

Neil Smith's Scale

John Paul Jones III

*School of Geography and Development, University of Arizona, Tucson, AZ, USA;
jppjones@email.arizona.edu*

Helga Leitner

Department of Geography, UCLA, Los Angeles, CA, USA

Sallie A. Marston

School of Geography and Development, University of Arizona, Tucson, AZ, USA

Eric Sheppard

Department of Geography, UCLA, Los Angeles, CA, USA

Abstract: In this essay, part of a special issue acknowledging the scholarship of Neil Smith, we trace his contributions to conceptualizing scale. From his important foundational text, *Uneven Development*, to his later works that fashioned a more malleable, constructivist, and socio-cultural approach, Neil Smith made lifelong contributions to our understanding of the processes of scale production—contributions that have forever altered how we understand the relationships among space, capitalism, and politics.

Keywords: Neil Smith, scale, social theory

Introduction

Neil Smith possessed a brilliant analytic mind along with a commitment to theory, writing, and teaching in support of social transformation. Part academic activist, he was known for the encouragement and support he provided to the critical scholars and activists he encountered on his travels. Neil—as we will refer to him here in recognition of his refusal of hierarchical nominations—loved Geography and deeply believed that space was central to revolution. His personality was large: to be with him was to experience the pull of his social gravity. Invariably he was at the center of the conversation, and yet his intellectual generosity prohibited all but perhaps a few the sin of envy. Yes, he transgressed and frustrated, and possessed contradictions and weaknesses, but through his unique combination of intellect, creativity, and enthusiasm, a generation of geographers knew no equal.

These talents—partly given, and partly shaped through life experience, the talents of his mentors, and his hard labor—enabled him to make major contributions to the discipline. He will have lasting influence over studies of uneven development, gentrification, the production of nature, the history of geographic thought, war and empire, and globalization. He also has profoundly revolutionized and shaped scholarly

understandings of space through his conceptualization of scale, a theoretical and political project that spanned two decades and that in no small way led to Geography's popularity among theorists throughout the critical social sciences and humanities.

We also have engaged with scale theory, albeit in ways that variously align and deviate from his—and one another's—writings. For each of us, however, Neil's own path through scale, itself a history of the concept's evolution in Geography, has been foundational. That history can be briefly summarized. Like several other concepts of space, scale was long entangled in Euclidean geographies. It assumed a natural character through its utility as a conventional cartographic metric. But in the late 1970s, space, place, and, shortly thereafter, scale, became caught up in the force fields of relationality, dialectics, and constructivism. Geography has not been the same since.

Scale as Uneven Development

Neil substantively engaged with the question of geographical scale in his 1983 doctoral dissertation at Johns Hopkins University, supervised by David Harvey and subsequently published as *Uneven Development: Nature, Capital, and the Production of Space* (Smith 2008).¹ Yet his first published discussion of scale can be found in his 1982 paper on gentrification and uneven development (Smith 1982), presumably written alongside his dissertation.² There he introduces three scales at which uneven geographical development can be observed: the urban, the regional, and the national.³ At each scale, he argues, specifically capitalist relations connect developed and underdeveloped areas via the spatial movements of capital. These movements have different velocities and concentrations as capital responds to and produces its contradictory landscape of equalization and differentiation (1982:142). Scalar production is one outcome of these processes. Neil takes scales to be largely self-evident in this early piece, although there is a hint, in his discussion of the urban scale (his primary focus therein being gentrification), that scales are produced rather than given: "The urban scale as a distinct spatial scale is defined in practice in terms of the reproduction of labor power and the journey to work" (1982:146).

Uneven Development takes these arguments several steps further, presenting the production of scale as Neil's distinctive contribution to theorizing uneven geographical development. The leitmotif of the book, of course, is how both space and nature are produced rather than given—produced distinctively in capitalism by comparison to other social formations. His discussion of "the production of space" draws on Lefebvre, whose book of that title had yet to be translated into English. The production of nature he sees as an extension to which "Lefebvre may well not have objected" (2008:250).

The culminating chapter of *Uneven Development* is devoted to scale and its production, understanding the origins of which, Neil argues, is necessary to understand the uneven development of capitalism. He chides his mentor for having neglected scale in *Limits to Capital* (Harvey 1982), "resulting in the misleading impression that while a systematic if inherently contradictory logic guides the capitalist production of space, the product does not reflect the organization of the process" (2008:180). Harvey's oversight, Neil argues, results in a treatment of

space as a mosaic of exchange spaces; under capitalism, however, those spaces are organized by processes of abstraction and the development of a world market into a multi-scalar system: “We tend to take for granted the division of the world into some combination of urban, regional, national and international scales, but rarely if ever explain how they came about” (2008:180). Neil’s explanation directly links the production of scale to the unevenness of capitalist development:

I think it is possible to use the dialectic of differentiation and equalization to derive the actual spatial scales produced by capital, and to show that the result of uneven development is simultaneously more complex and [simpler] than a mosaic. There is little doubt about the impossibility of a spatial fix for the internal contradictions of capital, but in the doomed attempt to realize this spatial fix, capital achieves a degree of spatial fixity organized into identifiably separate scales of social activity (2008:180).

