Reply

Situating Flatness

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Introduction

Our paper, 'Human Geography without Scale' (Marston *et al.* 2005), is developed in two parts: a critique that is immanent to scale, where we show that, even on the grounds of contemporary spatial theory, the concept is deficient; and a critique that is extrinsic to those grounds, where we make a contribution to an alternative ontology that does not rely on the transcendental abstraction of scale. The paper is of course *about* scale, but these alternately internal and external critiques mean that it is also in play with two different domains of spatial thought more generally. On the one hand, most theorists of scale have come to rely on Henri Lefebvre's dialectical materialist approach to overcoming long-standing divisions between social and spatial ontologies. On the other hand, inspired by thinkers such as Deleuze, Latour and others, a small but increasing number of geographers are charting a different approach to space, one that is also materialist but poststructuralist and non-dialectical (Bonta and Protevi 2004). Our paper can be read as the latest salvo in the scale debates, but as this reply should make clear, it also speaks directly to widening differences in these theorizations of space in critical human geography.

One does not have to be a Kuhnian to realize that any time a shift in dominant thinking takes place there will be 'sides' – and reading some of the comments on our paper reveals that this word is not too strong. Here we suggest that, in order to develop a more complete and analytically rigorous account of these differences, non-dialectical theorists of space will have to respond to a number of questions, the answers to which dialecticians have already filled in while developing their own approach to social space. These questions, which amount to something of an agenda for an alternative spatiality, include the following:

- How are power and politics theorized?
- How does the theory address agency and structure, identity and difference?
- What is the relationship between 'the social' and 'the spatial'?
- How are the 'human' and 'non-human' theorized?
- What is the relationship between materiality and discourse?
- How is causality specified in general and determined in particular?
- How is knowledge produced theoretically and verified empirically?
- What research questions emerge and what methods are needed to answer them?
- How does the theory address core concepts such as place, region and scale?
- How do new concepts emerge from the theory?

While our paper touches on a number of these questions through the entry point of scale, finding a satisfactory set of answers is a much more extensive project. A small contribution to it, we hope, is this response to the wide-ranging comments on our paper by Chris Collinge (2006), Arturo Escobar (2007), Scott William Hoefle (2006), Andrew Jonas (2006) and Helga Leitner and Byron Miller (2007). In short, we take up their specific criticisms, while at the same time making an effort to indicate some of the implications for the wider terrain of geographic thinking onto which 'Human Geography without Scale' has landed. But first, we briefly review the key threads of our argument.

Our paper begins by noting that after over 20 years of scale theorizing in geography, disagreement remains about what it is and, even, whether it exists. We note that geographers have been steadily 'complexifying' their concepts of scale since the seminal work of Peter Taylor (1982) and as vehicles in the large literature on this topic we offer synoptic readings of the work of Taylor and six other geographers: Neil Smith, Erik Swyngedouw, Neil Brenner, Kevin Cox, Richie Howitt and Doreen Massey. In brief, these writers have elaborated on: (a) the social production, structuration and relational character of scale; (b) the ways that different social processes are unevenly and complexly distributed across various scalar levels; and (c) the relationship between scalar theorizing and horizontal, or network theorizing.

We go on to note that in spite of these complexities, a vertical view of scale as a series of nested spaces – from the neighbourhood to the locality to the region, nation and globe – continues to hold sway, and we outline four major problems with this conceptualization. First, as many others have noted, there is widespread confusion over the relationship between vertically stratified scales and horizontally extensive spaces. Both carve territory equally well, but using them interchangeably compounds confusion. There are, we argue, advantages to demarcating horizontally. Second, we note that vertical scale is anchored by the endpoints of the local and global, and that these appear inescapably tied to a host of other binary oppositions that even the best orthogonal thinkers are prone to conflate, including: agency and structure, subjectivity and objectivity, parochial and cosmopolitan, concrete and abstract, static and dynamic. The result of these alignments, we argue, has been a pervasive association in which:

> economic macro-isms are articulated alongside their attendant 'global spaces', while (minor? reproductive?) social practices are cordoned off in their respective localities (or even homes), thereby eviscerating agency at one end of the hierarchy in favour of such terms as 'global capitalism', 'international political economy', 'larger scale forces', and 'national social formations', while reserving for lower rungs examples meant to illustrate the 'unique manifestations' of these processes in terms of local outcomes and actions. . . . (Marston *et al.* 2005, 421)

Third, we observe with Howitt (1993) a tendency for researchers to approach scale as a conceptual given, an already ordered spatial imaginary onto which they project an endless number of phenomena and processes. We claim that, in spite of increasingly pliant accounts of the concept: 'events and processes come pre-sorted, ready to be inserted into the scalar apparatus at hand' (Marston *et al.* 2005, 422). Fourth, we maintain that the global imaginary, in part because of its association with an Archimedean conceit of objectivity, defies self-reflexive and situated accounts of social life.

