Commentary

The ‘ontological turn’ in social theory. A Commentary on ‘Human geography without scale’, by Sallie Marston, John Paul Jones II and Keith Woodward

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revised manuscript received 2 November 2006

Assemblages and ‘flat alternatives’

‘Human geography without scale’ is a complex argument about scale, space, ontology and social theory itself. Although I am not an expert on these issues – and certainly not on the rich literature on scale and space – I found the paper to be one of the most thought-provoking I have read in a long time; this is perhaps because I have been thinking for some time about related issues, particularly in connection to place and networks. Marston, Jones and Woodard’s argument, I feel, is intended to entice the theoretical and political imagination into alternative conceptions of space and scale.

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 (more on this below).

Notwithstanding, the argument stands sharply and firmly on its own. In this short Commentary, I would like to place it in the context of the larger trend in social theory to which I just alluded. One of my main sources is cited but not discussed in the article, and this is the framework developed by Manuel de Landa out of what I believe are two of the most important sources for flat ontologies: theories of complexity, particularly in the natural sciences, and the philosophy of Deleuze and Guattari.

It is important to mention that flat alternatives and theories of complexity and self-organization have not emerged in a vacuum; the history of their most important antecedents is rarely told, since they pertain to traditions of thought that lie outside the immediate scope of the social sciences. These include cybernetics and information theories in the 1940s and 1950s; systems theories since the 1950s; early theories of self-organization; and the phenomenological biology of Maturana and Varela. More recently, the sources of flat alternatives include some strands of thought in cognitive science and informatics and computing; complexity theories in biology; network theories in the physical, natural and social sciences; and Deleuze and Guattari’s ‘neo-realism’. One could also see Foucault’s work within this frame – e.g. Foucault’s theory of the archaeology of knowledge may be seen as a theory of autopoiesis and self-organization of knowledge; his concept of ‘eventalization’ resembles recent proposals in assemblage theory; and his conception of power anticipated developments in actor-network theory.

Flat alternatives can also be seen as building on, and responding to, the various waves of social constructionism, deconstruction and discursive approaches of the past few decades. These movements...
brought with them a critique of realism as an epistemological stance. It is not yet readily recognized that some of the most interesting social theory trends at present, including flat ontologies, entail a return to realism. Since this is not a return to the naïve realisms of the past (particularly the Cartesian versions, or the realism of essences or transcendent entities), these tendencies might be called neo-realists. One could use other viable metaphors for the emerging social theories, such as ‘biological sociologies’, a term applied to the phenomenological biology of Maturana and Varela (1980) in particular, or new materialist sociologies (e.g. actor-network theories). Deleuze and Guattari have inspired some of these developments, including Manuel de Landa’s extended commentary on these philosophers (2002) and his own neo-realist assemblage theory (2005). Deleuze, in de Landa’s view and unlike many constructivists, is committed to a view of reality as autonomous (mind-independent); reality is the result of dynamical processes in the organization of matter and energy that leads to the production of life forms (morphogenesis); things come into being through dynamical processes of matter and energy driven by intensive differences; these processes are largely self-organizing. This view amounts to ‘an ontology of processes and an epistemology of problems’ (2002, 6). Deleuze’s morphogenetic account, in other words, makes visible the form-generating processes which are immanent to the material world.

A central aspect in de Landa’s social ontology arises from Deleuze’s concept of the virtual. There are three ontological dimensions in the Deleuzian world: the virtual, the intensive and the actual. The larger field of virtuality is not opposed to the real but to the actual. This is a very different way to think about the relation between the possible and the real – here, the possible is not thought about in terms of a set of pre-defined forms that must retain their identity throughout any process of change, thus already prefiguring the end result (this is one of the most fatal, and self-serving, modernist assumptions, since it precludes real difference). The actualization of the virtual in space and time entails the transformation of intensive differences into extensive (readily visible) forms through historical processes involving interacting parts and emerging wholes; this leads to what de Landa calls ‘a flat ontology, one made exclusively of unique, singular individuals, different in spatio-temporal scale but not in ontological status’ (2002, 47).

The existence of the virtual is manifested ... in the cases where an assemblage meshes differences as such, without canceling them through homogenization. ... Conversely, allowing differences in intensity to be cancelled or eliminating differences through uniformization, effectively hides the virtual and makes the disappearance of process under product seem less problematic. (2002, 65)

This concealment is the result of human action – hence the need to investigate the unactualized tendencies of the virtual wherever they are expressed.