Neil places three of these scales at the center of his analysis of capitalist uneven development. The urban scale is one of spatial differentiation, between spaces of production and of reproduction, a conceptualization that he uses to critique Castells (1977) for his neglect of cities as spaces of production. The urban scale is thus simultaneously a labor market and a commuting shed; it is “the daily geographical sphere of abstract labor” (a somewhat contradictory formulation), whose size is an emergent feature of the trade-off between a labor force that is “comparatively limited” (2008:183) and an overextended labor market threatening “fragmentation and disequilibrium in the universalization of abstract labor” (2008:183).

By contrast, the global scale, which is produced through capitalism’s permanent search for new markets but constrained by the “geographical limits of global space” (2008:185), is “purely the product of the tendency toward equalization ... universalizing the law of value” (2008:186). Neil argues that capital, faced with contradictory needs to limit wages and promote consumption:

appears to have emphasized the possibilities for accumulation rather than consumption ... As a result, the geographical differentiation of the globe according to the value of labor power ... is replicated ... in a pronounced international division of labor and systematic differentiation between ... developed and underdeveloped areas (2008:188).

The third scale, the nation-state, is political rather than economic—produced less through capitalism than through its already-existing national political organization and international competition “between different capitals on the world market ... This [competition] leads to a hierarchy of nationally based laws of value more or less integrated within a larger international law of value” (2008:189). At the same time, Neil argues that capitalism has the capacity to produce nation-states where they do not yet exist: “With the increased scale of the productive forces and the internationalization of capital, the capitalist state generally combines a number of these smaller states into a nation-state” (2008:190). The limits to this scale are not set by differentiation and equalization, but “by a series of historical deals, compromises, and wars” (2008:190). Clearly, Neil is struggling here to absorb inter-national territorial politics into a narrative of globalizing capital (Marxist theories of the state at this point still being plagued by the national territorial trap; cf. Agnew and Corbridge 1995).

Two further scales enter the stage toward the end of that last chapter, with bit parts. The sub-national regional scale, an emergent territorial division of labor, “has the same function as the global division between the developed and underdeveloped worlds ... geographically fixed (relatively) sources of wage labor ... under the more direct control of the national capital” (2008:193).⁴ Thus far, scales are strictly spatially nested, one within the other. Yet, with an eye on the emergence of a putative European Union, Neil’s final scale jumps these tracks by way of supranational regions:

Given the expansion in the scale of the productive forces, the continued internationalization of capital, and the fossilization of nation-state boundaries as a means of political control, the development of supranational regions may be an economic necessity among all but the largest nation states (2008:195).

The production of scales shaping the spatiality of globalizing capital—in the form of territorial economies persistently differentiated at each scale along lines of production/consumption, prosperity/stagnation or development/underdevelopment—lays the groundwork for what Neil dubbed the seesaw theory of uneven geographical development. He writes: “[W]e can think of the world as a ‘profit surface’ produced by capital itself, at three separate scales” (2008:197). At each scale, processes of development in privileged territories have a tendency to create barriers for accumulation in peripheral spaces: “lower unemployment, an increase in the wage rate, the development of unions, and so forth” occur in some areas, while others simultaneously experience underdevelopment, with “high unemployment rates, low wages, and reduced levels of workers’ organization” (2008:198). At a certain point, capital switches from the former spaces to the latter, where profits will ultimately be higher. Yet the result is never convergence to spatial equilibrium: peripheries become cores and cores peripheries, and the see-saw process repeats itself.⁵ Channeling Harvey (1982), Neil is at pains to point out that such spatial fixes are only ever temporary, unable to overcome the defining contradictions of a capitalist mode of production as described by Marx. Thus:

... however fixed these scales are made, they are subject to change, and it is through the continual determination and internal differentiation of spatial scale that the uneven development of capitalism is organized. The vital point here is not simply to take these spatial scales as given, no matter how self-evident they appear, but to understand the origins, determination and inner coherence and differentiation of each scale as already contained within the structure of capital (2008:181).

In our view, Neil was absolutely correct in his argument that Harvey’s spatial focus on *places* of production is too limiting, as it does not sufficiently emphasize the broader interconnecting spatialities of scale (we would also add connectivities/mobilities). Neil’s first extensive formulation of what has come to be known as scale theory is economic in focus—a theory of uneven geographical development driven by capitalist dynamics in the spirit of Marx. As for Harvey, Neil’s grounding in classical value theory, and his assertion that produced spatialities (spatial fixes for Harvey, scale for Neil) cannot ultimately resolve capitalism’s deepest contradictions, has been critiqued from within geographical political economy