One alternative to vertical scale that we consider – one that quite possibly could work within a dialectical approach to spatiality – is the increasingly popular approach sometimes referred to as 'spaces of flows' (Castells 1989; Amin 2002). Network-based horizontality does avoid some of the problems discussed above, but in reviewing this literature we see significant evidence of 'flowsterism': the idea that people, phenomena and processes somehow fly above the stickiness of space in an atmosphere of frictionless fluidity. We find, moreover, the same tendency to spatial abstraction in the horizontal view that we also criticize in the vertical one, with scattering lines of flows now standing as transcendental counterparts to layers of nested territories. So we opt, instead, for a 'flat ontology', largely based on the work of Deleuze, DeLanda and Schatzki. In it we conceptualize 'sites' as immanent (self-organizing) event-spaces dynamically composed of bodies, doings and sayings. Sites are differentiated and differentiating, unfolding singularities that are not only dynamic, but also 'hang together' through the congealments and blockages of force relations. The 'actuality' of any site is always poised for compositional variation – subject to reorganizations and disorganizations – as its inexhaustible 'virtuality' or potential continually rearticulates itself (Deleuze 1994). Finally, the ontology is called 'flat' because it neither incorporates *a priori* transcendental forms nor deploys 'axiomatic' or typological analytics that pre-ordain a series of solutions to critical inquiry. As we mention, these too often characterize the analytic procedure of scale theory. Sites must be approached problematically through analysis conditioned by the compositional specificities particular to each.

We end the paper with a brief response to what we knew to be on the minds of most readers: what about the politics of the site ontology? Perhaps, we offer, sites might be porous and dynamic enough for us to imagine multiple outlets for and connections among a range of political struggles. But if nothing else, then the site should at least stand in opposition to the juggernaut of 'globe talk' (Robertson 1992), which is continually marched out in efforts to mystify the concrete assemblages (e.g. boardrooms) that hide behind the banners of 'globalization', 'global capitalism', etc.

Anxieties over geography

Once critical geographers made scale an object of inquiry, its relationship to the discipline became much more than simply a cartographic device (McMaster and Sheppard 2004), which helps explain the anxious tone in some of the responses to our paper. We of course recognize that scale has been a productive vehicle for theorizing all sorts of political, economic and social processes (Marston 2000; Marston *et al.* 2005), and the fact that most of the sophisticated work on the concept has emerged from geographers should be a point of pride. As Jonas puts it, 'The politics of scale is partly about getting scholars of different disciplinary persuasions to embrace wholeheartedly concepts and practices of scale-spatiality' (2006, 399). Jonas concludes his response with the claim that he cannot imagine a human geography without scale. On the other side of this coin is Hoefle, who believes that abandoning the concept threatens geography's very existence. To make his point, Hoefle paints us as the killers of the 'goose' (geography) that laid the 'golden egg' (scale). He suggests that any attempt to venture from underneath the shadow of scale is 'suicidal' (Hoefle 2006, 241–2). Moreover, were geographers to think outside of the conceptual confines of scalar frameworks, Hoefle writes, the result would no longer fall under the purview of the discipline (2006, 241). Concerned about the possibility, Hoefle goes so far as to advise that our paper be 'read and digested *within* the discipline and for Geography's sake nary a word about the paper outside it' (Hoefle 2006, 242).

In our view, Hoefle's anxieties warrant two brief responses. First, geographers can no more claim ownership of scale than political scientists can of nation-state. Moreover, if scale exists in the bedrock terms that some critics contend, then it must certainly have been around prior to any claims on it by the social constellation of knowledge that Hoefle refers to as 'Geography'. On the other hand, if scales are historically and socially produced, as most Marxists claim, then it is clearly not a class of geographers who have been doing the bulk of the manual labour! Second, such talk about survival and suicide does not stand up to the historical record. Back in the 1970s and 1980s, many thought that the broadsides launched against Cartesian epistemology and spatial fetishism would spell the end of the discipline, but clearly that did not occur. Instead, the dialecticians of space – as Jonas and Leitner

and Miller note in their responses – took us in lots of interesting directions. So will other geographers as they continue to sort out answers to the ten questions listed in our Introduction.

Trotting out the scalar axiomatic

One of the early responses to the paper came from a prominent theorist whose reply went something like this: 'I completely agree with you, but you have to remember that scale exists!' The presumed self-evidence of scale is also present in the responses by Jonas, Hoefle, and Leitner and Miller. Jonas – his concluding comment about not being able to imagine human geography without it notwithstanding – is noteworthy for paying close attention to scale's causal powers, a task that leads down an ambivalent path that we also followed when rethinking scale. First, he is careful to note the difference between the scalar organization of material resources and that organization's causal effectivity, if it can be said to have any (2006, 400–3). For example, he discerns differences between capital 'doing this' or nation-states 'doing that' and the complex of causalities that arise 'in the sense that certain scalar properties of an object, process or activity make a difference to the way it operates or to ways that groups act upon its knowledge-context' (2006, 401). With respect to those knowledge-contexts, we are in agreement with Jonas that scale could in one sense be nothing more than a discursive device (something that was of concern in our paper, inspired by Katherine Jones 1998). Like us, he acknowledges that scale operates epistemologically – as a 'lens' – and he spends a part of his response explaining how scales help researchers think through and write up research. Scale helps resolve, he offers, problems of narrative. And indeed, at a crucial point he seems to agree with us in suggesting that scale exists only as an analytic device:

> Marston *et al.* are therefore correct in their belief that these processes do not converge around discrete scales and territorial hierarchies, *but unambiguously misguided in their claim that those of us who work with scalar concepts believe that such elegant structures and categories actually exist, other than as heuristic abstractions.* (2006, 400; emphasis added)

Jonas might respond that this passage applies only to fixed scales and not to complex ones, which is presumably what he means by referring to 'spatial-material scales' (2006, 404). But it is important to remember that taking complexity into account does

not by extension secure ontological status. Just because the scale concept has become more fluid and complex over time does not make *it* any more real. In any event, Jonas ultimately wants it both ways: scale as abstraction, conceptual lens and aid to narration; and scale as a complex specificity that results from the '*necessary* scale-spatiality of social, economic and political life' (2006, 404; emphasis added):

