Afterword

Transcending Scale?

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The acceleration of market-driven globalization and technological change since the 1990s has forcefully shaken received notions of how the geopolitical world is geographically constituted, conceived, and experienced. Various flows, interactions, and networks that compose the world as unevenly structured, yet interwoven, seem to predominate over a more territorially based world order. Relationally oriented research has followed the pace of this development, and some scholars have gone as far as to declare that the very idea of territorial space as an ontological category is now obsolete, together with the idea of scalar structuration of the geopolitical world (e.g., Amin 2002; Marston et al. 2005; Escobar 2007).

At the same time, as Herb points out in chapter 1 of this volume, ongoing identity politics in various parts of the world provide clear evidence of the persistence of territorial discourses and attachments as popular realities that can be mobilized especially in times of crisis (Nogué and Willibrand 2010; Stead 2015). Territory and scale also seem to be deeply rooted in various institutional practices, such as national accounting. Despite the ever-deepening geoeconomic interconnectedness across the globe, it is the economic performance of individual countries that serves as a key measurement of recovery after the 2008 global financial crisis (e.g., Moshirian 2008; Bleys 2012). Moreover, many of the over seventy ongoing geopolitical conflicts and crises in Africa, Asia, and the Pacific region, but also in Europe and the Americas, involve territorial and boundary disputes, attesting to the continued relevance of the

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blunt geographies of controlling volumetric space (CrisisWatch 2016).

Little surprise, then, that one of the most vibrant theoretical and methodological debates in human geography of the past decade has revolved around the concept of scale. From early on, scale seemed to provide the discipline with a powerful tool for grasping the nature of several major changes ongoing in the contemporary "glocalizing" and transnationalizing societies (Swyngedouw 1997; Mitchell 2003). Moreover, as Kaplan shows in chapter 2 of this volume, scale has been recognized as a key attribute in how political identities relate with territoriality (see also Kaplan and Herb 2011). On top of figuring as the discipline's new anchor to political relevance, the concept of scale served as a nodal point for interactions across geographical subdisciplines, and with other branches of social theory and humanities, such as urban studies, international relations research, cultural studies, political science, environmental studies, sociology, and economics (e.g., Gibson et al. 2000). Suddenly the guestion of scalar structuration was found to be present explicitly, implicitly, or as a pretheoretical notion in a vast array or social science scholarship tackling issues framed as micro, macro, proximate, distant, local, urban, territorial, national, transnational, and so on. Because of its role as a connective keyword and a term that resonated strongly in existing scholarship, it seemed for a while that most novel discussions in human geography have something to do with scale (e.g., Agnew 1993; Delaney and Leitner 1997; Jones 1998; Cox 1998; MacLeod and Goodwin 1999; Brenner 2001; Peck 2002; Sheppard 2002; Herb 2004; Paasi 2004; Gough 2004; Sadler and Fagan 2004).

Several comprehensive accounts have been written on the development of scale debate in human geography and related disciplines (e.g., Marston 2000; Howitt 2003; Marston et al. 2005; Moore 2008). Hence, in this context it is sufficient to note that in human geography theoretical contestation on the methodological import of scale was largely set in motion by Peter Taylor's (1982) and Neil Smith's (1984) seminal texts basically arguing that scales are socially constructed and that there is an unresolved (geo)politics involved. During the 1990s, the rapidly expanding

discussion moved to propose competing theoretical accounts concerning the nature of scales as social constructs ranging from an idea or metaphor functioning as an epistemological ordering frame (e.g., Jones 1998) to the more materially embedded question of reach in strategic networking (e.g., Brenner 2001). Much attention was paid to the different ways in which scales are constructed and what social, political, cultural, and economic ramifications these differences entail (e.g., Jonas 1994; Cox 1998; Marston 2000). In a sense, the debate culminated in the provocative article written by Marston, Jones, and Woodward (2005), and the predominantly critical responses published in three issues of Transactions of the Institute of British Geographers (Collinge 2006; Hoefle 2006; Jonas 2006; Leitner and Miller 2007; Escobar 2007).