Based on a careful reconstruction of Deleuze’s concepts, de Landa goes on to propose his own approach to ‘social ontology’ as a way to rethink the main questions of classical and contemporary sociology (including notions of structure and process, individuals and organizations, essences and totalities, the nation-state, scale, markets and networks). His goal is to offer an alternative foundation for social theory (an alternative ‘ontological classification’ for social scientists). His starting point is the realist stance of asserting the autonomy of social entities from the conceptions we have of them. This does not mean that social science models do not affect the entities being studied, which certainly happens in many cases; this was one of post-structuralism’s stronger arguments. It means that the focus of realist social ontology is a different one; the focus is on the objective, albeit historical, processes of assembly through which a wide range of social entities, from persons to nation-states, come into being. The main objects of study are ‘assemblages’, defined as wholes whose properties emerge from the interactions between parts; they can be any entity: interpersonal networks, cities, markets, nation-states, etc. The idea is to convey a sense of the irreducible social complexity of the world. Assemblage theory is thus an alternative to the organic or structural totalities postulated by classical social science. It does not presuppose essential and enduring identities.

A particular problem for social theory is the causal mechanisms that account for the emergence of wholes from the interaction between parts; this impinges on the question of the micro and the macro, and so on scale. Conventional approaches assume two levels (micro, macro) or a nested series of levels (the proverbial Russian doll). The alternative approach is to show, through bottom-up analysis, how, at each scale, the properties of the whole emerge from the interactions between parts, bearing in
mind that the more simple entities are themselves assemblages of sorts. Moreover, through their participation in networks, elements (such as individuals) can become components of various assemblages operating at different levels. This means that most social entities exist in a wide range of scales, making the situation much more complex than in conventional notions of scale:

Similar complexities arise at larger scales. Interpersonal networks may give rise to larger assemblages like the coalitions of communities that form the backbone of many social justice movements. Institutional organizations, in turn, tend to form larger assemblages such as the hierarchies of government organizations that operate at a national, provincial, and local levels. . . . All of these larger assemblages exist as part of populations: populations of interpersonal networks, organizations, coalitions, and government hierarchies. (de Landa 2005, ch 2, 6)

The processes of assembly through which physical, biological or social entities come into being are recurrent. This means that assemblages always exist in populations that are generated by the repeated occurrence of the same processes. It is through collectivities interacting with one another that assemblages develop many of their features or become more or less stable macro-assemblages. There is recurrence of the same assembly process at a given spatial scale, and recurrence at successive scales, leading to a different conceptualization of the link between the micro and the macro levels of social reality. For de Landa, the question becomes:

How can we bridge the level of individual persons and that of the largest social entities (such as territorial states) through an embedding of assemblages in a succession of micro and macro scales? (2005, ch 2, 7)

For the case of markets, for instance, this means showing how differently-scaled assemblages operate, with some being component parts of others which, in turn, become part of even larger ones. In his historical work on the development of markets, de Landa (1997) shows how larger entities emerged from the assembly of smaller ones (including town, regional, provincial, national and world markets, following the Braudelian explanation).

In sum,

social assemblages larger than individual persons have an objective existence because they can causally affect the people that are their component parts, limiting them and enabling them, and because they can causally affect other assemblages at their own scale. The fact that in order to exercise their causal capacities, internally as well as externally, these assemblages must use people as a medium of interaction does not compromise their ontological autonomy any more than the fact that people must use some of their bodily parts (their hand or their feet, for example) to interact with the material world compromises their own relative autonomy from their anatomical components. (2005, ch 2, 9)

To sum up:

The ontological status of any assemblage, inorganic, organic or social, is that of a unique, singular, historically contingent, individual. Although the term ‘individual’ has come to refer to individual persons, in its ontological sense it cannot be limited to that scale of reality. . . . Larger social assemblages should be given the ontological status of individual entities: individual networks and coalitions; individual organizations and governments; individual cities and nation states. This ontological maneuver allows us to assert that all these individual entities have an objective existence independently of our minds (and of our conceptions of them) without any commitment to essences or reified generalities. On the other hand, for the maneuver to work the part-to-whole relation that replaces essences must be carefully elucidated. The autonomy of wholes relative to their parts is guaranteed by the fact that they can causally affect those parts in both a limiting and an enabling way, and by the fact that they can interact with each other in a way not reducible to their parts, that is, in such a way that an explanation of the interaction that includes the details of the component parts would be redundant. Finally, the ontological status of assemblages is two-sided: as actual entities all the differently-scaled social assemblages are individual singularities, but the possibilities open to them at any given time are constrained by a distribution of universal singularities, the diagram of the assemblage, which is not actual but virtual. (2005, ch 2, 10, 11; emphasis added)