> [We 'scalists', i.e., the 'pro scale' geographers] are responding to the challenge of narrative and deploying scalar *categories* in ways that attempt to show how particular material structures and processes have become fixed at or around *certain* sites and scales, are in the process of becoming unfixed at a *specific* scale, or combine to differentiate the world in complex scalar and site-specific dimensions. (2006, 404; emphasis added)

Our point is not whether scale can be both a narrative device and a 'spatial-material' object. It is, rather: first to caution against abstractions that become real through reification; and second, to be equally wary of abstractions that emerge as their presumptively concrete referents are destabilized through social constructivism. Indeed, perhaps scale as *both* epistemology and ontology is trapped in the revolving door of discourse and materiality that has consumed so much energy since the 1980s – the same time frame over which it has been increasingly complexified. Is scale so axiomatic that it had to be reinvented as a discourse once geography discovered deconstruction? Is the corollary in that operation found in the production of scale as an object out of such raw materials as narrative conventions and epistemological lenses?

Compared to Jonas, Hoefle adopts a similar but less nuanced analytic strategy, while also treating us to a short course on the history of geographic thought. Specifically, he offers a contradictory reading of Mitchell (1995), which he uses to criticize our project:

> Of course the concept of scale, as all theoretical devices such as culture, society, economics, environment, nature, site and a host of others are [sic] just that, a word (symbol) in our head to which a string of ideas are associated concerning things, activities and processes perceived in the world. It is unfortunate that the authors were inspired by Mitchell (1995), who tried to argue that the concept of culture . . . does not exist ontologically. (2006, 240)

He is right about Mitchell, who famously critiqued culture for its lack of ontological status. But it is hard to see how Hoelfe could criticize us for invoking Mitchell when in the same passage he *also*

rejects a 'thingified' version of culture – and scale. Resonating alongside Jonas's discursive-material duplet, Hoefle later goes on to discuss 'real' scales, as in claims that 'the success or failure of alternative politics in the Amazon hinges on working through *all* the scales of political alliances' (Hoefle 2006, 239; emphasis in original). The 'idea' of scale, which we do not deny, is here trumped by scale as an axiomatic object – the transcendental abstraction becomes reified.

Leitner and Miller also attest to the representational aspects to scale, doing so through the Lefebvrean production of space more generally. Lefebvre of course had a lot to say about both spatial ontology and epistemology, but Leitner and Miller object strenuously to the notion that scale is merely an epistemological ordering frame. Scale is for them an ontological aspect of space itself:

> Spaces, moreover, exist in nested relationship to other spaces, creating differential opportunities and constraints for practices of individual and collective agents . . . The notion of 'scale as level' points toward such differences in powers and capacities, opportunities and constraints, among nested spaces. (2007, 119)

But how is this nesting produced? Leitner and Miller answer this question by analysing the social practices involved in the social construction of scale. We think this is a good way to proceed, for a focus on social practices is at the heart of the site ontology developed in our paper (also see Schtazki *et al.* 2001). But before continuing they criticize us for reducing the choices to idealist versions of scale as a level and as a size: 'Marston *et al.* ground their ontological critique in an interrogation of "scale as size" and "scale as level"' (2007, 119). But we do not do that. The part of the paper they are referring to is not about ontology at all, but is instead a straightforward empirical discussion of the relative merits of thinking size versus level, a point of confusion in the scale literature that has been widely acknowledged but never resolved (see Howitt 2003). Our ontological commitments should have been quite clear: to reject transcendental imaginaries that circulate in scalar thought and to reposition analytics at the sites of doings and sayings, events and orders.

At this point in their response Leitner and Miller seize on a comment in our paper about 'bordering practices', erroneously suggesting that we reduce scale to these prosesses. But let us compare some text. They write:

Marston *et al.*'s 'imaginary' critique of the scale literature points us only toward bordering practices as a technology of scale production. For Marston *et al.* scale is 'the result of marking territories horizontally through boundaries and enclosures, documents and rules, enforcing agents and their authoritative resources. (Leitner and Miller 2007, 119)

This, however, is a perversion of the printed page, which reads as follows:

> For one encounters these 'structures' [legal, juridical, and organizational] not at some level once removed, 'up there' in a vertical imaginary, but on the ground, in practice, the result of marking territories horizontally through boundaries and enclosures, documents and rules, enforcing agents and their authoritative resources. (Marston *et al.* 2005, 420)

In short, we never reduce scale to 'bordering practices'. Quite the opposite, in fact: we suggest in the above quote that 'marking territories' is part of site-talk, not scale-talk. Leitner and Miller go on to make much out of this misreading, admonishing us in this section about power being 'shot through' this or that, and about the irreducibility of politics to boundary making. They accuse us of lacking an analytic of power, as if our 'documents and rules, enforcing agents, and their authoritative resources' are not about power.