In essence, what Marston, Jones, and Woodward (2005) claimed was that the concept of scale is not only an unproductive part of the conceptual repertoire of human geography but also a harmful one. This is so, they argued, because scalar thinking misleads geographical imagination by imposing mistaken "vertical" and "horizontal" hierarchies to socio-spatial relations where there ontologically are none. What results, they contended, is a tendency in human geography to essentialize the geopolitical world either in terms of a vertical continuum from local to global, or as a horizontal radiation from origin (out from here) to edge (Marston et al. 2005, 422). Instead of operating with a vocabulary that seems to predetermine how the (geopolitical) world is constituted, they suggested that human geography analysis would do well to discard the concept of scale altogether, and to view the social world as "ontologically flat." In practice, this meant the appreciation of spatial relations as complex and emergent. In a flat world, social and material entities are seen as assembled in ways that cannot be captured by scalar geometries but, rather, they are composed and decomposed relationally as emergent events (often temporary and mobile) unfolding in "sites" (Marston et al. 2005, 423).

Among scholars holding that scale is and will be an important tool for making sense of various cultural, economic, and political processes, the broad and profound

argument by Marston et al. (2005) was met with astonishment, doubt, and downright irritation (e.g., Jonas 2006; Leitner and Miller 2007). While sympathetic to some aspects of flat ontology, especially its potential in informing progressive politics, the critical commentaries generally maintained that the more than twenty years of scholarship on geographical scale retains its relevance (Collinge 2006; Hoefle 2006; Escobar 2007). In responding to the criticism, Jones, Woodward, and Marston (2007) insisted on a fundamental division between the traditional dialectical theory building and its post-structuralist alternative, and willingly positioned themselves to the "other side" defined by non-dialectical theorization of space. Hence, for some time the debate on the relevance of scale in human geography was in a methodological deadlock where the apparent remaining options were either to discard the notion of scale altogether, or to disregard the argument concerning the relevance of "flat ontology."

BEYOND THE SCALE BY MEANS OF SCALAR THOUGHT

Arguably, the difficulty of reaching a truce in the scale debate was largely based on a juxtaposition suggesting that, as a way of making sense of how the social world is actually composed, the relational spatiality of "flat ontology" is an exclusive alternative to other (topographic, territorial) understandings of spatiality. While recognizing that the critiques of scalar thought have been helpful in stirring a lively debate, several scholars came to argue that the juxtaposition was methodologically unfertile (e.g., Leitner et al. 2008; Neumann 2009). As an intellectual response to the theoretical impasse, they proposed scholarship that would seek to move beyond a simple contradiction between territorial and relational approaches to geopolitical change. There are various intentions and motivations for bringing together topological and topographical, or relational and territorial approaches in human geography. For example, Jessop et al. (2008) have introduced a methodological TPSN (territory, place, scale, network) framework to move beyond what they call one-dimensionalism in the analysis of socio-spatial relations and processes, and to focus attention to their interconnections and mutual constitution. Their goal is to thus "generate more

precise, substantial, and substantive analyses of some of the 'big questions' within geographical political economy" (Jessop et al. 2008, 397). In this, they echo one of the early moves in this direction by authors such as John Agnew (1993, 264) who talks about "'topological' space in which diverse scales are brought together," or Eric Sheppard (2002) who saw "positionality" as an important analytical window that combines geographical situatedness with topological connectivity.

In a much similar vein, Leitner et al. (2008, 158) seek a way out of "a strong tendency to privilege a particular spatiality—only to abandon that in favour of another" (see also Häkli 2008). Their intention is to show that in the analysis of contentious politics it is necessary to pay attention not only to the co-presence of particular spatialities but also their "co-implication . . . [that is] how they shape one another." Here their primary motivation is to grasp the ways in which participants in contentious politics creatively cobble "together different spatial imaginaries and strategies on the fly," rather than contribute to philosophical debates (Leitner et al. 2008, 158).

With somewhat different emphasis, Jones (2009) takes up the methodological challenge of dealing analytically with multiple spatialities and argues that, while empowering for geographical imagination, relational perspectives run the risk of overlooking factors that constrain and structure space. Hence, he contends, "relational approaches to space [...] should not be seen standing in opposition to territories" (Jones 2009, 493–94). As an alternative to one-dimensional relationism, he proposes the idea of "phase space" as a conceptual entry point for "tracing the polymorphic organization of sociospatial relations" as expressed in Jessop et al. (2008) and Leitner et al. (2008). Allen (2011) goes further along the way of adopting topological vocabularies in analyzing the workings of power in a contemporary "spatially ambiguous world." Yet, he too stresses that it is not useful to "dismiss territorial or network understandings of power in favour of a topological interpretation," precisely because the pertinent approach depends largely on the questions asked (Allen 2011, 294–95; see also Häkli and Kallio 2014; Kallio and Häkli 2017).