(Sheppard 2004; Soja 1980). In these initial forays, there is a rigidity and functionalism to Neil's theorization of scale. He describes economic processes through which territories are produced at each scale, whereby the co-production of the urban and global scales is a necessity for globalizing capitalism (with cities as the nodes of commodity production in an increasingly globally interconnected system). The nation-state scale does not fit neatly into this framework, because he has difficulty recognizing political processes that exceed capitalism, yet its role in shaping globalizing capitalism is clear. At the same time, however, there is a fixed menu of scales, largely nested, within which processes operate in parallel—a less-than-dialectical categorization. Constrained by the nested geographies of census data, his one empirical demonstration of scale and uneven geographical development reproduces this nesting without critical reflection (Smith and Dennis 1987). While recognizing supranational regions, Neil does not pursue the disruptive implications of these for the nesting and parallelism characterizing his preceding analysis. He also presents the production of scale as the prime produced spatiality—a forgivable move, perhaps, for a young scholar seeking to articulate his originality as a thinker, and one that subsequent scale theorists tended to reinforce, at least until recently (Jessop et al. 2008; Leitner et al. 2008).

The Political Construction of Scale

If Neil's initial scholarship on scale emphasized questions of accumulation, issues of politics are inescapable within the political economy tradition. Building on the theoretical insights of Neil's scholarship, a new trajectory of scale research emerged around questions of how the construction of scale also is attempted or accomplished by a diverse set of actors engaged in political transformations—the practice of a politics of scale. Such practices draw attention to the uneven relationships between space and power, but also to conceptions and ideologies that situated social actors bring to their efforts to change the world and, of course, to resist undesirable change (Delaney and Leitner 1997). Some of this had to do with classical questions of political economy anticipated by Neil: the state and class politics, for example (Smith 1992a, 2008). For Neil and co-author Ward Dennis, for example, the so-called Sunbelt-Snowbelt regional economic transformations of the 1980s might be better understood as a scalar transformation of *regionalization* based on the uneven powers of capital and labor:

... in short, there is a political struggle over the uneven attribution of the costs of crisis, and one dimension of this unevenness is geographical. In particular, there is a strong effort on the part of employers to discipline the working class, both politically and economically, through layoffs, wage takebacks, runaway shops, plant closures, detrimental safety conditions and work rules, and union busting. If this political attack can be concentrated regionally, thus freeing up other regions for much needed expansion, so much the better (Smith and Dennis 1987:187).

Rather than taking regions at face value, it “may not be too much of an exaggeration to claim that the question of scale comprises the ground on which a new regional geography will either flourish or fail” (1987:167).

Others extended the space/power framework to non-state, non-capital actors, including non-class based social movements and contentious politics, mobilized around questions of culture, identity and environment. Social movements may deploy scalar strategies to make their voices heard and to expand and secure their political and geographical power. For example, in order to overcome the limitations of their localness, social movements may engage in what Neil termed “scale jumping”: turning local into regional, national and global movements, escaping the traps of localism, parochialism, and particularism through an expansion of geographic and political reach (Smith 1992a). Movements ranging from the Zapatistas, to labor unions, indigenous peoples, feminists, environmental activists and others have successfully used scalar strategies to advance their cause (cf. Fröhling 1999; Herod 1997; Miller 2000). Yet scaling up should be complemented by down-scaling (Leitner et al. 2007), a strategy that Neil had too little time for given his critiques of localism (Smith 1987). Such localization strategies often rely on attachments to place and culture, seeking to reaffirm the importance of local particularity as necessary to successful broader-scale strategies. For example, Escobar (2001) suggests that place-based cultural, ecological, and economic practices are important sources of inspiration for alternative imaginaries of, and practices for, reconstructing local and regional worlds, no matter how produced by “the global” they might also already be. Multi-scalar strategies also frequently are employed, simultaneously broadening the scale of action while drawing strength from reinforcing the local scale.

Scale also matters in terms of representation: scale frames are deployed by different actors as discursive practices to locate problems, causes and solutions at particular scales and to legitimize the exclusion of certain actors and ideas from debates (Kurtz 2003; Martin and Miller 2003). For example, opposition to the concentration of power over immigration policy at the supra-national scale of the European Union has come from nationalist right-wing political parties presenting themselves as the guardians of national identity and interest under threat of being obliterated by the European Union (Leitner 1997)—with reinforced emphasis and resonance since the 2015 refugee crisis.

Scales of Difference

By the mid-1990s, Neil had begun to appreciate that social difference, both as a conceptual lever and a set of embodied and micro-spatialized social markers, needed to be incorporated into his thinking about scale. This led him to arguments about an alternative politics of scale, wherein he interpreted some activities of social movements as scalar productions specifically designed to confront fixities put in place by capital and the state. Never one to see scalar categories as given, this focus on social difference co-evolved with Neil’s more expansive view of the spatial differentiations possible in the production of scale. He wrote a series of publications reflecting these parallel concerns during and after the 1990s. These demonstrate how his thinking about spatial difference might resonate with, while move beyond, the capitalist forces of differentiation that drove his early work on regional political-economic theory. These efforts engaged with the body, the home and the street,

including how social reproduction, culture, and social differences of, for example, gender and race, play into and are shaped by the wider processes of scalar production (Smith 1992b, 1996). At every step in these analyses, scalar production becomes more, rather than less, central to the project of comprehending complex spatial differentiation.

