

What Social Ontology for Social Web? An Assemblage Theory promoted

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ABSTRACT

In this paper, we propose to investigate three main social ontological schools – practice theory, assemblages theories and actor-network theory – to focus on the assemblage theory, and to clarify social ontology underlying the last one, for finally discussing its contribution in the debate on the philosophies of the (social)Web, in order to specify what social ontology for social web.

Keywords

Social ontology, assemblage theory, actor-network theory, practice theory, social web.

1. WHAT IS SOCIAL ONTOLOGY?

Online social interactions form the basis of much online activity including all what is actually important for people: expression of self, social networking, citizen participation, content sharing or, more concretely, all practical aspects of everyday life (online shopping, traveling, health, education, sport, jobs, religion...). As we referred more and more often to the Web as the *social* Web and more explicitly as a set of social relations that link people through the World Wide Web [1] it becomes necessary to go more thoroughly into what “social” is.

If we except the two main theoretical traditions in Social science, as Giddens [2] coins them - holist or objectivist theories like functionalism, systems theory and structuralism on one side, individualist or subjectivist theories like hermeneutic and the many interpretative theories (including rational action theory which must be treated separately, i.e. Coleman [3]) on the other side – the eighties are characterized by some attempt of overcoming the antinomies between ‘action’ (or agency) and ‘structure’, which existed in both sociological and philosophical literature. The notions of agency and structure presuppose one another and social theorists proposed different conceptualizations from the relation of the actor to the system which transcend this opposition. The new object of the social sciences becomes something which “stands in the middle”, neither the consciousness or experience of individual nor the societal totalities.

The question of what social reality is made of is not only an epistemic issue but also (and more deeply) an ontological one. The emergence of a vivid ontological debate around social ontology is a recent one, stimulate by the work of Margaret Gilbert [4], John Searle [5, 6], Barry Smith [7] or Pierre Livet and Frédéric Nef [8] in France. Nevertheless, we consider that

the questioning on the existing entities that the Social sciences speaks about must not be an exclusive privilege of some philosophers or sociologists who position mainly on social ontology, but also the fact of some social scientists or philosophers who wants to renew traditional ontological divisions for better addressing the duality agency-structure of the Social. In doing so, many other social scientists (but not so much) can be invited in the social ontological debate.

Seen like that, and if we willingly exclude for the present discussion the Phenomenologist or Interactionist perspectives¹ due to the limited ambition of this communication, three main frameworks with many variants seem to appear at that time (the eighties): practice theory, actor-network theory and what we propose to call an “assemblage theory”, following DeLanda [9]. What we propose to do is to recall these three schools, to focus on the assemblage theory, and to clarify social ontology underlying the last one, for finally discussing its contribution in the debate on the philosophies of the (social)Web.

To be fully honest humanistic, phenomenological or interactionist approaches, as well as the text-centered hermeneutic models tend to adopt what Quentin Meillassoux [10] call in prominent book correlationism². It is why we exclude them.

¹ Like Goffmanian microsociology, ethnomethodology or Conversation Analysis.

² By ‘correlationism’ he means “the idea according to which we only ever have access to the correlation between thinking and being, and never to either term considered apart from the other...[C]orrelationism [indexes] any current of thought which maintains the unsurpassable character of the correlation so defined. Consequently, it becomes possible to say that every philosophy which disavows naïve realism has become a variant of correlationism.” (Meillassoux, 2008, p. 5). He denounce the restrained nature (and inconsistency) of the premises of post-Kantian continental philosophy and propose a new, speculative way of philosophising, based on direct access to the external world obtained through mathematical reasoning. Correlationist position tacitly holds that we can’t really have experience of the world (or in knowledge of reality) independently of thought or language. The origins of this correlationist turn lie in Kant and his successors, from Husserl to Heidegger to Derrida.

We claim that it is valuable to pay anew attention to materialist and realist options in social theory and philosophy. So we propose to refer to some contemporary thinkers who perfectly know practice theory as well as actor-network theory or arrangement theories, and who make some effort to extricate social ontology from them. Doing so, we will be in a position to compare the differences between these positive ontologies around few features.

2. SOME MAIN SOCIAL ONTOLOGIES

We retain in this article three social ontologies: practice theory, assemblage theory and actor-network theory.