But getting back to the practices that socially construct scale, Leitner and Miller write:

> While necessarily affected by relations of inclusion and exclusion across differentially permeable borders, power relations, processes, and capacities within bounded spaces cannot be reduced to bordering practices. (2007, 119)

Irrespective of the fact that we did not say they were (see above), what they offer as their version of legitimate practices behind the social construction of scale are the following:

> While the state is heavily implicated in bordering practices as well as entangled in power relations beyond its borders . . . its activities cannot be reduced to bordering practices. States engage in a wide range of regulatory practices relating to resource allocation, authorization, legitimation, and signification. They invariably exhibit internal geographical differentiation by level, e.g., local, state/provincial, national, as well as differentiation in relationship to supra-national regional institutions and institutions of global governance, e.g., NAFTA, EU, WTO, IMF, World Bank. (Leitner and Miller 2007, 119)

There are two points to be made about this passage. First, the practices named – regulatory, allocative, authoritative and signifying – are in fact good places to start looking for the social production of scale, but we should be precise: strictly speaking, all of them rest on 'bordering practices', on the seizure of alterity, on its reduction to exploitative forms of difference, and on the social power that maintains such difference. Seen in this way, bordering practices are in fact all about power. As such, they oversee all of Leitner's and Miller's practices: of who to regulate and how to regulate different bodies differently; who gets what sort of allocation and how much is allocated; who has the right to exercise authority and how that authority is activated differently on different people; and what is signified and how it is signified differently. So, even when taking their misreading of our paper on their terms, we stand by the idea that bordering practices (through their enforcing agents and their documents and rules) are in fact a good place to see the operation of power (or what we referred to as 'force relations').

Second, we need to ask how one studies these messy aspects of power when one shifts, as they immediately do in the quote, to the scalar axiomatic, which departs from the factories, offices and stores; the traffic intersections and sidewalks; the schools and border-crossing posts; and the council chambers and courtrooms. Surely we are not going to find their practices at work, 'bordering' or otherwise, at 'levels' that are positioned as rungs above these sites of social practice, i.e. at their 'local, state/provincial, national' or 'supra-national regional' and 'global' levels. Here Leitner and Miller reveal a tendency for causal slippage that Jonas makes a conscious effort to avoid – not so easy when one is enrolled in the scalar axiomatic. The problem so thoroughly infuses scale talk that we soon find Leitner and Miller talking about things being 'downloaded' and 'uploaded' to other levels, while at the same time claiming that these restructurings of scale 'flow from social struggle' (2007, 120). Which sites those struggles took place in, and which practices are involved, is left unresolved.

Dusting off the usual political subjects

As we noted in our original paper, the scale debates of the last 20 years emerge out of strong political commitments, and we do not question the sincerity of those we review in our critique of scale. But in the responses to our paper, we find that what stands for political is in danger of calcification and caricature. Hoefle and Leitner and Miller return repeatedly to a small variety of political 'hot

topics' meant to illustrate the utility of the scale concept for mapping solutions to political crises. While we also do not question our commentators' political commitments, we nevertheless note that too frequently their reluctance to engage an alternative theory of spatiality is due not to an evaluation of its intrinsic merits, but to their sense – misguided in our estimation – of the self-evident value of scalar frameworks for pushing forward socio-political change. Specifically, the discussions of politics tend to appear either: (a) in the place of strong analysis, support and refutation in the respondents' arguments in support of scale; or (b) as a 'reading off' of politics through scale in order to demonstrate its concreteness, while at the same time being tautologically framed in its terms. Hoefle and Leitner and Miller pull together various examples in which supposedly 'scalar' politics – e.g. the global scale of the WTO versus those of local, grassroots social movements – stand in for arguments against our critiques of the scale concept, but they do so as if these examples were transparently scaled beforehand. When political empirics are pre-treated with a scalar analytic and then used in support of the scalar concept itself, it not only naturalizes scale thinking, more importantly it does an injustice to political thought, falsely suggesting that scale theorizing is the only way – or at least *the* right way – to frame a given political struggle. The political risk in this rhetorical strategy is to defuse the real potential of academic activism by reductively assigning the virtualities of political struggles of diverse groups to a scalar *a priori*. In such cases, the political work of academics might rightly be viewed by non-academic activists as exploitative, undertaken in order to prop up a theoretical argument incapable of standing on its own.

To illustrate, in the first proper section of his response, Hoefle enlists his 2000 analysis of Brazilian political movements to develop an argument for the political relevance of scalar analytics. Here Hoefle attempts to convince readers of the political relevance of scale by carving up a political context in scalar terms and then asserting its significance:

> A host of global, national, regional, state-level, municipality-level actors interact and struggle over the fate of the Amazon, and the concept of scale is extremely important for understanding what appears to be political chaos. (2006, 238)

This research, however, does not prove the political value of scale but simply exercises the analytics (Hoefle 2006, Figure 1, 239) he brought from Rio to the rainforest. Absent of any analysis, and without having engaged our conceptualization of the site, Hoefle instead offers an abrupt announcement that 'it is hard to see how the concept of a site would do justice to the complexity of Amazonian politics' and that 'the concept of the site is politically conservative' (2006, 240).

In contrast, we maintain quite simply that the flat ontology is *deeply* concerned with questions of politics, and that assuming that power only flows through a logic of scale, taken as a given from the outset (whether it looks like this ↕ or this ↔, etc.), restricts rather than enhances its analysis. We advance a site ontology specifically to address politics, calling it an approach that:

> allows us to avoid falling into the trap of naïve voluntarism by embedding individuals within *milieux* of force relations unfolding within the context of orders that constrict and practices that normativize. (Marston *et al.* 2005, 424)