The above explanation is by necessity schematic. Let me mention a few other aspects of de Landa’s assemblage theory of interest to the argument about scale. Assemblage theory seeks to account for the multi-scaled character of social reality, and provides adjustments to this end. First, it recognizes the need to explain the historical production of the assemblage, but without placing emphasis only in the moment of birth (e.g. as in the origin of a given collectivity or social movement) or on the original emergence of its identity at the expense of the processes that maintain this identity through time. Second, assemblages are produced by recurrent processes; given a population of
assemblages at one scale, these processes can generate larger-scale assemblages using members of existing populations as components. Assemblages (e.g. organizations), in other words, come into being in a world already populated by other assemblages. Finally, there is the question of how assemblages operate at longer time scales. Does it take longer to effect change in organizations than in people, for example? In general, the larger the social entity targeted for change, the larger the amount of resources that must be mobilized. This implies that the spatial scale does have temporal consequences since the necessary means for change may have to be accumulated over time. There is no simple correlation, however, between larger spatial extension and long temporal duration. In the case of assemblages that do not have a well defined identity, such as dispersed, low-density networks, this dynamic is a strength and a weakness at the same time: On the one hand,

low density networks, with more numerous weak links, are for this reason capable of providing their component members with novel information about fleeting opportunities. On the other hand, dispersed networks are less capable of supplying other resources, like trust in a crisis, the resources that define the strength of strong links. They are also less capable of providing constraints, such as enforcement of local norms. The resulting low degree of solidarity, if not compensated for in other ways, implies that as a whole, dispersed communities are harder to mobilize politically and less likely to act as causal agents in their interaction with other communities. (2005, ch 2, 7)

Sites without scale?

Let us now return to ‘Human geography without scale’. The authors are correct in stating that most conceptions of scale remain trapped in a foundational hierarchy and verticality, with concomitant problems such as micro–macro distinctions and global–local binaries. An important part of the their argument is that these problems cannot be solved just by appealing to a network model; the challenge is not to replace one ‘ontological–epistemological nexus (verticality) with another (horizontality)’ but to bypass altogether the reliance on ‘any transcendent pre-determination’ (Marston et al. 2005, 422). This is achieved thanks to a flat (as opposed to horizontal) ontology that discards ‘the centering essentialism that infuses not only the up-down vertical imaginary but also the radiating (out from here) spatiality of horizontality’ (2005, 422). Here flat ontology refers to complex, emergent spatial relations, self-organization and ontogenesis.

This framework also moves away from the ‘liberalist trajectories’ that fetishize flows, freedom of movement and ‘absolute deterritorialization’ at larger abstract scales that are present in some sociological and geographic theories inspired by Deleuze and actor-network theories. In contra-distinction, the geographical application of flat ontology emphasizes the assemblages constructed out of composition/decomposition, differential relations and emergent events and how these result in both systemic orderings (including hierarchies) and open-ended events (akin to de Landa’s limiting and enabling aspects). One conclusion is that ‘overcoming the limits of globalizing ontologies requires sustained attention to the intimate and divergent relations between bodies, objects, orders and spaces’ – that is, to the processes by which assemblages are formed, again with de Landa; for this, they propose to invent ‘new spatial concepts that linger upon the singularities and materialities of space’, avoiding the predetermination of both hierarchies and boundlessness (2005, 424). In this flat alternative, ‘sites’ are reconceptualized as contexts for event-relations in terms of people’s activities. Sites become ‘an emergent property of its interacting human and non-human inhabitants’; they are manifolds that do not precede the interactive processes that assemble them, calling for

a processual thought aimed at the related effects and affects of its n-connections. That is, we can talk about the existence of a given site only insofar as we can follow the interactive practices through their localized connections. (2005, 425)

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 globalocentric thinking, with their emphasis on ‘larger forces’, hierarchies, determination and rigid structures. In this newer vision, entities are seen as made up of always unfolding intermeshed sites. To paraphrase

Trans Inst Br Geogr NS 32 106–111 2007
ISSN 0020-2754 © 2007 The Author.
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a well-known work (Gibson-Graham 1996), flat approaches spell out the end of globalization (as we knew it). To the disempowering of place and social agency embedded in globalocentric thinking, these approaches respond with a new plethora of political possibilities (Gibson-Graham 2006). Some of these possibilities are being tapped into by social movements, and even by individuals seeking to become new kinds of subjects of place and space. Today, it could be argued, a good part of what movements do is precisely to enact a politics of the virtual so that other social/natural/spatial/cultural configurations might become possible (for a more extended exploration of these concepts when applied to social movements see Escobar and Osterweil forthcoming).