Even with their different overtones, these approaches share criticism toward an overemphasis of scalar vocabularies in the analysis of how the geopolitical world is structured, yet none is willing to go as far as to simply reject the concept of scale tout court. It may be useful to view this growing circumspection as a response and corrective to the dominant position that scale took in the early 1990s as the beacon of political geography's theoretical projects. In fact, it now seems evident that scholarly attempts to reconcile the contradiction between topological and scalar thought, by showing these as complementary spatialities rather than alternative ontological positions, actually signaled the steady decline of scale in the vocabulary of prominent theorization in political geography.

Scale has not disappeared from political geography literature, as a quick survey of the latest volumes of Political Geography clearly reveals. In an assessment of 259 articles, editorials, and commentaries published between 2013 and June 2016, it turns out that the term is used in altogether 192 different publications, and thus it seems to occupy a firm position in the analytical repertoire of the subdiscipline. However, what is striking is that scale no longer plays a major role in opening theoretical avenues. Assessment of the context of its usage shows that the term rather serves as a tool for ordering analytical observations, which typically concern the geopolitical world seen as a nested system of levels of action understood in a relatively traditional sense. Scale, it seems, has been somewhat scaled down in terms of theoretical ambition and vigor.

ALIENATING SCALE: THE RISE OF ASSEMBLAGE THINKING

Where, then, do we stand with regard to the prospect of further development of scalar thought in political geography? It is too early to say whether the contemporary decline in its significance as a nexus for theoretical debates is a temporary condition, only to be sparked into a revival in perhaps another form. In the meantime, we should note that variants of post-structuralist thinking, such as "flat ontology," "assemblage thinking," and "new materialism" continue to propose social or sociomaterial

ontologies that allow little role to the idea of scale. Inspired by or directly deriving from philosophies of immanence and actor network theory, their key message is that scalar structuration makes no sense in a world constituted by emergent assemblages that are shaped by the interactions of their constituent parts, which at once partake in several relatively open-ended assemblages (Latour 2005). Networks, relations, and distribution, rather than territory and scale, seem key metaphors in understanding how events unfold and are effected in an ontologically "flat" and completely horizontalized world (e.g., Jones et al. 2007; Anderson and McFarlane 2011; Coward 2012).

At stake in the rise of assemblage thinking is more than just a novel theoretical toolbox set to unravel the complexities of the geopolitical world. What the approach is proposing instead is a new ontology that entails fundamental shifts in understanding reality in a post-structuralist, materialist, and post-humanist vein. Simply put, the proponents of assemblage thinking view the (political-geographical) understanding of the "world as we know it" as ontologically false, which then makes most theoretical constructs set to analyze it obsolete, the scale included (see also Joronen and Häkli 2016).

A quote from the seminal work by Deleuze and Guattari (1987), a book that has inspired, influenced, and authorized much of the recent assemblage thinking in human geography, helps in clarifying the nature of this move:

There is no longer a tripartite division between a field of reality (the world) and the field of representation (the book) and the field of subjectivity (the author). Rather, an assemblage establishes connections between certain multiplicities drawn from each of these orders [. . .]. For the moment, we will note that assemblages have elements (or multiplicities) of several kinds: human, social, and technical machines, organized molar machines; molecular machines with their particles of becoming-inhuman. (Deleuze and Guattari 1987, 23, 36).

The ontology of assemblages and the language that it operates tend to blur precisely

those kinds of entities and distinctions that scalar thinking in political geography has come to depend on. Hence, in a world of multiplicities where human and nonhuman elements form endlessly overlapping, emerging, and mutually constituting networks of conjoint action, all distinctions between microscales and macroscales dissolve. Moreover, the idea of politics is detached from human intentionality and reflexivity because

[e]very statement is the product of a machinic assemblage, in other words, of collective agents of enunciation (take "collective agents" to mean not peoples or societies but multiplicities). (Deleuze and Guattari 1987, 37)

The contemporary variants of "flat ontology" or "assemblage thinking" have informed a wide scholarship ranging from environmental geography and political ecology to urban studies to critical geopolitics and beyond (e.g., Bingham 2006; Braun 2008; Roberts 2012; Dittmer 2014; Latta 2014). Attention to material and nonhuman (or more-than-human) realities in connection with social systems and emergent processes has been one of the stimulating outcomes of this work, together with the critical questioning of received notions and understandings of causality in large-scale socio-technical emergencies, such as the 2003 North American blackout (e.g., Bennett 2005). However, when it comes to the analysis of scalar politics, the adoption of poststructuralist ontologies has profound consequences. One methodological challenge, from which several more specific questions arise, is related to the ontologizing move itself, which, by definition, performs a fundamental alienation to the "world as we know it." What this means in practical terms is that with a new ontology, established scientific vocabularies, ideas, and theoretical propositions become defunct and must be replaced by a new language better able to capture how the reality is actually constituted. This is precisely the point that Marston et al. (2005) sought to make when launching their critique of scalar thinking.