Reading closely

Our review of the literature in 'Human Geography without Scale' was organized to illustrate the increasingly complex character of scale theorizing over the past 20 years. Given the brevity of our review, it is not surprising that some of the participants in the scale debates would take exception to one or another aspect of our analysis. Among these respondents, it is Jonas and Leitner and Miller who most challenge our characterization of the scale literature. Jonas is concerned that we have unfairly presented scale as a choice between two poles, the local and the global, without acknowledging the vast amount of literature that addresses what goes on in the complicated middle ranges of scale (urban areas, regions and states), where actors tend to engage institutions and states. On the one hand, we describe at several points in the paper the attention paid to these middle scales, and in fact the overall intent of the section 'Complexifying scale' is to acknowledge progress in dismantling the rigidities first elaborated in Peter Taylor's three-level model (1982) on the production of scale. On the other hand, as Jonas notes, we do focus considerable attention on the binaries associated with the local and the global, and in various passages it might appear that scale pivots on that polarity. Our numerous references to the local-global model are not, however, based on a

reductive reading of scale, but rather a consideration of its 'limit concept'. As formulated in the literature, the local and the global do not exclude levels within a continuum, but rather enable a variety of *relative* differences in power, flexibility and mobility constituting the in-between of any given set of scalar levels. We acknowledge this complexity throughout the paper, but what is of importance to us is not how many levels or how complex their intersection, but the various binarizations associated with its endpoints (e.g. cosmopolitan-parochial, objective-subjective, masculine-feminine), which we find unnecessarily constrictive.

 For their part, Leitner and Miller claim that we neglected a large body of empirical literature that elaborates the scales at which agency is operative. They contextualize their criticism in terms of the disciplinary impact of the agency versus structure debates in geography. Leitner and Miller are correct in pointing out that there are several parts of our paper where we claim that the scalar imaginary pits local actors against broad-scale economic forces. The following example from our paper is especially apposite:

> hierarchical scale (de)limits practical agency as a necessary outcome of its organization. For once hierarchies are assumed, agency and its 'others' – whether the structural imperatives of accumulation theory or the more dynamic and open ended sets of relations associated with transnationalism and globalization – are assigned a spatial register in the scaffold imaginary. Invariably, social practice takes a lower rung on the hierarchy, while 'broader forces', such as the juggernaut of globalization, are assigned a greater degree of social and territorial significance. (Marston *et al.* 2005, 427; also see the extended quote from page 421, above)

On Leitner's and Miller's point, we concede that a close reading of the literature will reveal examples of agents who are thought to tap the resources of mid-level scales in opposition to the forces of capitalism (Herod 1991, who we cite, is, as Leitner and Miller note, a case in point). Nonetheless, there is also a great deal of evidence in support of our reading of the literature, so much so that it barely requires supportive citation these days. For example, consider this relatively recent assessment by Gibson-Graham:

> We are all familiar with the denigration of the local as small and relatively powerless, defined and confined by the global: the global is a force, the local is its field of play; the global is penetrating, the local penetrated and transformed. Globalism is synonymous with abstract

space, the frictionless movement of money and commodities, the expansiveness and inventiveness of capitalism and the market. But its Other, localism, is coded as place, community, defensiveness, bounded identity, *in situ* labor, noncapitalism, the traditional. (2002, 27)

Finally, while our review of nearly 25 years of scale theory in a few pages may have produced some synoptic gloss, our commentators had a much smaller text to work with. Hence it is unfortunate to see some of their textual infidelities, as in: (a) Leitner's and Miller's equation of our flat ontology with agency, a hangover from *their* local-global binarism (2007, 118); their unexplained conflation of our ontology with that of Latour's, after which their response to *his* is presented without explanation as a response to *ours* (2007, 121); and their use, as 'evidence' against our 2005 paper, of a string of citations to unavailable book chapters from a single forthcoming volume:

> the recent scholarly literature on imaginaries and practices of progressive social movements challenging neoliberal globalization suggests that erasing scale and structure as theoretical notions in geographical inquiry is problematic and unproductive (Bond & McInnes 2007; Leitner *et al.* 2007a, c; Mair 2007; Miller 2007; Oldfield & Stokke 2007; Sites 2007; Wainwright 2007). (Leitner and Miller 2007, 121)

(b) Jonas's adaptation of an unpublished 2000 commentary, wherein he cites a six-year-old paper by Marston (2000), who was critical of scale theorists' failure to address social reproduction, and interrogates it on the critical ground and perspective of Marston *et al.* (2005), as if the arguments were or even need be the same (Jonas 2006, 401); and (c) Chris Collinge's attempt to conduct a deconstructive reading of Neil Smith's contributions to socio-spatial theory, which is problematically approached as if: (i) the author's intentions were immune to conceptual re-positionings, and (ii) the texts needed to form a singular and coherent *oeuvre*; and (d) Hoefle's claim that we rely 'too heavily' on Derrida (Hoefle 2006, 238), whom we never cite and mention only in passing, by way of an adjective (2005, 423).

Thinking Latour and Derrida with Collinge

While we take issue with Collinge (2006) on certain points, we nevertheless find his to be a generally encouraging response to our effort to articulate a human geography without scale. By turns, he blends an analysis of the two trajectories of our argument – a critique of the scale concept and the

creation of a flat ontology devoid of scale – with two alternate strands, presented as divergent routes that our paper might have taken.

Responding to our flat ontology, Collinge proposes that a turn to Latour and Actor Network Theory (ANT) provides a different approach to exploring terrains beyond scale, even though he affirms our use of Deleuze's distinction between the actual and the virtual to avoid that 'deadpan sense of happen-stance' (Collinge 2006, 250) one sometimes finds in ANT. While page constraints prevented us from providing a comparative analysis of the differences between Latour's and our position, Collinge's commentary enables us a brief excursion here. He highlights three crucial distinctions: (a) Latour neutrally includes both humans and non-humans in his notion of the network, whereas Schatzki (2002) – the central inspiration for our turn to site ontol-ogy – includes both, but privileges the human; (b) Latour's ANT offers a more politically efficacious and indeed potentially radical account of social life; and (c) the spatialities of our project are unneces-sarily restrictive, precluding the interrogation of scale altogether, a move that Collinge argues against, alternately through Latour and Derrida.