2.1 Practice Theory

Practice theory has its root in Ancient Greek where the word *praxis* referred to activity engaged in by free men. Aristotle held that there were three basic activities of man: *theoria*, *poiesis* and *praxis*. Three types of knowledge correspond to these three kinds of activities. Aristotle further divided practical knowledge into ethics, economics and politics. New practice theorists which revive Aristotelian conception of moral (and unlike some analytic or libertarians philosophers who try to generate moral consensus on the basis of an ideal of rationality) could be found in philosophical communitarianism, especially in the work of Alasdair MacIntyre (*After Virtue*) for who practices is the fabric of virtues or mainly Charles Taylor (*Sources of the Self*). They consider classical liberalism to be ontologically and epistemologically incoherent.

Marx himself also alluded to this concept in his *Theses on Feuerbach* when he stated that “The chief defect of all hitherto existing materialism (...) is that the thing, reality, sensuousness, is conceived only in the form of the object or of contemplation, but not as sensuous human activity, practice (...) All social life is essentially practical (...) Feuerbach, not satisfied with abstract thinking, wants contemplation; but he does not conceive sensuousness as practical, human-sensuous activity”. In continuity practice is often also a key entity in critical paradigms as in critical theory (“Frankfurt School” theorists like Jürgen Habermas, e.g his ‘Theory of Communicative Action’).

The third influential source of contemporary theory of practice is provided by Wittgenstein’s *Philosophical Investigations* [11]. Here he rejected the dominant semantic conception of language where “every word has a meaning. This meaning is correlated with the word. It is the object for which the word stands” (Augustine, Confessions, 1. 8.). The exact opposite of what semantic web seems to be! Isn’t it? On the contrary, pragmatic conception of language treats language as an activity. His argument is that meaning is use: words are not defined by reference to the objects they designate, nor by the mental representations one might associate with them, but by how they are used.

However, the term “theories of practice” was introduced by Sherry Ortner in the 1980s to refer to recent theorizing in Anthropology, and it is today use to cover the works of a diverse set of philosophers and social theorists [12, 13]. Antony Giddens cited above is himself well-known for his ‘theory of structuration’ and his holistic view of modern societies. Structuration theory tried to overcome the duality between agency and structure proposing “practice” as a ‘Rosetta stone’ to comprehend how a social practice both enables and constrains social action. Quite as the same time, Pierre Bourdieu in his

Outline of a Theory of Practice [14] tried to reconcile the influences of both external social structures and subjective experience on the individual. Michel Foucault [15] is obviously also quoted to belong to the practice camp. In the complementary vein, Michel de Certeau in *The Practice of Everyday Life* [16] develops a theory of the productive and consumptive activity inherent in everyday life. According to de Certeau, everyday life is distinctive from other practices of daily existence because it is repetitive and unconscious.

A ‘situated’ version of social practice theory was elaborated by Jean Lave [17] who pioneered the theories of situated cognition. She downsized the ‘structuralist view’ of practice still present in both Bourdieu and Giddens works by emphasizing that knowing is inseparable from doing and by arguing that all knowledge is situated in activity bound to social, cultural and physical contexts. So social practices virtually pre-exist from agent which are ‘participants’ or, as Andreas Reckwitz [18] coined, ‘carriers of the practice’ (p. 252). People are always embodied and embedded in ongoing historical processes which belong themselves to a socially and culturally structured world. Lave emphasizes the relational interdependence between persons, activity, and world. Social practice theory is thus a theory of relations. The notion of situated activity assumes that subjects, objects, lives, and worlds are made in their relations. “That is, the contexts of people’s lives aren’t merely containers or backdrops, nor are they simply whatever seems salient to immediate experience. Persons are always embodied, located uniquely in space and in their relations with other persons, things, practices, and institutional arrangements” ([19] p. 2).

Sharing some features with structurationism and some version of social constructivism, she quoted (Hart, 2002, p. 296) saying that: “instead of starting with a presumption of pre-existing bounded entities – whether spatial, social, or individual – a relational approach attends explicitly to ongoing *processes* of constitution. This processual understanding, in turn, is grounded in a theory of praxis that asserts the inseparability of situated practices and their associated meanings and powers relations”. So, as Foucault also brings to light, the situatedness of practice involves that living is embedded in political arrangements, hegemonic projects, and diffuse relations of power. But, as other relationisms (in particular Whitehead’ one), social practice theory (and more particularly Marxian ones) belongs surprisingly to a relational ontology camp as Hart and Lave reassert, most probably through Hegelian dialectic.

In the new ontological front open by recent disparagements of totality and individuality as basic element of the structure of social life, practice appears as a principal constitutive element – a particular type of entity – in social life³.