Open networks and distributed control

Let me now add a second source for contextualizing ‘Human geography without scale’ within other trends in social theory. Building on the field of biological computing, Tiziana Terranova adds useful elements to the conceptualization of networks as self-organizing systems which engender emergent behaviour. For her, networks can be thought of in terms of ‘abstract machines of soft control – a diagram of power that takes as its operational field the productive capacities of the hyperconnected many’ (2004, 100; emphasis added). Social phenomena are seen as the outcome of a multitude of molecular, semi-ordered interactions between large populations of elements. Individual users become part of a vast network culture – of the ‘the space-time of the swerve’, which may lead to emergence (2004, 117). These systems only allow for soft control (as in cellular automata models); it is from this perspective that Terranova’s definition of network (‘the least structured organization that can be said to have any structure at all’, 2004, 118) makes sense. The open network (such as the Internet or network of networks)

is a global and large realization of the liquid state that pushes to the limits the capacity of control of mechanisms effectively to mould the rules and select the aims. (2004, 118)

This network culture emphasizes distributed/autonomous forms of organization rather than direct control. In short:

The biological turn is, as we have seen, not only a new approach to computation, but it also aspires to offer a social technology of control able to explain and replicate not only the collective behavior of distributed networks such as the internet, but also the complex and unpredictable patterns of contemporary informational capitalism. . . . The biological turn thus seems to extend from computing itself towards a more general conceptual approach to understanding the dynamic behavior of the internet, network culture, milieus of innovation and contemporary ‘deregulated markets’ – that is of all social, technical and economic structures that are characterized by a distributed and dynamic interaction of large numbers of entities with no central controller in charge. (Terranova 2004, 121)

This applies to many social phenomena that can be studied under the rubric of social emergence, from markets to social movements. It marks a sharp contrast to concepts of control based on Taylorism, classic cybernetics and governmentality, even if these have by no means completely disappeared. Similar to de Landa, Terranova sees pros and cons in this situation; on the downside the multitude/mass cannot be made to unite under any common cause, and the space of a network culture is that of permanent dissonance; yet the benefits in terms of opportunities for self-organization and experimentation based on horizontal and diffuse communication (again, as in the case of many social movements) are clear. In the best of cases, the simultaneous tendencies to diverge and separate, on the one hand, and converge and join, on the other, shown by networked movements might lead to

a common passion giving rise to a distributed movement able to displace the limits and terms within which the political constitution of the future is played out. (2004, 156)

The logic of distributed networks thus amounts to a different logic of the political, as a number of social movement observers are pointing out. In addition, and akin to de Landa and Marston et al., Terranova envisions a cultural politics of the virtual, understood as the opening up of the real to the action of forces that may actualize the virtual in different ways. To sum up, a number of theories of networks of the past two decades have tried to make different sense of the contemporary logic of the social and the political. The trends based on flat alternatives, self-organization and complexity articulate notions from the perspective of an ensemble of new logics operating at the levels of ontology, the social and
the political. 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. Does this 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’? De Landa, as we have seen, does hold on to some notion of scale, albeit significantly transformed. More a process and a set of mechanisms of connection than a nested verticality, he sees ‘differently-scale social assemblages’ as individual singularities with no predetermined structures linking them up. Does this notion avoid the ontological verticality of established views of scale? Do ‘embedded assemblages’ (de Landa) amount to a manifold of sites which are themselves composed as a manifold (Marston et al.), whether with emergent and adaptive properties or not? 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? 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 multi-directionally and unfolding non-linearly’ (Marston et al. 2005, 26)? These are a few of the questions that emerged for me as I placed this important argument in the context of some other trends in theory and political practice.

Note

1 De Landa (2005) is a completed draft book manuscript but still work in progress. I have chosen to reference this work according to the chapter in question, followed by a page number that corresponds to a single space printout with a 12 point font.

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