With regard to the first distinction, it is important to note that, while Schatzki does indeed develop his social site through human-centred contextuali-zation, this portion of the theory is *not* something that we take up in the paper. On the contrary, our descriptions of the site are predicated on avoiding privilegings and other *a priori* distinctions between the human and the non-human. We further opt to forego entirely the compulsion to frame spatialities in the yet-still-privileged terms of humans and their negations (distributing 'agency' to other objects only serves to spread the liberalist philosophy more, well, liberally); for this reason, we chose instead the generic term 'bodies' to register the material contents of the site. The Spinozism that lurks behind this terminology is intended: the various ways that bodies assemble and move, affect and are affected together are enormously important for discussing both the constitution of a site and how it might cohere and maintain itself (Spinoza 2000).

Our response to Collinge's second point is related to the issue of the non-human, for it is the Latourian tendency to include the non-human as agents in networks that Collinge affirms to be 'more radical' than those who, like Schatzki, centre the human (Collinge 2006, 250). While we agree with his inclination to opt for the more radical in a series of choices, it is not entirely clear to us that Latour's work can be held up as the exemplar of radical theorizing. For example, in reviewing a number of Latour's recent works, Wainwright noted the tendency for Latour's politics to be lamely bourgeois:

> It's nice to imagine, as Latour beckons, 'that a [wine] cellar in Burgundy invites you to a wine tasting,' but what does this have to do with political struggles? Latour never deigns to apply his approach to a complex historical-political situation. (Wainwright 2005, 119)

In the third point Collinge makes clear that he considers Latour's picture of the network to be more spatially inclusive than our own. Collinge notes that Latour's project is designed to be completely inclusive, open to explorations of scales as well as sites. Yet we note that the scalar imaginary is not simply the most pervasive of spatial imaginaries, but that it has become so normativized and centralized as to make it impossible to think space without it (note the tone of inevitability adopted by some of the other commentators). While the thought of alternative spatialities (*qua* the creation of concepts, following Deleuze and Guattari 1994) is indeed appealing to us, it is necessary to make room for them as they are encountered. Considering the size of the ground that the scalar theorists have crowned, such a proposal seems impossible.

And finally, why not turn to Derrida after all and take up Collinge's very interesting point that:

> the problems with scale analysis go well beyond simple error and express a wider tendency, a wider logocentrism or metaphysics of presence within the language of human geography. (Collinge 2007, 250)

On these grounds, Collinge suggests that we *need* scale – more or less to be the negative moment, the trace, in the production of the site. An alternative to this interesting suggestion is to do something we never attempted in our paper: *deconstruct* scale.

In his analysis of the metaphysics of presence, which he directed to such terms as 'God' and 'Man', Derrida pointed to the problematic 'structurality of structure' (1972, 248), by which he meant to signal the contradictory openness of a structure that closes off the very 'freeplay' that structure itself makes possible (see also Foucault 1994, on the ana-lytic of finitude). Had we taken up the metaphysics of scale, then we might have indicted the 'global' as the transcendental spatial signifier – the mother (Genesis) of all signifiers? – producing the very

possibility of scalar thinking (see Tagg 1997). We could then see the global operating as a constant presence, an essence, a substance, a subject, a logos that, as with all centres, organizes its attendant structure (scales from it to the local), while *limiting* (by conceptually and politically fixing space) and *enabling* (through scalar structurations, glocalizations, scale bendings, etc.) freeplay. Hence we reach a paradox: the global is both the 'origin' of scalar complexity and the barrier to thinking (spatially) outside of the binary. As Derrida put it in a different but parallel context:

> The concept of centered structure is in fact the concept of a freeplay based on a fundamental ground, a freeplay which is constituted upon a fundamental immobility and a reassuring certitude, which is itself beyond the reach of the freeplay. (Derrida 1972, 248)

In the absence of the structuring centre of the global and the resultant scalar hierarchy, might not this constrained freeplay be set *loose* to become the real 'messiness' of space (also see Marston *et al.* 2007)?

Thinking Deleuze and DeLanda with Escobar

Escobar's (2007) response expresses multiple affinities with our paper and advances questions that invite further refinements of its ontological argument. He situates our paper within a small-but-growing number of social theorists – Manuel DeLanda and Tizianna Terronova among them – who are developing an 'ontological turn' characterized by 'flat' theorizing. We are flattered to find ourselves in such good company and appreciate his overall affirmation of our project:

> It follows that processes of localization should not be seen as the imprint of the global on the local, but *as the actualization of a particular connective process, out of a field of virtuality*. Indeed, what exists is always a manifold of interacting sites that emerge within unfolding event-relations that include, of course, relations of force from inside and outside the site. This site approach is of relevance to ethnography and anthropology as much as it is to geography. It provides an alternative to established, state-centric, capitalocentric and globalcentric thinking, with their emphasis on 'larger forces', hierarchies, determination and rigid structures. (Escobar 2007, 109; emphasis in original)

Given Escobar's central concerns for politics and complex organization (2004), we also appreciate his recognition that: 'Flat alternatives make visible design principles based on open architectures allowing for interconnection of autonomous networks, and the potential for expansive inter-networking enabled by decentralization, resilience and autonomy' (Escobar 2007, 111).