Many studies were done to try to systematize the specific principles and concepts of the various theories of the practice, which still does not form today a real unified theory. *The practice turn in contemporary theory* edited by Theodore R. Schatzki, Karen Knorr Cetina, and Eike von Savigny in 2001 [21] can be viewed as one of the cornerstone of the practice’

³ Meanwhile at the same time the concept of practice was virulently attack by Stephane Turner [20].

revival⁴. It is said that: “The practice approach ... is summed up in its forceful opposition to representational accounts: meaning and language, arising from and tied to continuous activity, cannot be telescoped into representations or mental contents, which themselves acquire the property of being about something by virtue of how people use and react to them” (p. 12). The complexity of practice concept lies in the fact that, as practice theory is absolutely a cultural theory ([18], p. 244), and, as such, *must* to evoke some symbolic stuffs and/or language, although it can't resort to any kind of representation or linguistic features to explain the shared understanding that emerge inside human coexistence, except in term of ‘practice’. It argues that even the most apparently “propositional” knowledge acquires meaning only in relation to fields of social and embodied practice.

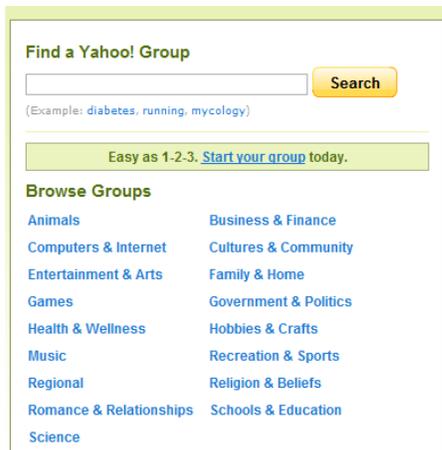


Figure 1. Sameness of practices on Yahoo’s site as Aristotle ‘praxis’ conception.⁵

So, if they are many conceptions of practice, we propose to consider Theodore Shatzki as one of the main philosopher of social sciences who is clearly the most ontological oriented, even if he doesn’t cover all practice theorists positions. According to him practice approaches promulgate a distinct social ontology: “the social is a field of embodied, materially interwoven practices centrally organized around shared practical understandings. This conception contrasts with accounts that privilege individuals, (inter)actions, language, signifying systems, the life world, institutions/roles, structures, or systems in defining the social” (Shatzki and al. 2001, p. 3).

2.2 Assemblage Theories

“Assemblage” is a term used by authors of philosophy and sciences to characterize to varying degrees the non-unified, non-hierarchical, non-linear, hybrid, flat, and complex nature of wholes. We refer here especially to the seminal metaphysic work of Whitehead [23], enrich by some postmodern philosophy stances in favour of apparatus [15] and ‘agencement’ [24], continued by new continental philosophers like Manuel DeLanda [9].

Foucault defines an “apparatus” following: “What I’m trying to single out with this term is, first and foremost, a thoroughly heterogeneous set of consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral, and philanthropic propositions – in short, the said as much as the unsaid. Such are the elements of the apparatus. *The apparatus itself is the network that can be established between these elements (...)* By the term “apparatus” I mean a kind of a formation, so to speak, that at a given historical moment has as its major function the response to an urgency. The apparatus therefore has a dominant strategic function (...) I said that the nature of an apparatus is essentially strategic, which means that we are speaking about a certain manipulation of relations of forces, either so as to develop them in a particular direction, or to block them, to stabilize them, and to utilize them. The apparatus is thus always inscribed into a play of power, but it is also always linked to certain limits of knowledge that arise from it and, to an equal degree, condition it. The apparatus is precisely this: a set of strategies of the relations of forces supporting, and supported by, certain types of knowledge” [15] (194-96).

Contrary to Foucault who seeks through the figure of the apparatus to make the idea of structure more dynamic (in structuralism sense), while preserving however the assumption of a certain homogeneity of the elements which are connected, Deleuze will build the differential of the forces which are embodied in assemblages starting from an assumption of radical heterogeneity of their components. “Structures are linked to conditions of homogeneity, but assemblages are not (...) What is an assemblage? It is a multiplicity which is made up of many heterogeneous terms and which establishes liaisons, relations between them (...) Thus, the assemblage’s only unity is that of co-functioning: it is a symbiosis, a “sympathy”. It is never filiations which are important, but alliances, alloys; these are not successions, lines of descent, but contagions, epidemics, the wind” [25] (p. 69).

The main (but crucial) difference among us is that as Foucault remains in a neo-structuralist posture where, in apparatus, entities in relation are linked by internal relations to form a whole as totality (relations of interiority), Deleuze calls ‘assemblages’ wholes characterized by *relations of exteriority* (DeLanda, 2006, p. 10). Thus, any social entity, on any scale (person, interaction, interpersonal network, City, State...) can be described as an assemblage who offers us a true alternative to organic totalities. In particular, any assemblage could be seen as resulting of an emergence starting from complex interactions between heterogeneous and autonomous components parts.