The annihilating style of argumentation that follows the proposition of novel ontologies often materializes in a tendency to discuss events and phenomena in the

register of "is not," rather than grasping what the ontological conditions "are" in each case. Take, for example, the short discussion on the ontology of objects in Meehan et al. (2013). In the space of just two paragraphs mapping out the ontological contours of the proposed object orientation, they come to characterize "the object" as "not a passive clump," "not inherently reducible," "not the sum total of its effects," "not limited to crude materiality," and belonging to "not a world that first exists.". Moreover, they point out that "our knowledge of things is not 'ontic'" and that the point is "not to adjudicate on the supposed reality of an object" (Meehan et al. 2013, 3). Beyond the register of negativity in world descriptions, asserting a new ontology requires that, to be consistent, argumentation cannot take the more conventional understandings of reality as its point of reference even for analytical purposes. To do so would compromise the new ontology's claim to reality's ultimate "flatness" or "assembledness." This is a challenge of such magnitude that few authors employing flat ontology or assemblage thinking succeed in being consistent with how they construe analytical propositions. Herein lies the dilemma: As the claim to novelty of an ontologizing approach lies in proposing an alternative understanding of reality (as "flat" or "assembled"), coupled with the employment of language and vocabulary fit to discuss reality thus understood, in principle this position cannot be compromised. Otherwise the claim to novelty would lose its purchase as a "theory of everything" (Lynch 2013, 453). Yet, to fulfill the promise of progressive analytical power of the ontologizing move, authors are often tempted to showcase their analytical propositions by means of examples firmly embedded in the conventional understanding of reality—the "world as we know it."

Hence, what often results is an oscillation, either uncontrolled or strategic, between analytical propositions embedded in the asserted new ontology, and conventional descriptions of phenomena that are not consistent with it. This oscillation is ultimately a back-and-forth between an alternative understanding of reality that by definition cannot be suspended (ontological style of argumentation), and alternative interpretations of reality that depend on a shared point of reference in the "world as we know it" (epistemic argumentation) (Barnett 2008; Aspers 2015). Without

the latter, it is difficult to communicate what is novel in the analytical propositions made, yet the move relativizes the proposed new ontology that thus remains "parasitic" to conventional understandings of reality (Joronen and Häkli 2016).

An example, related to the manner in which "assemblage thinking" not only suggests a transcendence but the very obliteration of scale, should help clarify the rather abstract discussion above. In a recent attempt to bring assemblage thinking to bear in geopolitics, Jason Dittmer (2014, 388–89) first carefully outlines a new way of understanding geopolitical agency:

A posthuman geopolitics rooted in assemblage theory enables agency to be located in animals [...], objects [...], and environments [...]. Of crucial importance to this move is that it entails no determinism at all (p. 388). [Hence] it can be difficult to make sense of the myriad interactions that produce [assemblages], especially given the differences in scale and temporality that characterize the various components and interactions [of the] open systems that are always in flux, with components adding in or dropping out over time. (p. 396)

Given how messy the world is when understood as a multitude of complex assemblages, it is perhaps understandable that many of Dittmer's illustrations of the geopolitical pertinence of this approach resort to rather familiar entities, conceivable as part of a territorial world with scalar structures, such as Yugoslavia, Iraq, the Somali state, and the Soviet Union. Yet, even for a sympathetic reader it is very difficult to keep thinking about these entities as part of our reality, while simultaneously imagining that ultimately everything is ontologically composed of open-ended and fluctuating assemblages bundling human, nonhuman, and material elements around "attractors" bound to dissolve before "reterritorializing around a new attractor" (Dittmer 2014, 393).

Another case in point is a recent study that analyzes the humanitarian treatment of belongings that migrants have left behind when crossing the Sonoran desert (Squire 2014). The article sets out to challenge the categorical division between humans and nonhumans and instead proposes that these form the two ends of a continuum, in which neither ever exists in a pure form. Hence, leaning on Karen Barad's (2003)

thought she proposes that the distinction between human (subjects) and nonhuman (objects) is but an artificial "cut" that, when performed, turns the category of "the human" into "a political stake in contemporary struggles over migration and mobility" (Squire 2014, 12). By exploring the ways in which humanitarian activists engage with the discarded belongings of migrants through artistic interventions, attempting to emphasize the humanity of migrants, the article argues against such "naïve humanism" precisely on the grounds that to assume that "the human" is a relevant category in understanding the social world is ontologically false. Instead of humans preexisting ontologically, people, places, and things are "co-constituted through intra-acting physical and social forces"—a position that also fits uncomfortably with the idea of scalar structuration (Squire 2014, 18).