Yet while Escobar is enthusiastic about the shifts that emerge within our flat ontology, he retains some reservations about our project:

> What is most exciting about the argument for me is that it is part and parcel of what seems a growing, and daring, attempt at looking at social theory in an altogether different way – what could broadly be termed 'flat alternatives'. The language itself is indicative of this aim: flat versus hierarchical, horizontality versus verticality, self-organization versus structuration, emergence versus transcendence, attention to ontology as opposed to epistemology, and so forth. Whether all of this amounts to a complete overhaul of the notion of scale, I think, remains an open question. (Escobar 2007, 106)

This open question is based most centrally within DeLanda's recent use of scalar thinking in developing a theory of assemblages (2006), and at the end of his commentary, Escobar leaves us with three key inquiries. In what follows we examine the implications of each of these questions.

> Does [the flat ontology] entail human/natural geographies without scale, or does it necessarily lead to a conceptualization of human geography which has no longer any use for 'scale'? (Escobar 2007, 111)

As our discussion of Jonas noted earlier, one of the critical lines running through both our paper and the commentaries has been the too frequent indiscernibility of scale as an object *in the world* and/or as an analytic *tool* used for describing it. Echoing this, Escobar asks whether we propose an ontological-material rejection of scale (i.e. asserting that it does not exist in the context of the actual geographies around us) or merely a methodologico-epistemological evacuation of the concept (i.e. calling for the termination of its analytic employment within the discipline). We answer both of Escobar's framings in the affirmative: the material nonexistence of scale is an ontological implication of the second half of our paper, but, at the same time, the internal critique of the scale concept that opens the paper suggests that retaining it within disciplinary discourse and practice is also epistemologically and politically disabling. Rather than leave an ontological vacuum in the place of these critiques, we went on to construct a dynamic and mutable notion of the site that avoids the taxonomic and static pitfalls characteristic of scalar worldviews.

That effort required, in part, a critical and selective incorporation of DeLanda, who had early on employed certain modes of scalar thinking as a means for describing the co-constitutive workings of micro- and macro-processes (DeLanda 1997). Escobar reiterates DeLanda's (2006) contention that his ontology is capable of combining flat approaches with a 'significantly transformed' notion of scale (Escobar 2007, 111). Not surprisingly, this ontology has a great number of resonances with our own, as DeLanda and his primary influence, Deleuze, played key roles in the articulation of our flat ontology. Importantly, while DeLanda is resolute about the inclusion of scale within his own system, he is also at pains to avoid the apparent simplicity that comes with scalar configurations 'resembling a Russian doll or a set of Chinese boxes' (Delanda 2006, 33). He analyses the relations between assemblages – wholes whose properties emerge from the interactions between parts (Escobar 2007, 107) – and scales as a system in which micro assemblages aggregate and create affective resonances in such a way as to constitute larger, macro assemblages, which in turn then push back, affecting their own smaller, constitutive assemblages. In this way, he suggests, many local practices and residences go on to form neighbourhoods, many neighbourhood stabilizations and activities will go on to form cities, and so on. But, in addition to these 'bottom-up' processes, larger aggregates mobilize their own scale-proper processes that have systemic effects upon the smaller assemblages. Given the double movement of these specific connectivities, Escobar asks, 'Does [DeLanda's notion of social assemblages] avoid the ontological verticality of established views of scale' (Escobar 2007, 111)?

In addition to the more obvious instances of hierarchical discourse that frequently arise within DeLanda's text, we find that his consistent employment of scalar imaginaries at best risks reductivism and at worst imports a power-laden system that privileges certain socio-spatial aggregations over others. Part of our critique of scale turns upon the ways that geographers frequently import – sometimes even in spite of themselves – imaginaries of verticality that organize discussions of power according to structured difference, where specific sorting mechanisms/concepts are deployed in order to *select out* certain aggregated relations, bodies or movement. DeLanda's frequent and deliberate use of scale as a tool for articulating the fundamental processes of assemblage theory represents an attempt

to illustrate the contributions of 'micro' parts to the emergence of 'macro' entities (e.g. cities or markets), such that those parts encumber the effects of new organizations in terms of size, force, movement and duration (DeLanda 2006, 34). He explains:

> The identity of any assemblage at any level of scale is always the product of a process (territorialization and, in some cases, coding) and it is always precarious, since other processes (deterritorialization and decoding) can destabilize it. For this reason, the ontological status of assemblages, large and small, is always that of unique, singular individuals. (2006, 28)

While we affirm, with Escobar, aspects of DeLanda's development of assemblage theory for presenting 'an alternative to the organic or structural totalities postulated by classical social science' (Escobar 2007, 107), we find that his invocation of scale short-circuits the productivities that could surface in such anti-essentialist and singularizing thought. So while DeLanda is clearly at pains to avoid conceptualizing successive layers of scale – *the* neighbourhood, *the* city – they continuously resurface as transparent and critically preemptive objects, cemented into a ranking of appropriate processes relative to equally cemented neighbours (thus the city becomes sandwiched between the neighbourhood and the nation). This formulation enables DeLanda's readers to imagine aggregates of larger or smaller size, but only at the cost of taking their production in space for granted. What is more, it provides a picture of the world wherein nothing really looks all that different; though we take a different route, at the end, the same spatio-conceptual objects remain. The problem is not simply that, for DeLanda, scale is treated as a hierarchical given, but that, throughout his analysis, the classic analytical objects of scale – those imaginary puzzle pieces that combine to form a picture of scalar hierarchy – retain their critical hegemony.