An assemblage refers therefore to the heterogeneous components which are ordered in any domain of entities, assemblage itself being the system of relations that can be established between these elements. Assemblages are non-essentialist (they are historically contingent actual entities – singular individuals - not instances of ideal forms) and non-totalizing phenomena’s (assemblages are not seamless totalities but collections of heterogeneous components that should be analyzed as such). An assemblage is a “multiplicity”, a whole made of elements (or parts). Unlike organic totalities an assemblage is a by-product of interactions between components, an emergence. Such multiplicity is a *structure of a possibility space* [26].

⁴ See also *Knowing in Organizations. A Practice-Based Approach* edited by D. Nicolini, S. Gherardi and D. Yanow in 2003 [22].

⁵ The only differences relate to ‘Computer and Internet’...

Assemblage's identity as possibility space may be "parameterized" (or restricted) along primary axes [27]. A first axis defines the variable roles a component may play: expressive or material. A 'territorializing'/'detritorializing' axis indicating processes in which a component is involved. These components are defined by relations of exteriority, i.e. their 'role' within a larger assemblage is not what defines them (this would be a relation of interiority). This means that a component is self-subsistent and may be 'unplugged' from one assemblage and 'plugged' into another without losing its identity. Whereas in organic totality the linkages between its components form *logically* necessary relations which make it what whole it is, in an assemblage these relations may be only *contingently* obligatory. This second axis specifies the stability of an assemblage according to the state of its boundaries (sharp and fixed or fuzzy and fluctuating) and the degree of internal homogeneity of its components. The degree of mobility (behavioral factors) of an assemblage may also determine its identity. A third axis defines processes in which specialized information constraints intervene in 'coding'/'decoding' the assemblage. A high degree of territorialization and codification means for an assemblage a weak ability to change. And vice versa an assemblage may be said (relatively or absolutely) decoded and detrterritorialized if it is able to decontextualize a set of relations that partially fixed it (and, thus, destabilized it), rendering them virtual (immanent) and preparing them for more distant actualizations (like communication technology does). Thus the parts of an assemblage are analyzable and assemblage itself has irreducible properties to its parts, without being a 'totality'.

Assemblages are also defined by their tendencies and capacities [27]. Tendencies can make the properties of a whole vary, as when a seed is growing up and changes its own identity, becoming a young plant: here the tendency of any seed is to grow (if nothing prevents it). On the other hand, capacities make a whole exhibit aspects of their identity that were previously hidden, as when an apparently neutral plant turns out to possess unexpected medicinal powers. But tendencies and capacities cannot be listed before they appear due to the relationship between entities component the whole and the all different ways in which they can be affected and by affected each other's and by other wholes.

Assemblage theory makes it also possible to position social entities on all scales, from sub-individual to transnational, making the problem of the link between micro- and macro-levels of reality non relevant in this 'flat ontology' perspective. Finally, assemblages necessarily exist in heterogeneous populations, which form their context. The relationship between an assemblage and its components is complex and non-linear: assemblages are formed and affected by heterogeneous populations of lower-level assemblages, but may also act back upon these components, imposing restraints or adaptations in them.

2.3 Actor-Network Theory

Actor-network theory is a recent approach to social theory which originated in the field of science studies. It is known for its controversial insistence on the agency of nonhumans and more generally for claiming the introduction of the too often neglected objects in social sciences. Enlarging the list of workable entities allows envisioning rethinking the old question of blend or alliance among entities with new fresh eyes. Actor-

network theory tries to explain how material-semiotic and / or actors-objects networks come together to act as a whole.

Latour pushes thus the concept of assemblage to the limit in the Actor-Network Theory [28]. In "*Irreductions*" [29] Latour provides the ontological basis for what has become known as "actor-network theory". Here, an active entity (an agent or actant) is defined neither by itself (identity, essence) nor by its relations (its network). This apparent paradox is possible because the question of the actors and their network is always empirically untied, during trials in which agents, and mediations on which they rely on, operate translations enabling them at the same time (or not) to enter in relation, and to be defined as acting individual and collective entities. The dynamic "mediation-translation-trial" associates (according to dimensions which are themselves heterogeneous) and stabilizes an initial plurality of heterogeneous entities according to a certain trajectory (to go further, see participation).