In “Contours of a Spatialized Politics”, published in *Social Text* in 1992, Neil reaches beyond the geography of uneven development to the uneven realm of art (Smith 1992b). Writing for a broad audience of social and cultural theorists, the paper begins with a sympathetic critique of an ironic construction—a mobile and secure enclosure for limited but functional mobility for homeless people—by New York artist Krzysztof Wodiczko. Neil reads Wodiczko’s “Homeless Vehicle” and “Poliscar” as “an impertinent invention that empowers the evicted to erase their own erasure” (1992b:58). Little more than enclosed shopping carts, and appearing well before the Geography’s object turn, these materialist contraptions are his “vehicles” for both downsizing scalar analysis and for demonstrating that scalar politics can be both dominant and oppositional. As he renders it, the vehicles:

... appropriate and express the political ambition of these struggles [over encampment and eviction] from the perspective of many homeless people, and they express the central realization that political liberation requires spatial access. They provide oppositional means for reinscribing and reorganizing the urban geography of the city, but they do so in a very specific way. They ... stretch the urban space of productive and reproductive activity, fracture previous boundaries of daily intercourse, and establish new ones. They convert spaces of exclusion into the known, the made, the constructed. In short, they redefine the scale of everyday life for homeless people (1992b:60).

Neil goes on to argue that the political empowerment facilitated by the shock of the vehicles lies precisely in their “contradiction between absurdity and functionality” and, finally, on the “reinscription of geographical scale” they promise as they “expand the scale of self-centered control and at the same time contract the scale of official control” (1992b:60). In this mobile metal work of art, Neil spies the production and reproduction of geographical scale as a political strategy, one that enables the evicted to “jump scales”, that is, “to organize the production and reproduction of daily life and to resist oppression and exploitation at a higher scale—over a wider geographical field” (1992b:60).

Towards the second half of the paper, we see how the cultural critique has moved Neil—or perhaps it is the other way around—to widen both the range of scales under analysis in Geography and to rethink the politics inscribed. In separate subsections Neil addresses the social, cultural, economic and political processes at every level of scale: the body, home, community, urban space, region, nation and global boundaries. If there was ever a valid argument that specific processes have their attendant scalar levels, Neil dismissed that here. *Social Text* is of course an ideal venue for excursions into areas where space and scale meet cultural theory, anti-racist theory, feminist theory, and art, and Neil makes the most of it, all the while holding firm on his belief that, when it comes to space, materiality trumps metaphor (cf. Smith and Katz 1993).

This last point is echoed in a later work, in *Critique of Anthropology* (Smith 1996). This piece also uses Wodiczko's Poliscar as a jumping off point, but instead is directed toward the increasing tendency to speak (following Castells and others) of a "space of flows". The flow analogy—with its simultaneous appropriation and unpacking of globalization's information networks and mobile forms of production and consumption—would seem to contrast with the staid "space of places" that characterizes less fluid forms of capitalist development and spatial politics. While Neil certainly works the fluidity/fixity opposition in this paper, "[i]t is not so much that place is deracinated in the space of flows than that the relationship between the fluidity and the fixity of space is itself restructured—often in surprising ways, and certainly not in a unidirectional manner" (1996:71). In contrast to flow-thinking's "spatial maze of cities, regions, and nations submerged in" and "deposited out of" a "spatial swirl of capital and information" (1996:71–72), Neil asks: "What if ... the scale of the city, the scale of the region, and the scale of the nation are themselves so restructured that it makes little sense to cling uncritically to these concepts of geographical scale?". The result, in other words, is not the "fantasy of spacelessness" nor the "extinction of place"—concepts hard to admit for anyone who spent time discussing Geography with Neil—"but *the reinvention of place at a different scale*" (1996:72). He captures this spatial transformation by elaborating on the concept of scale jumping, a process not unimaginable within the context of *Uneven Development* some dozen years earlier, but now more explicitly aligned to the shifting contours of spatial restructuring under "so-called globalization" (1996:68). As he puts it: "A stronger recognition of the power of the production of scale should significantly mitigate any vision of a space of flows" (1996:72).

Another of Neil's contributions to scale's endless malleability is captured in the concept of scale bending, which he uses to capture geopolitical power shifts (cf. Brenner 2005), all the while maintaining an eye on the political potentials of social movements that re-work scale:

Cities and states are not supposed to have their own foreign policy, presumably the prerogative of national states. Private individuals are not supposed to dwarf nation-states in bankrolling other national and transnational state institutions. In the home of the free, "domestic" activists are not supposed to jump scale and appeal to international authority for the resolution of local complaints. And since when did global corporations displace nation-states as the proper purveyors of diplomatic emissaries? Taken together, these events suggest intense "scale bending" in the contemporary political and social economy. Entrenched assumptions about what kinds of social activities fit properly at which scales are being systematically challenged and upset (Smith 2004:193).