> Do 'embedded assemblages' [DeLanda] amount to a manifold (Marston *et al.*), whether with emergent and adaptive properties or not? (Escobar 2007, 111)

Despite the fact that he retains a scalar conceptualization, we still see connections between DeLanda's notion of assemblages and our own reading of manifolds. Indeed, some of these connections have already been articulated by DeLanda. Put most plainly, we can configure a relation between the two when oriented by the Deleuzean axis of the actual and the virtual (DeLanda 2002). In DeLanda's

account (2006), assemblages tend to look like actualities that take their own 'scales' for granted (scale looks in DeLanda like the 'there' where the assemblage often happens). Ideally, each assemblage should operate according to its own emergent 'diagrams' of power relations (that is, its *tendencies* toward certain force relations and organizations conditioned by its own situatedness). As we understand them, manifolds consist of the dynamism of force relations expressed potentially or virtually in the articulation of the emerging site. They are the potential upon which a diagram traces a trajectory or maps a set on interrelating, inter-affective forces. At issue, then, is a distinction between the assemblage and the site, rather than the assemblage and the manifold.

DeLanda distinguishes himself from Deleuze, explaining:

> Because Deleuze does not subscribe to the multiscale social ontology that I am elaborating here, he never says that each of these entities (interpersonal networks, institutional organizations, cities, etc.) have their own diagram. On the contrary, he asserts that the diagram 'is coextensive with the social field'. (DeLanda 2006, 126)

But here, the diagrams emerge almost invariably out of the banal, classically scalar objects that we have been describing above, leaving us in a position where we have a new term (assemblage) with which to talk about cities, but a similar analytic (diagrammatic 'tendencies') with which to say that the city does what we always thought it did (think central place theory, for instance). By contrast, our account of the virtuality of sites *makes that which goes into their constitution* determinant with respect to their diagrammatics. Thus, the virtual communicates with its site situatedness: the site ontology thereby avoids imposing precontextualized social spaces (scales) on emergent diagrams. Hence, we propose *n* diagrams, a virtually infinite number with which to speak to the specific variations and differences unfolding in the equally specific and singular site.

> What happens to the logic of control, to minoritarian logics, to the enabling and open-ended character of dispersed network formations dreamt up by some contemporary movements if gains cannot be thought about in terms of scalar effects? (Escobar 2007, 111)

A Newtonian worldview continually haunts the calculus of mobilization and resistance. At its most basic, this resolves itself in size fetishism, where global capitalism and imperialism can only be combatted by entities operating at a similar scale. This leaves those who are constrained by various 'militant particularisms' (Harvey 1996), or who are too under-resourced or disorganized to 'scale jump' (Smith 1992), on the bench when it comes to the zero-sum game of global resistance. More recently, this view has been articulated through force relations, mobility and access in an equally large-but-more-inclusive confrontation between global Empire and the Multitude it constitutes (Hardt and Negri 2000, 2004).

Geographers have recently made positive inroads to modifying these conceptualizations in the context of various global anti-globalization and anti-capitalist movements (Glassman 2002; Wainwright and Ortiz 2006). From the perspective of the activist, an incorporative, both/and strategy has emerged as an attempt to tackle aggregations of power at multiple scales:

> Much debate goes on in the movement about whether to focus our efforts globally or locally. We need to do both. The global institutions can most effectively be countered on a global scale, with international coordination and solidarity. But on a local scale, alternatives are much easier to implement. By their very nature, the alternatives that lead to a restorative economic democracy will be small-scale and rooted in community. (Starhawk 2002, 259)

With regard to this type of political interrogation, we find DeLanda to be at his weakest. While we are inclined to disagree with much of the reliance on scalar thought that goes into conceiving strategies for social change, we are even less inclined to agree with DeLanda's conceptualization of social change, divorced as it is from the politics that drive such changes. Although there have been numerous advances in thinking about the complexities of social movements at the end of the twentieth century (Graeber 2002, 2004), DeLanda nevertheless exhumes resource mobilization theory (2006, 42) as the proper entry point for considering social movements in the context of an assemblage theory that takes the participants in an aggregate as being relatively interchangeable (p. 37). In the final tally, this is the worst kind of scalar-centrism, an analytic that makes scale the final measure of possibility for any social change and ultimately reduces all of the various dynamisms – trans-cultural and trans-continental affinities and solidarities – to a bottom line.

As an addendum to his third question, Escobar asks of our project,

Is every politics of scale not reduced to the conjunctural integrals of dispersed power if seen in terms of a notion of horizontality and mobility, even when 'conceived as both open and multi-directionally and unfolding non-linearly' (Marston *et al.* 2005, 26)? (Escobar 2007, 111)

And yes, the dispersion of power *has* been the critical question for a number of years – both within and without the academy. It is no surprise that, in the absence of scale, Escobar would ask us about the seams on which certain lines of power begin to tear. Frankly, we find it easier to imagine these conjunctures as following along and redrawing the boundaries of dynamic sites defined by Deleuzean difference than as traversing space through structurated scales, no matter how complex. And as our site-specificity would suggest, we register affinities with the approaches taken by contemporary social movements generating strange attractors and even stranger aggregations of any number of different, minor political groups (such as multiplicities of affinity groups) that, in the style of *zapatismo*, work from developing solidarities with various minoritarian political groups with the intent of producing mobile, mutable aggregates.

Conclusion

If you got this far you must really love scale (or love talking about it). We close ever so briefly by gratefully acknowledging the commentators on our paper: Chris Collinge, Arturo Escobar, Scott William Hoefle, Andrew Jonas, Helga Leitner and Byron Miller. The amount of effort required to write such detailed and thoughtful critiques explains why such exchanges are so rare. We also extend special thanks to Adam Tickell for providing the space for this interchange to occur.

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