3. WHAT ARE THE MAIN FEATURES FOR SOCIAL ONTOLOGY?

We try to propose some taxonomy of philosophers in order to see more clearly in some ontological statements, based on a free reading of Harman lecture [30, 31, 32], because he is a sagacious analyst of the current ontological situation.

Harman sets out to develop what he calls an *object-oriented philosophy* (OOP). Taking the tool-analysis as the momentum in twentieth-century philosophy, Harman finds in Heidegger the roots of metaphysics which place the 'things' at the center of reality, like many Heideggerian philosophers (ie Stiegler among many others). Although he considers phenomenology to be deficient in that it subordinates the independent life of objects to our (human) access to them (position closed to Quentin Meillassoux's correlationism). Against the Kantian tradition, his object-oriented philosophy considers the neglected real life of objects to be a 'line of flight' for a new 'speculative metaphysics' [33]. It is possible to pair Whitehead and Latour as object-oriented philosophers according to Harman. The two of them are philosophers of concrete, actual and individual entities (actual entity or actual occasion for Whitehead and 'actant' for Latour⁶). But Harman breaks up at the same time from Whitehead and Latour on the definition of his object ontology. According to him, Whitehead turns entities into clusters of relations, while he holds that *only a non-relational model of object* is capable of accounting for both the transient and enduring faces of reality (Harman, 2011 b., p. 292). Focus on becoming (as well as Whitehead, like Deleuze besides in the current fashion) is only possible with a non-relational ontology (as opposed to what Whitehead or Deleuze would however propose). Compared to the question of becoming only, object oriented philosophy is thus distinguished also from the philosophy of Deleuze, where there is no place for concrete entities⁷. And by rebounds, Deleuze would not be Whiteheadian!

But it is not possible to accord Latour and Harman because Harman [31] promotes a dual category of objects (real objects

⁶ It is perhaps insubstantial to qualify Whitehead of philosopher of the process like Rescher [34] does it.

⁷ Although bridging between Whitehead and Deleuze was established by Isabelle Stengers.

and sensual objects or intentional objects) completely antagonistic from ‘the flat ontology’ of Bruno Latour (as Hartman admits in *Prince of Networks: Bruno Latour and Metaphysics* [30]). And, as we have previously said, Harman excludes Whitehead because the latter treat individual things as bundles of relations. Finally Harman’s object-oriented position is the only one among other Speculative Realists that might be called *both* Heideggerian and Whiteheadian⁸.

Contrary to appearances the link between Whitehead and Deleuze is not so evident: the core entity of Whitehead ontology is the ‘actual entity’ or concrete individual⁹ (or ‘actants’ as Latour calls it to denote human and non-human actors) whereas entities or actors are not the core of reality nor for Deleuze or any other ‘virtualists’, the first of which Bergson. Bergson avoids breaking reality into discrete states. It is the same for Simondon which presupposes a ‘pre-individual’ dimension of any reality (Simondon conceived of “pre-individual fields” as the funds making individuation itself possible). And for Manuel DeLanda there is always what it is called a ‘space of possibility’ [27] deeper than any actualized individual. Deleuze refers to as a *diagram*, a set of universal singularities (they more or less represent *ideal types* in Max Weber terms, but surely not *essences*) that would structure the space of possibilities (or multiplicity¹⁰) associated with the assemblage. Deleuze defines a diagram as a display of relations of force, or of a distribution of capacities to affect and be affected [9]. To conclude on this point let us say that some thinkers take individual entities as primary (Whitehead, Latour, Harman) whereas some others view them as derivative (Bergson, Simondon, Deleuze¹¹ or DeLanda).

Whiteheadian ‘actual entities’ are not a durable substance (they lies behind their accidents, qualities or relations like in tropes ‘view promoted by Livet and Nef [8] because they perpetually and instantly perish and be transformed (if they succeed in binding to or prehend other entities) to new actual entities. The same holds for Latour: according to actor–network theory, such actor-networks are potentially transient, existing in a constant making and re-making. This means that relations need to be repeatedly “performed” or the network will dissolve.

⁸ Generally, Heideggerians (like Derrida) speak most about the “failures of presence” and not so much about inanimate relations without sentient observers (they are correlationist in some ways) whereas Whiteheadian (such as Latour) are relationalist but they are not attracted by the idea of a hidden reality concealed from all presence.

⁹ « Actual entity – also termed ‘actual occasion’ – are the final real things of which the world is made up” ([23], p. 18).

¹⁰ This is why it is not possible to equal multiplicity (Deleuze) and actor-network (Latour) as however many commentators of the two authors do it.