Yet, while "the human" as a stake in political struggles is a stimulating idea, especially in the context of irregular migration, it is less clear how far Squire is able to hold onto the ontological position she adopts. Indeed, if ontologically speaking there is no such thing as the "human" as anything pure or preexisting, how should we understand expressions like "the scholar Jason De Leon," or "the humanitarian activists," or "migrants in Nogales are people," or a "man who refused simply to take the pair of socks that I offered to him" (Squire 2014, 19)? The argument gets confusing and it is difficult to follow reasoning that oscillates between the idea of humans as agents, embodied in entities like scholar, people, activist, and man, and the idea that they all are ultimately "sociophysically" co-constituted with objects and places "through the intra-action of elements that are material/physical as well as social in their formation" (Squire 2014, 12).

By way of concluding it can be said that the consequences of ontological argumentation for the accessibility of political geography scholarship are considerable, and hence it would seem justifiable to expect a solid analytical purchase from these research approaches. However, research with a "new materialist" or "assemblage" orientation often tends to arrive at merely tentative conclusions, or plead for more work to be done to map out the new complex terrain that is just beginning to heave

into view. This, of course, is a standard assertion among works that propose novel theoretical ideas, but it certainly would be more valuable and ambitious to draw out conclusions by showing what precisely is achievable analytically when the world is conceived ontologically anew.

WHITHER GOEST THOU SCALE?

One of the most vibrant theoretical and methodological debates in the human geography of the past twenty years has centered on the concept of scale. The discussion has moved from early argumentation claiming that scales are socially constructed, to competing theoretical accounts concerning the ways in which they are constructed, to attempts to establish a role to scale in methodologies employing multiple spatialities. The latest turn in the discussion has culminated in claims that scale is no longer of any relevance in the conceptual repertoire of human geography.

The ontologically flat assemblage thinking that proposes the transcendence of scale has several origins in philosophies of immanence (Sheppard 2008). A major inspiration has been the deliberately complex philosophical text by Deleuze and Guattari (1987) in which the authors offer their philosophical project to the world as a contribution to an emerging assemblage (ontologically speaking) rather than a theory of the world (epistemologically speaking). As John Phillips (2006) points out, what Deleuze and Guattari do with Thousand Plateaus is partake in the agencement of themselves as authors, their philosophical readership, and ultimately the world at large, all knit together by the rhizomatic connectivities of their critical philosophical project. Seen in this light, their philosophy is a political act in itself, rather than an ontology with which other scholars should seek to mirror the reality. Attempts to do so are, arguably, the category mistake that many scholars have made with regard to Deleuze and Guattari's (1987) philosophical project. Its political efficacy, vested in engaging creative language, has then been compromised by turning a philosophical action into a fixed ontological position viewing the world as an assemblage of assemblages.

Working with and through a new ontology and vocabulary is tricky as one should be able to carry out a double move. The first one is to reject the "world as we know it" for a superior ontological understanding that requires a new language through which it can be accessed. The second move is to refer the insights thus gained back to the world. This move is more difficult than the first one because the new analytical tools that are claimed to improve our understanding of some pertinent aspects of the geopolitical world are truly hard to grasp without resort to "the world as we know it." Yet, as the discussion above has sought to illustrate, its entities do not always inhabit comfortably the landscapes drawn by novel ontological vocabularies.

It may be too early to say whether the intellectual pendulum swinging away from the (excessive) centrality of scalar thinking is already beginning to reach the other tipping point of ontological flatness and its (excessive) dissolution of the world "as a meaningful structure within which we can consciously engage" (Chandler 2013, 533). Nevertheless, it is almost certain that a corrective turn toward a theoretical and methodological revaluation of scalar thought is underway, even though its form and content are yet difficult to discern. In the meanwhile, we should refrain from aspiring for a full transcendence of scale as an analytical concept, not least because as a term it continues to signify, circulate, and effect in the myriad social practices that constitute the geopolitical world. Scale in this sense is performing in the politics of its own becoming, much in the way that Deleuze and Guattari (1987) proposed the concept of assemblage to do as part of their philosophical action.

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