If fixity/fluidity was the most important successor to *Uneven Development's* driving opposition of differentiation/equalization, it was the production/reproduction dialectic that took Neil into his collaboration with Sallie Marston in the early 2000s. Marston (2000) built on Smith's emerging interest in scale and social difference as it exists in the micro-spaces of the home.⁶ Expanding upon socialist feminists' theories of social reproduction, she argued that most scale theory in the discipline through the 1990s had been: "largely unresponsive to questions of difference in human agents and how power relations outside the relations of capital and labor

might also influence scale-making” (Marston 2000:238). Using the historical case of the expanding consciousness and political roles of US women involved in the Progressive Movement in the 19th and early 20th centuries, she shows how the home is a significant scale at which the everyday relations of patriarchy, racism, and citizenship connect to wider scales of capitalist production and consumption. Her contention was that:

A discourse about women as “female citizens” operated among and between scales from the household out to the globe and provided these subjects with a consciousness that enabled a particular negotiation of patriarchal subordination and began a gender transformation of the public sphere through a reconstitution of the private sphere of the home. In short, the home was utilized as a scale of social and political identity formation that eventually enabled American middle-class urban women to extend their influence beyond the home to other scales of social life (2000:235).

Neil Brenner (2001) reacted with concern to Marston’s expansive theorization, worrying that scale would become another chaotic concept in the discipline, as any spatial phenomenon might come to be identified as a scale. His aim in launching a critique was to:

contribute to the development of an approach to sociospatial theory in which the specifically scalar dimensions of social spatiality—in contradistinction to its many other dimensions, such as localization, place-making, territorialization, spatial distancing, the formation of spatial networks, the production of environment/nature and so forth—may be adequately recognized and theorized (Brenner 2001:593).

In arguing for “a more precise and hence analytically narrower conception of geographical scale” (2001:593), Brenner’s reply, though strategically directed at Marston, was meant to rein in the widening circle of interventions that were then expanding both the theoretical framing and empirical utility of scale (e.g. Howitt 1998; Jonas 1994; Swyngedouw 2000). Through these and other extensions, the concept of scale was becoming more processually inclusive (e.g. through a focus on the politics of scale and the inclusion of social reproduction and environmental processes in scale theory), as well as, relatedly, more spatially complex (e.g. by including horizontal networks and households). For Brenner, the key to understanding what scale is and how it operates was through “relations of hierarchization and rehierarchization among vertically differentiated spatial units”, such that they can be distinguished “from other forms of sociospatial structuration” (2001:603). Thus, in order to appreciate how scale might be tied to “an explicit causal argument linking the substantive social content of the spatial unit in question to its *embeddedness* or *positionality* within a broader scalar hierarchy” (2001:600), it was necessary to limit scalar processes to already established and well recognized spatial units such as those specified by the likes of Peter Taylor (1982) and the early Smith (2008), and, it might be argued, to the more conventional levels acknowledged by planners, development experts, and states.

Marston co-authored her reply to Brenner with Neil (Marston and Smith 2001). They concede the point that Geography needs analytic precision around scale,

but they conclude that Brenner will not find the tools for that by maintaining boundaries between scalar production and the wider social production of space (à la Lefebvre). They wrote:

[S]cale is a produced societal metric that differentiates space; it is not space *per se*. Yet “geographical scale” is not simply a “hierarchically ordered system” placed over pre-existing space, however much that hierarchical ordering may itself be fluid. Rather the production of scale is integral to the production of space, all the way down. Scaled social processes pupate specific productions of space while the production of space generates distinct structures of geographical scale. The process is highly fluid and dynamic, its social authorship broad-based, and the scale of the household (or the home) is integral to this process. So too, we contend, is the scale of the body (Marston and Smith 2001:615–616).

In addition to their theoretical response—which is centrally directed to the question (also posed by Delaney and Leitner 1997) of what kind of space scale *is*—Marston and Smith criticize Brenner for an “inability to see the theoretical relevance of the social reproduction argument” (2001:617). Noting that it is “arbitrary that the home is relegated to a ‘place’ or ‘arena’, while the state gets to be a multifaceted ‘scale’” (2001:618), they argue that while “[f]uture historical research may yet reveal the household to be a ‘stable background structure’ in all of this ... the smart money will be wagered elsewhere” (2001:618).

The Scale Debates

For Marston, adopting a post-structuralist feminist response with Neil to Brenner’s structural Marxist arguments presaged her later move toward a non-scalar ontology. Indeed, this move was already signaled *in* the 2000 paper, which openly entertained the “the rejection of scale as an ontologically given category” (Marston 2000:220). Marston subsequently wrote, with Jones and Keith Woodward, a paper that attempted to dismantle scale theory under the provocative title of “Human geography without scale” (Marston et al. 2005). Without rehearsing the complexities of the analysis therein, the fundamental argument advanced is that scale is not an ontological category of space but a spatial imaginary, an analytic for making sense of the world. In contrast to a scalar epistemology, they draw on Deleuze and others in articulating a non-scalar, “flat” ontology consisting of:

analytics of composition and decomposition that resist the increasingly popular practice of representing the world as strictly a jumble of unfettered flows; attention to differential relations that constitute the driving forces of material composition and that problematize axiomatic tendencies to stratify and classify geographic objects; and a focus on localized and non-localized emergent events of differential relations actualized as temporary—often mobile—“sites” in which the social unfolds (2005:422–423).