¹¹ Conversely Deleuze does not speak of the actualization of the virtual in terms of the “things”, but in terms of the “event”, where an event is inessential, unexpected anomalous, seemingly impossible from the current state of affairs, and therefore capable of opening up the future, making a difference, and changing the world. Every actualization of the virtual is an event [35].

	Whitehead	Deleuze	Latour	Schatzki	Livet & Nef	Harman
Object	yes	no	yes	no	no	yes
Relation	external	external	external	internal	internal	no
Virtuality	no?	yes	no	no?	yes	no
Context	no	no	no	yes	yes	no
Becoming	no?	yes	yes?	no?	no	yes

Figure 2. Some Social Ontologies candidates

On the side of the theories of the practice, in bond with arrangement theory, the things seem more complicated. Frequently practice theorists make a claim in favor of splitting reality in two (articulated) parts: activity (process of production¹²) and some social order which constitute a ‘context’ for activity: Structure and Agency for Giddens; Field and *Habitus* for Bourdieu; social order and situated practices for Lave, person’s identity embedded in a community for Taylor and so on.

Schatzki [37] (p. xi) characterizes thus social life or human coexistence primary by is grounding in something he called “the site of the social”. The social site is a specific context of human coexistence, the place where, and as part of which, social life inherently occurs. This site-context is composed of a mesh of orders¹³ and practices: “Orders are arrangements of entities (e.g., people, artifacts, things), whereas practices are organized activities” (p. xi). Human coexistence thus transpires as and amid an elaborate, constantly evolving nexus of arranged things and organized activities. By doing that Schatzki argues in favor of *ontology of place* (embedding milieu or medium, closely

¹² Fischbach establishes in a convincing way filiation between Spinoza and Marx around the idea of *ontology of the productive activity* and of its primacy on any other authority. According to Marx and Engels, for individuals, the mode of production is “a definite form of expressing their life, a definite *mode of life* on their part. As individuals express their life, so they are. What they are, therefore, coincides with their production, both with *what* they produce and *how* they produce” [36]. This idea is articulated around a principle common to Spinoza and Marx, by whom this last breaks with the metaphysics of subjectivity suitable for the German idealism: the assertion of the integral inscription of the man in nature. History and Nature are link and form a unity because the natural conditions of the human production are as much its historical conditions. Affirming that, we can measure the cost of the correlationism which brings back, in a typically idealistic epic, the production process of reality to that of its human access. This retreat affects in particular the theory of the practice, in particular in its Wittgensteinian versions, even if the term ‘Form of life’ (German *Lebensform*) used by Ludwig Wittgenstein connotes the sociological, historical, linguistic, physiological, and behavioral determinants that comprise the matrix within which a given language has meaning.

¹³ What made us choose Schatzki among others practice theorists it is that the social order is theorized there as an assemblage. Through Schatzki’s work a link between practice and assemblage theories can be found. As he said: “As the master figure organizing this treatise’s account of the social, the distinction between arrangements and practices runs throughout the book” (p. xii).

related also to the ideas of Martin Heidegger¹⁴) and considers that analyzing the social through the concept of site offers several advantages over rival social ontological paths, especially individualist ontologies and also other anti-individualisms, above all ‘structuralists’ which suffer from a tendency toward hypostatization (fascination for abstract structures).

But the main confrontation is between what he calls himself “theories of arrangements” and “practice theories”. The term “arrangement” denotes a group of thinkers who takes arrangements of entities to be the principal compositional feature of social life. If the word “arrangements” does not appear as such, the relevant expressions are instead *apparatus* (or assemblages) (Foucault), *assemblages* (or arrangements) (Deleuze and Guattari) and *actor-networks* (Latour and Callon). Arrangements are “social things organized in configurations, where they hang together, determine one another via their connections, as combined both exert effects on other configurations of things and are transformed through the action of other configurations, and therewith constitute the setting and medium of human action, interaction, and coexistence” (p. xiii).

Almost two main differences cleaves the two sets of categories of social ontology: theories of arrangements are anchored in social *nominalism* which contends that sociality can be explained solely through the properties of and relations among the particular entities that compose social life whereas *contextualism* argues that these matters must be referred to a context, different from these entities, in which the latter exists. By “context” contextualists means a setting or backdrop that envelops and determines phenomena. Examples of contexts are economic systems, social structures, hierarchical distributions of power or capital, webs of meaning, discourses, and social practices. Social Nominalists on the contrary maintain that the character and transformation of arrangements are beholden to nothing but properties of and transactions among the components of arrangements. Individualist ontologies are nominalist in essence whereas ‘collectivist’ ontologies are not. Theories of arrangements creates new major division because they are nor individualist nor holistic ontologies.

