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Manuel De Landa
Assemblage Theory, Edinburgh, Edinburg University Press, 2016, pp. 198

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Assemblage Theory is the most recent effort of Manuel DeLanda. It accounts his own reframing of Gilles Deleuze and Felix Guattari's work. The book was published in 2016 as part of a series put out by Edinburgh University Press, which has hosted the debate on the "Speculative Realism", since the seminal conference held in 2007 at Goldsmiths College in London on the topic.

Delanda was fully committed with this intellectual challenge against the post-modern linguistic turn in humanities and for banishing heuristic textualism (Bryant, Srnicek and Harman 2011). An intense intellectual dialogue with the authors of *Thousand Plateaus* has opened up significant insights into sociological thought and for STS scholars, since the publication of DeLanda's *A Thousand Years of Nonlinear History* (1997).

"*Agencement*" is a concept at the core of the argument explored in the current book. "Assemblage", as admitted by the author himself, is a slippery linguistic solution, which was used to substitute the illustrious French word with an Anglophone one. Indeed, "assemblage" is intended as both the process and the outcome of a connection, that is to say a *multiplicity* of *heterogeneous* entities interrelated by *symbiotic* liaisons. Assemblage is the pattern of a flat ontological plane consistent with a non-reductionist account of reality and overcoming the conceptualization of

society as a self-sufficient whole.

The first chapter clearly addresses this point. Both micro and macro reductionism, respectively detected within phenomenological subject-oriented sociology and with that establishing structured paths and roles of actors, are contested. Even if this appears to be a very hurried critique towards too vague sociological approaches, the proposal to focus on exteriority (again a concept taken from Deleuze) is intriguing. Indeed, the external relationship between the parts, which constitute emergent social aggregates are reversible relationships that never crystallize the reduction of the parts to the whole and vice-versa. DeLanda provides the readers with an example in order to make this argument on exteriority explicit. When talking about how authority and legitimacy work in organizations, he writes (p. 12):

Nevertheless, and however centralised and despotic an organization may be, its members remain ultimately separable from it, their actual degree of autonomy depending on contingent factors [...]. It is this type of irreducible social whole produced by relation of exteriority, a whole that does not totalize its parts [...]. We can refer to these social wholes as "assemblages".

These assemblages, he continues, are emergent, immanent and contingent as the properties they express. Thus, there is no room for an "essence" of the assemblages that are individual, since the individuals are the parts that constitute the whole. The reference to the individuality clarify that all the entities at every scale (from *individual* persons to *individual* planet systems) are unique, historical aggregates. At first sight, it can be said that this point sounds controversial for those sociologists who endorse the added value of the comparative method in order to unfold the same "type" of assemblages. At the same time, the argument on individuality does not completely deny the possibility of comparison between assemblages, but invite one to take seriously in consideration historical and geographical differences. Fernand Braudel's work is quoted in order to reject the reification of heuristic models in favour of a modular scheme provided for socio-economic phenomena. In doing so, the famous *set of sets* is translated in aggregates of *individual* infrastructures, accountability techniques, situated spaces of exchange, temporal repetition of habits, traders, clients at different levels (from the cities to the international flows). The aim is to unravel what we usually put aside as general wholes: the State and the Market. DeLanda emphasizes the urgency to dedicate a specific commitment to the understanding of the production and maintenance of assemblages more than to the explanation of genuine causes of social wholes. This is not the only point of contact with a pragmatic sociology sensitivity.

Moreover, the way DeLanda conceptualizes the stabilization of assemblages leads to insights into the social sciences. In this case, the question is related to the processes that allows an individual aggregate being

stable and legitimate. The parameters, which are used to address the problem include both the degree of territorialisation/deterritorialisation and that of coding/decoding. As usual, the vocabulary is directly taken from Deleuze and Guattari in order to depict either the homogeneity of an assemblage or the conflicts between its parts. While the first couple of concepts are intended to address how singularity is stabilized in time and place, the second couple makes reference to "the role played by special expressive components in an assemblage in fixing the identity of a whole" (p. 22). It is interesting how DeLanda uses this meta-vocabulary to expose the "*imperialist pretension*" of the linguistic turn in humanities. The figured, self-consistency of language in respect to material realities are the ingredients of that representationalist epistemology which several leading STS scholars have contested from different theoretical perspectives (Latour 2004; Barad 2007). In chapter two, this *liason* is made more explicit through the performative argument, shifting from a linguistic to an ontological realm. Assemblages are considered, coherently with some Actor-Network Theory's assertions, performed by the entities that both constitute and affect them. A point of divergence seems to arise from the issue of relationality with respect to performativity dynamics, but we will deal with this later.