This view comes with its own spatial politics, one centered not at legal, juridical, or organizational structures “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" (2005:420).⁷ This argument was premised on the move, prompted by Marston and Smith's paper, away from a productivist orientation (*Uneven Development* being the apogee) and toward a more social reproductivist/feminist position that focuses attention on embodied practice, intimacy, and intelligibility.

"Human geography without scale" sparked intense debate in the mid-2000s, particularly in the pages of *Transactions of the Institute of British Geographers*. A 2005 AAG panel was convened in Denver to discuss the Marston, Jones and Woodward paper, which included, alongside the authors, Neil, Helga, and philosopher John Protevi. At the session, Neil refused to accept the epistemic argument made in the paper. He declared, somewhat contradictorily but perhaps understandably so in light of all the friendships shared: "Look, I agree with you, but you still have to understand that scale exists!". Beyond that session there were few other public discussions about this intellectual disagreement, but there were many debates in private where Neil continued to disagree with the ontological reorientation argued for in the paper and subsequent articles. It is not surprising, therefore, that in a posthumous 2015 publication by Neil titled "The future is radically open", edited by Don Mitchell, he reasserts the salience of scale. He writes: "The post-structural critique seems to abolish any concept of scale in favour of what the critics want to call a horizontal space, abolishing any social and political difference, creating, effectively, a flat earth. Power differences are abolished in an act of wishful thinking" (Smith 2015:964). In the midst of the debates, Leitner and Miller (2007:121) made a very similar point, expressing concern that the flat ontology argument entails "an impoverished understanding not only of the power relations that inhere in scale, but of the power relations that inhere in the intersections of diverse spatialities with scale".⁸

The last 10 years have seen two further shifts with respect to scale theory. First, reflecting persistent disjunctures between political economic and poststructural accounts, one finds attempts to rethink scale that follow two strands of thought. From the perspective of political economy, MacKinnon (2010) exemplifies efforts to examine scale as a boundary object enabling engaged pluralism with poststructuralism. For example, in reflecting on Moore's (2008) intervention, MacKinnon seeks to disavow attempts to brand political economic approaches as reifying scale (a trap that Neil was not the only one to avoid). He seeks common ground with poststructuralism around how scales are an emergent effect of "material production and capitalist restructuring on the one hand, and social practice and discourse, on the other" (MacKinnon 2010:28). The alternative, avowedly poststructural, strand of thought stresses immanent ontological and political accounts (Ansell 2009; Escobar 2007; Hiller 2008; Isin 2007; McFarlane 2009; Shaw 2010; Woodward et al. 2010, 2012). Second, there are those seeking to decenter scale as the overarching spatiality—in this sense, writing back against Neil. Some argue, in different ways, that scale is just one spatiality among many that need to be placed in conversation with one another (Jessop et al. 2008; Leitner et al. 2008). Others point to alternative spatialities, with assemblage, mobility, phase space, topology, grey and partitioned space receiving particular attention (Anderson et al. 2012; Cresswell and Merriman 2011; Jones 2009; Merriman et al. 2012; Roy

2011; Yiftachel 2009). Having access to Neil's views on these unfolding debates and alternative spatialities would be instructive. What we can assume is that he would prioritize scale as part of a broader argument that spatialities are material, and matter.

Conclusion

The entire discipline of Geography owes a tremendous intellectual debt to Neil Smith, as do spatial thinkers throughout the social sciences and humanities. His focus on scale transformed socio-spatial theory. While he did not neglect such related spatialities as place, region, city, nation-state and the rest, for him scale was always integral to understanding the production of space. This is itself a novel contribution. Neither Lefebvre, nor Harvey, nor any other spatial theorist who had sought to elaborate the production of space would so forcefully make scale both the driving dynamic and outcome. Neil's conceptualization of scale was determinately Marxist in origin, and consistent with this was his lifelong adherence to dialectical thinking. Throughout his evolving theorization of scale, one can witness a long list of dialectics at work, including: differentiation/equalization; accumulation/consumption; production/reproduction; process/outcome; abstract/concrete; materiality/metaphor; expansion/contraction; and mobility/constraint. Other, more meta-level and specifically spatial outcomes, such as developed/underdeveloped, core/periphery, and global/local, follow in the wake of these interconnected processes—it was never one nor the other, but always both/and. With this powerful conceptual apparatus, it is little wonder that the traditional nesting of scales fell to the wayside early on his thinking. While his thinking was clear, precise, and analytic, for Neil nothing was ever “given” or “fixed”, whether in space or in politics.

For us, his influence is ineradicable even as we came to see our thinking as moving beyond Neil's writing on scale—toward a flat ontology for Sallie and JP, toward scale's intersections with other, also non-territorial, spatialities for Helga and Eric. We are, if you will, post-Smithian, sharing his broader critical sensibility about what is wrong with today's world. This enables us to engage in productive exchange, notwithstanding the occasional spirited intellectual disagreement.

