Oslo, the city's master plan bases its GHG emissions budget on production-based emissions accounting. The city has a goal of becoming a zero-emission city and pays considerable attention to recycling, consumption and transportation. Overall, transportation is identified as the biggest emission source, accounting for about half of Oslo's climate emissions (Oslo kommune, 2018). However,

the city has recently shown interest in addressing scope 3 emissions and is currently working in collaboration with other cities to develop such an approach. While recognising the methodological challenges of accounting for scope 3 emissions (Creutzig et al., 2016a, 2016b; Moran et al., 2018), incorporating such accountability at the city scale provides an opportunity to avoid the trap of allocating consumption patterns to individual responsibilities and choice (see e.g. Moberg et al., 2019). If Oslo were to adopt a consumption-based emissions approach, a different topography of emissions could be revealed and a different topology of emissions drivers and clusters could be found, potentially shifting the logic currently guiding compact city strategies.

Ultimately, this planetary perspective ascribes a different collective responsibility of compact cities as actors *in the world*. Through the temporary activities established in Hovinbyen, such as the circular economy approaches adopted in Vollebekk Industries, the attentiveness to such relational responsibility is apparent. However, the co-determination of Hovinbyen in the world was not brought into a framework that enabled its articulation within a compact city perspective. Adopting a planetary perspective of the compact city could legitimise a different, relational toolkit for evaluating the sustainability of adopted strategies.

Conclusion

The purpose of this article has been to initiate a discussion on the possible conjunctures of the compact city. Prompted by the idea that there is no true compact city, I have argued that the sustainability of the compact city is a matter of its extensive and intensive constitution. By making use of the conceptual tools of topography and topology, I have suggested a relational reconceptualisation of how the compact city is produced, discursively and

materially. This conceptual shift consequently asks different questions of the compact city. It questions the political constitution of the eco-spatial consensus (Knudsen, 2018) that the compact city currently manifests, as well as the possible political conjunctures that could manifest qualitatively different compact cities. This entails asking questions, such as what is the relationship between housing policy or land ownership law and urban form, urban containment boundaries and/or consumption-based emissions? Importantly, and with relevance for relational thinking in urban studies more generally, such an approach works towards operationalising a non-deterministic and relational understanding of structure.

As shown by the analysis of the Oslo case, however fragmented and partial, practitioners are attuned to such relational reconceptualisation. By working through the relational topographies of the compact city, practitioners may forge entirely new comparative geographies. By critically engaging the relational intensities and planetary constitutions of diverging compact cities, such relational topographies may progress compact cities towards sustainability.

In terms of empirical research, this relational orientation confers methodological implications. First, it suggests that the sustainability of a compact city should not be evaluated merely based on individual factors in isolation, or within local or regional growth boundaries alone. For both quantitative and qualitative research, this entails re-evaluations of case boundaries. Case boundaries may be defined analytically and by empirically identifying key drivers within diverging contexts, rather than through territorial means. Similarly, individual elements could be researched through their cofunctioning with other elements. This would not negate the identification of key drivers of (un)sustainable compact cities but would reject the prioritisation of universal

categories (such as has been the case with urban form). Second, this relational orientation suggests that learning across differences can advance compact city theory and practice. For compact city research, this means researchers should challenge established notions of comparability (e.g. Jacobs, 2012b; Robinson, 2011, 2016) as they and others may in fact draw theoretical and empirical lessons across very different compact cities. Finally, this article invites policy makers to take a hard look at the types of regulations, laws, practices and alliances that might be enacted to enable more sustainable compact cities.

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Notes

1. I thank Referee 1 for pointing this out.
2. I thank Referee 2 for pointing this out.
3. See Seto et al. (2014: 937, Box 12.2) for a description of different methods of GHG emissions accounting at the local scale.

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Paper II

Paper III

Paper IV

Paper V

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