DeLanda insists several times on another *vexata quaestio*: the micro and macro analytical levels. A flat ontology, even flexible and scalable in terms of *assemblage of assemblages*, cannot be consistent with any form of analytical reductionism. This is why even Foucault and Deleuze are considered too worried about a social "totality", the first conceptualizing the pervasive "disciplinary institutions", the latter postulating the level of the "social field". However, the main target of the controversy seems to be Marx and his scientific-political heritage. Capitalism, as a whole, and the reification of those generalities, on which the thinking of the left still remains tied up, are, of course, criticized. The message of DeLanda is clear. Revolution can affect only partial, specific and heterogeneous assemblages that are just parts of a mind-independent reality. So, the claim of the ultimate dictatorship of the proletariat is "diminished" here to a more pragmatic and situated process of social change.

In the third chapter, an account of the evolution of the army and weapons is the narrative pretext to clarify how to reconstruct and unfold assemblages of assemblages. The interplay between the material/expressive dimensions, territorialisation/deterritorialization dynamics, and the changing in codes and parameters are addressed here. Within a complex conceptual framework, the distinction between properties and capacities is also displayed. This has been a pivotal point of reasoning since the first elaboration of Assemblage Theory. While properties are the proof of the irreducibility of entities, capacities are enacted when assemblages perform and are performed by the entities involved. As Graham Harman, the editor of the "Speculative Realism" book series noted,

the emphasis on capacities, which are actualized when relationality occurs between entities, seems to be risky in respect to the very realism of the ontology DeLanda deals with (Harman 2008, p. 378). As said, relationality constitutes a sensitive point within DeLanda's construction.

The second part of the book is centred on the heuristics of scientific fields, which means the distance between knowledge procedures (axiomatic versus inductive logic) and phenomena under scrutiny. These fields are treated as assemblages of assemblages. The heuristic of chemistry, for instance, is accounted in terms of an historical process of reterritorialization of its domain through the Periodic Table. Once again, the *cartographic* discussion of Delanda is quite close to those STS scholars who, in the last 20 years, have been committed to observing scientific laboratories "in action", as well as in deconstructing reified generalities such as Science and Nature. However, in this part of the book it seems that any attempt of translation of the ontological stances in terms of sociological inquiry appears quite difficult. A kind of meta-reflection on concepts, diagrams, and non-linear historical trajectories complicates the discussion on both how assemblages work and how these can be reconstructed. So, if "the objectivity of problems, their autonomy from their solutions, implies that what is problematic is not just what strikes our minds as being in need of explanation" (p. 178), what could be the role of a social scientist who feels inspired by this ontological framework? The book of Delanda does not provide a first-hand response, but instead, raises another helpful question: Which kind of political action stems from such a theoretical elaboration? I deem that the answer to the latter question sketches a hypothesis for the first one. If post-Marxism looks too materialistic, but not realistic enough in the eyes of DeLanda, I see that the work on *ontological politics* developed by John Law (2004), among other STS scholars, could be a fruitful path to follow. The *trait-d'union* is twofold: the real can be seen as ontologically multiple, while the method (i.e. the sociological one) can be seen as a partial and situated connection with the real.

If reality is not dependent on the mind of sociologists, and these minds cannot be reduced to the assemblages they take part in, sociologists are still not "innocent" and contribute to the making of reality (Law and Urry 2005, p. 404). This means that the speculative effort in unfolding reality is, in itself, a political action, even when it consists in the updated empiricism performed by Assemblage Theory.

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Benoît Godin and Dominique Vinck (eds.)
Critical Studies of Innovation. Alternative Approaches to the Pro-Innovation Bias, Cheltenham and Northampton, Edward Elgar, pp. 335

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Studying innovation, I found processes addressed as "innovations", which did not change anything, and processes, which had a relevant impact, with many consequences, which were not considered "innovations" (Mongili 2015). What do we make then of the concept of "innovation" and its incongruities?

The book *Critical Studies of Innovation. Alternative Approaches to the Pro-Innovation Bias* (*CSoI*), edited by Benoît Godin and Dominique Vinck, is an attempt to remediate the lack of analysis concerning such incongruities and, at the same time, it is a relevant effort to develop a new research program, in order to include innovation within a broader framework, avoiding an ideological use of this concept.

The main issues tackled by *CSoI* are: (a) the reconceptualization of the very notion of innovation, as it appears in scholarship and in public discourse; (b) the analysis of the phenomena, which are excluded from current concepts of innovation; (c) the development of a theoretical proposal, *NOvation*, aimed at a more comprehensive approach to socio-technical phenomena, both included and excluded from the current definition of innovation.

The book is organized in four parts containing a total of seventeen contributions, enclosed within Godin and Vink's "Introduction" and "Conclusion".

In the first part, inconsistencies of the usual ideas of innovation are analyzed. For instance, Godin's opening article reflects about the fact that imitation has no place in current analyses of innovation; whereas Tiago Brandão and Carolina Bagatolli's one analyzes the double bind between technoscience and politics focusing on the innovation policies in