Endnotes

¹ Quoted material is from the widely accessible 2008 third edition published by the University of Georgia Press. The first edition was published by Basil Blackwell in 1984; the second in 1990.

² This theme would reappear in Neil's later works, such as his 2002 paper linking globalization to a rescaled “new urbanism” focused in Africa, Asia and Latin America: “The urban’ is being redefined just as dramatically as the global; the old conceptual containers—our old 1970s assumptions about what ‘the urban’ is or was—no longer hold water. The new concatenation of urban functions and activities vis-à-vis the national and the global changes not only the make-up of the city but the very definition of what constitutes—literally—the urban scale” (2002:431).

³ Contrast these levels to those proposed by Peter Taylor (1982:24) in the same year: “the scale of reality (global), the scale of ideology (state) and the scale of experience (urban)”. In *Uneven Development*, Smith would propose the same levels (see below) but criticize Taylor for his reliance upon Wallerstein's exchange-based world-systems theory (2008:289). Unlike

Taylor, Smith would not argue that the global level is the primary determinant, nor did he assign a specific and allied social process to different scales (e.g. ideology to the nation state, experience to the urban). Rather, capitalism *produces* scales at all levels as part-and-parcel of its endless shifting between equilibrium and disequilibrium.

⁴ In *Spatial Divisions of Labor* (Massey 1984), published almost simultaneously with *Uneven Development*, Doreen Massey differentiates sub-national regions in the same way. Eschewing scale, however, her explanation stresses geological metaphors of territorial layering.

⁵ For Neil, gentrification offers a paradigmatic example of such see-sawing: the suburbanization of production and the middle classes/whites in the US is part and parcel of an underdevelopment of central cities, creating a rent gap that eventually attracts capital and middle classes back to the central city, displacing its poorer, non-white residents (Slater 2015).

⁶ Marston's paper was titled "The social construction of scale". Tellingly, Neil had suggested that she substitute "production" for "construction" in the title, but she declined. Along the same lines, Delaney and Leitner (1997:93) had previously advocated for the term "constructionist", titling their intervention "The political construction of scale", so as to emphasize the connections between power, practice and scale also among a wider universe of actors and sites.

⁷ Interestingly, Neil made a similar argument when critiquing Castells' and others' concepts of "spaces of flows" (Smith 1996).

⁸ Jones et al. (2007) offer a reply to Leitner and Miller (2007) as well as to the other critics and sympathizers in *Transactions'* "scale debates".

References

- Agnew J and Corbridge S (1995) *Mastering Space: Hegemony, Territory, and International Political Economy*. London: Routledge
- Anderson B, Kearnes M, McFarlane C and Swanton D (2012) On assemblages and geography. *Dialogues in Human Geography* 2:171–189
- Ansell N (2009) Childhood and the politics of scale: Descaling children's geographies? *Progress in Human Geography* 33:190–209
- Brenner N (2001) The limits to scale? Methodological reflections on scalar structuration. *Progress in Human Geography* 25:591–614
- Brenner N (2005) *New State Spaces: Urban Governance and the Rescaling of Statehood*. Oxford: Oxford University Press
- Castells M (1977) *The Urban Question*. London: Edward Arnold
- Cresswell T and Merriman P (2011) *Geographies of Mobilities: Practices, Spaces, Subjects*. Burlington: Ashgate
- Delaney D and Leitner H (1997) The political construction of scale. *Political Geography* 16:93–97
- Escobar A (2001) Culture sits in places: Reflections on globalism and subaltern strategies of localization. *Political Geography* 20:139–174
- Escobar A (2007) The ontological turn in social theory: Commentary on "Human Geography Without Scale" by Sallie Marston, John Paul Jones III, and Keith Woodward. *Transactions of the Institute of British Geographers* 32:106–111
- Frøehling O (1999) Internauts and guerrilleros: The Zapatista rebellion in Chiapas, Mexico and its extension into cyberspace. In M Crang, P Crang and J May (eds) *Virtual Geographies: Bodies, Space, and Relations* (pp 178–201). London: Routledge
- Herod A (1997) Labor's spatial praxis and the geography of contract bargaining in the US east coast longshore industry, 1953–89. *Political Geography* 16:145–169
- Harvey D (1982) *The Limits to Capital*. Oxford: Basil Blackwell
- Howitt R (1998) Scale as relation: Musical metaphors of geographical scale. *Area* 30:49–58
- Hiller J (2008) Plan(e) speaking: A multiplanar theory of spatial planning. *Planning Theory* 7:25–50
- Isin E F (2007) City.state: Critique of scalar thought. *Citizenship Studies* 11:211–228
- Jessop R, Brenner N and Jones M (2008) Theorizing sociospatial relations. *Environment and Planning D: Society and Space* 26:389–401