A second ontological issue is nested around humanist and post-humanist confrontation. As humanism assumes numerous forms, humanism consist here in the claim that human agency is both a highest form of agency and have a greatest significance to life on earth. In contrast, post-humanism stresses the causal significance of entities other than humans for social life. It could join the non correlationist point of view in some ways. Here the boundary between practice theory and theories of arrangement is more porous because thinkers who underline the mediation of intellectual functioning by cultural tools (like Activity Theory or Distributed Cognition Theory but also actor-network theory with its intermediaries and mediators), even those who fall under the thesis of the ‘externalism’ in the

philosophy of mind¹⁵, can be classified sometimes in practice theories camp sometimes in theories of arrangements camp (Whiteheadian process ontology and actor-network theory for sure). The case of Activity Theory is complex because it does not belong to a practice theory current of thought, emphasizes the prominent roles of tools whereas considers that the distinction between subject and object lies in human's agency and, doing so, separated from its theoretical counterparts on the former point, namely Actor-Network Theory. Various post humanists analyses, including theories of arrangements as well as of practice, stress the causal significance of entities other than humans for social life and threaten to dissolve human agency into the actions of nonhuman entities. This is why the moving, the overlap or the ‘blurring’ of boundary between human and other entities form a radical distinction between social ontologies. Considering these two ontological issues Schatzki condemns the rejection of context and deplores the debunking of the human agency in post humanists works. This criterion meets the question of the correlationism.

A third issue distinguishes the different conceptions of social and relates to the nature of the order itself. Order is a basic dimension of any domain of entities, if we accept that things tend not to form random aggregates but on the contrary clusters of inter-related determinate stuff. Order is thus the basic disposition of a domain of entities, the way that things are laid out or hang together in that domain. Social order as connection may be figured out by many socio ontological conceptions: order as human ‘rational’ action, practices (as in practice’ version of cultural theory), social structure (holism) or emergence (like in virtual space of possibility modeled by DeLanda from Deleuze). But the main line of divide is between conceptions of order that claims that social life contains perduring and substantive orders and these, more and more numerous, for which organizations and orders are in reality precarious, unstable, and transitory beings. ‘Ordering’ [38] or ‘Organizing’ [39, 40] and many other conceptualizations designate by contrast the dynamic processes that contribute to the ‘making of’ any enterprise (to unique encounter on the street to a complete domain of activity). In this new conceptualization of orders interdependence or coordination are put ahead (whereas regularity or stability): the constraint consisting to be connected to exist subordinates the semantics of the totality and the identity of the entities to coordination as a dynamics and emergent process.

But in the race for various alternatives to well-defined and well-organized enduring wholes, contemporary practices theories, but above all assemblage theories, are on the cutting edge of social ontologies. The issue is that much social ontologies interpret interdependence as regularized ties, interchanges, or reciprocity. And regulated means no arbitrary, which equates order with generic state of affairs. Interdependence connotes also mutual dependence, which is the trademark of the ontological conceptions based on the idea of *internal relations* (that of Wittgenstein, if one believes Descombes [41] in his own version of structural holism. See also [42]): here element is always a part of some sort of whole as if this whole seems to be not fully

¹⁴ By triangulation we can advance that if practice’ ontology can be articulated with the ‘scaffolding’ of Heideggerian - Wittgensteinian ontology (except with regard to the role given to the constraint carried out by the social structure and conflicts in the social reproduction) by contrast it should not be truly compatible with an approach of Whiteheadian - Latourian ontology.

¹⁵ which hold that the mind is not only the result of what is going on inside the nervous system (or the brain) but also of what either occur or exist outside the subject, like Andy Clark or enactivism and embodied cognition.

integrated. Descombes calls the doctrine that he defends, derived from Wittgenstein, “anthropological holism” or “structural holism”. It is the view that meaning or thought of any kind inheres in a whole network of practices, institutions, mores, and “forms of life” and form a concept he calls ‘objective mind’ (in reference to Hegel). This is a holistic position because it maintains that meaning is only given in a totality rather than in a one-to-one relation between a representation and its object. The totality in question is one made up of the human institutions and practices that anthropologists study (illustrated by Yahoo Groups!), which differs from the sort of semantic holism generally discussed by cognitivists (and analytic style philosophers) around action or isolated inference. In holism the concept of an order, of a structure of relations and, above all, rules (in the normative rather than causal sense) is thus crucial but, as we will see further, renew a holistic tradition, that we find wrong, leading from Hegel (or Montesquieu) through Durkheim to functionalist and structural-functionalist period.