- Jonas A (1994) The scale politics of spatiality. *Environment and Planning D: Society and Space* 12:257–264
- Jones M (2009) Phase space: Geography, relational thinking, and beyond. *Progress in Human Geography* 33:487–506
- Jones III J P, Woodward K and Marston S A (2007) Situating flatness. *Transactions of the Institute of British Geographers* 32:264–276
- Kurtz H (2003) Scale frames and counter-scale frames: Constructing the problem of environmental justice. *Political Geography* 22:887–916
- Leitner H (1997) Reconfiguring the spatiality of power: The construction of a supranational migration framework for the European Union. *Political Geography* 15:123–143
- Leitner H and Miller B (2007) Scale and the limitations of ontological debate: A commentary on Marston, Jones and Woodward. *Transactions of the Institute of British Geographers* 32:116–125
- Leitner H, Sheppard E and Sziarto K M (2008) The spatialities of contentious politics. *Transactions of the Institute of British Geographers* 33:157–172
- Leitner H, Sziarto K M, Sheppard E and Maringanti A (2007) Contesting urban futures: Decentering neoliberalism. In H Leitner, J Peck and E Sheppard (eds) *Contesting Neoliberalism: Urban Frontiers* (pp 1–25). New York: Guilford Press
- MacKinnon D (2010) Reconstructing scale: Towards a new scalar politics. *Progress in Human Geography* 35:21–36
- Marston S A (2000) The social construction of scale. *Progress in Human Geography* 24:219–242
- Marston S A, Jones III J P and Woodward K (2005) Human geography without scale. *Transactions of the Institute of British Geographers* 30:416–432
- Marston S A and Smith N (2001) States, scales, and households: Limits to scale thinking? A response to Brenner. *Progress in Human Geography* 25:615–619
- Martin D G and Miller B (2003) Space and contentious politics. *Mobilization* 8:143–156
- Massey D (1984) *Spatial Divisions of Labour: Social Structure and the Geography of Production*. London: Methuen
- McFarlane C (2009) Translocal assemblages: Space, power, and social movements. *Geoforum* 40:561–567
- Merriman P, Jones M, Olsson G, Sheppard E, Thrift N and Tuan Y-F (2012) Forum: Space and spatiality in theory. *Dialogues in Human Geography* 2:3–22
- Miller B (2000) *Geography and Social Movements*. Minneapolis: University of Minnesota Press
- Moore A (2008) Rethinking scale as a geographical category: From analysis to practice. *Progress in Human Geography* 32:203–225
- Roy A (2011) Slumdog cities: Subaltern urbanism and itineraries of recognition. *International Journal of Urban and Regional Research* 35:223–238
- Shaw I G R (2010) Sites, truths, and the logics of worlds: Alain Badiou and human geography. *Transactions of the Institute of British Geographers* 35:431–442
- Sheppard E (2004) The spatiality of *The Limits to Capital*. *Antipode* 36(3):470–479
- Slater T (2015) Planetary rent gaps. *Antipode* DOI: 10.1111/anti.12185
- Smith N (1982) Gentrification and uneven development. *Economic Geography* 58:39–155
- Smith N (1987) Dangers of the empirical turn: Some comments on the CURS initiative. *Antipode* 19(1):59–68
- Smith N (1992a) Geography, difference, and the politics of scale. In J Doherty, E Graham and M Malek (eds) *Postmodernism and the Social Sciences* (pp 57–79). London: Macmillan
- Smith N (1992b) Contours of a spatialized politics: Homeless vehicles and the production of geographical scale. *Social Text* 33:55–81
- Smith N (1996) Spaces of vulnerability: The space of flows and the politics of scale. *Critique of Anthropology* 16:63–77
- Smith N (2002) New globalism, new urbanism: Gentrification as global urban strategy. *Antipode* 34(3):427–450
- Smith N (2004) Scale bending and the fate of the national. In E Sheppard and R B McMaster (eds) *Scale and Geographic Inquiry: Nature, Society, and Method* (pp 192–212). Oxford: Blackwell

- Smith N (2008) *Uneven Development: Nature, Capital, and the Production of Space* (3rd edn). Athens: University of Georgia Press
- Smith N (2015) The future is radically open. *ACME* 14:954–964
- Smith N and Dennis W (1987) The restructuring of geographical scale: Coalescence and fragmentation of the northern core region. *Economic Geography* 63:160–182
- Smith N and Katz C (1993) Grounding metaphor: Towards a spatialized politics. In M Keith and S Pile (eds) *Place and the Politics of Identity* (pp 67–83). London: Routledge
- Soja E (1980) The socio-spatial dialectic. *Annals of the Association of American Geographers* 70:207–225
- Swyngedouw E (2000) Authoritarian governance, power, and the politics of rescaling. *Environment and Planning D: Society and Space* 18:63–76
- Taylor P J (1982) A materialist framework for political geography. *Transactions of the Institute of British Geographers* 7:15–34
- Woodward K, Jones III J P and Marston S A (2010) Of eagles and flies: Orientations toward the site. *Area* 42:271–280
- Woodward K, Jones III J P and Marston S A (2012) The politics of autonomous space. *Progress in Human Geography* 36:204–224
- Yiftachel O (2009) Critical theory and gray space: Mobilization of the colonized. *City* 13:246–263