So the question of order cleaves two main different ontological assumptions: one which supposes internal relations and, in some ways, an idea of totality; and another which posit the doctrine of external relations and, as Meillassoux calls it, a ‘non-totalisable being’, a position where structure of the possible as such must necessarily be un-totalizable¹⁶. Practice theories are usually in favor of the doctrine of internal relations, the work of Livet and Nef too, whereas Deleuze and Guattari and Callon and Latour, although not belonging at all to the same camps according to the nominalist versus contextualist criterion or in virtue of their opposition on the virtual versus non virtual character of assemblages, meet to privilege the doctrines of the external relations.

So we argue in favor of social order as arrangements or assemblages, but not like theories of practice because they are contextualist (activity/context), pro-correlationist and thus non nominalist¹⁷. For example Schatzki maintain: “What a thing of social life is cannot be fixed. A garden rock, say, can suddenly become a paperweight and at a later moment a weapon (...). In general, both what things are and the state(s) of affairs a given configuration of things constitutes depend on the things involved and their properties in conjunction with how people act toward and understand them” (p. 16). Social nominalism contends that the character and transformation of sociality can be explained solely through the properties of and relations among the particular entities that compose social life (and not by

¹⁶ Like Badiou, Meillassoux argues that only those theories that — “ratify the non-All”, hence excluding any possible conceivability of a totality, can be defined as ontological, given that being *is* the non-totalisable.

¹⁷ Trope theory in metaphysics could be on a certain plan sympathetic with assemblage theory because it is a version of nominalism. Foucault, who is an eminent representative of the practice theory camps, was absolutely nominalist in his way of studying the forms of power. Power is not a concept, an institution or an abstract structure. “Power must be understood in the first instance as the multiplicity of force relations immanent in the sphere in which they operate and which constitute their own organization” (Foucault [43], *The History of Sexuality*, 1:92). Power thus designates the reticular force relation organization of particulars in the social. Indeed, the social is this reticular organization of particulars.

evoking some ‘context’, different from these entities). Social nominalism is common to Foucault, Deleuze and Guattari, Latour and, as tropes theory, to Livet and Nef (whereas they seem to defend the doctrine of internal relations!).

To conclude, challenging the individual as a basic entity of social ontology, Pierre Livet and Frederic Nef grant this place to the structures, precisely with the structural constraints, of our social activities. The authors decipher then how the interactions proceed, are carried out. And, also challenging the reduction of social reality to our mental constructions, they defend structural realism then: if they admit limiting their analysis to the field of the human activities, they are interested in the methods of the social interaction apart from the experiment that we have some, or how they remain with their investment by the men. They confer a share of virtual thus to them, besides their actuality. The social interactions are the starting point of the ontology of social of Livet and Nef. At the beginning of the analysis, there are not for them initially the individuals, but their relations, which they define as being ways of an element in another. The structure of an interaction becomes a network when the way makes it possible to return to its starting element, when it forms a loop. It happens nevertheless inevitably that breakdowns of network occur. The loop is then not buckled, when an actor is failing or when the environment of the activity prevents, and one does not return to the starting point, at the point of starting of the loop. To these breakdowns of network, Livet and Nef suggest the solution of the substitutability of the activities: In the couple of activities “hunting-gathering”, the two activities can replace one the other when one or the other does not succeed. This clarifies their choices to place the ‘processes’ at the center of social ontology (or ontology of the recursion process). Social reality is thus a phenomenon of potentiality: in an exchange, an activity is virtual whereas the other is current. The ontology of operations attempts to describe networks and virtual processes based on the substitutability of the activities. The substitutability of the activities within an exchange implies internal relations (e.g of a context, as in practice theories) and at the same times the assumption of virtual processes at the core of social operation (like assemblage theories). One can thus say that they choose the anti-correlationist option and the virtual one, very closed to DeLanda work, but privilege the internal relations, as practice theorists. In doing so, they can’t really think a whole as an emergent property from the interactions between components, as DeLanda do following Deleuze. And by making substantial the contents of the exchanges, they share the object-oriented philosophy, but in Harman’s version.

4. CONCLUSION

This paper is a contribution to elicit some strong theoretical claims about conceptual domain ontological options made regarding the empirical social domain. Its purpose is to initiate a novel approach to social ontology around the kind of entities could exist, what could be the relations between them and what could be the form and the properties of social processes. Thus, it investigate some contemporary ontological propositions who share some strong ‘air de famille’ but also profound differences. We hope that it will help researchers to make their social ontology more coherent.

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