Unfolding the social: quasi-actants, virtual theory, and the new empiricism of Bruno Latour

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Abstract

An important philosopher and anthropologist of science, Bruno Latour has recently outlined an ambitious programme for a new sociological empiricism, in continuation of his actor-network-theory (ANT). Interrogating issues of description, explanation and theoretical interpretation in this 'sociology of associations', we argue that certain internal tensions are manifest. While Latour's philosophy of social science demands an absolute abandonment of theory in all its forms, proposing instead to simply 'go on describing', he is in practice employing versions of common sense explanation and pragmatic-constructivist theory to make ends meet. The core of this tension, we claim, can be located in Latour's meta-theoretical commitments, in effect obscuring important ways in which human subjects employ things, effects and symbols beyond their simple, 'empirical' existence. To illustrate these claims, we deploy the example of how morality works in social life, and coin the term quasi-actant, in allusion to the Latourian actant, to better understand such processes. Our overall criticism of ANT is immanent, aiming at the re-introduction of what we dub 'virtual theory' into Latourian empiricism, thus further strengthening what remains one of the most promising contemporary attempts to reinvigorate the sociological enterprise.

1. Introduction: Latour between radical descriptivism and empirical obscurity

In his recent book-length introduction to Actor-Network Theory (ANT) – *Reassembling the Social* (2005) – French philosopher and anthropologist of science, Bruno Latour, has given his thinking a distinctly sociological bend. He now aligns his well-known analyses of sciences and technologies (eg Latour, 1988a; 1996a) with a general sociological programme, dubbed the 'sociology of associations', to distinguish it from the tradition of the 'sociology of the social' running from Durkheim through to Giddens, Habermas, and Bourdieu. Sociologists of the social, Latour want us to realize, mistakenly sought to *explain* the social by society: some social stuff (power, capital, norms) explains other social stuff (behaviours, practices, institutions). According to Latour, this is

all wrong: society explains nothing but must itself be explained. Or rather, employing case studies and narratives of particular events, social life must be carefully *described* in its concrete details (Latour, 2000). Latour, we note, is at the forefront of a new descriptive turn in sociology, raising fundamental challenges to the methods, theories, and public authority of the discipline (see Savage, 2009).

Revisiting the social with Latour leads to a complete redirection of sociology. All the well-known structures of society are suddenly no-where to be found; instead, we now find concrete relations of humans and non-humans acting together. Over here is the man-computer-spreadsheet-office hybrid that we used to call 'bureaucratic rationalism'; over there is the vibrating man-virus-laboratory relation that we used to call 'scientific fact', and so on. Sociology of associations entails a change of focus from 'society' (of humans) to 'collectives' (of humans and non-humans). And, symmetrically, its method changes as well: from theoretically interpreting human actions to obstinately 'following the actor' by tracking and mapping its multiple associations. Explanations, Latour stresses, are only for lazy sociologists, who want to jump straight to the 'big picture' without paying the price. This is why Latour is dead serious when he states (2005: 146) that 'the name of the game is to get back to empiricism'. While distinguishing his *second* empiricism of shape-shifting techno-scientific objects from the *first* empiricism of Locke and onwards, this only makes the task of description more laborious than anticipated. Latour's ideal remains one of descriptivist empiricism, indeed of a self-confessedly radical type: 'just go on describing' seems to be his new master-rule of sociological method (see Latour, 2005: 110ff).

In this article, we want to engage in a critical, but fundamentally sympathetic, dialogue on Bruno Latour's empiricist take on sociological method, looking in particular at his version of the description-explanation-interpretation triad. Our engagement takes the new, hybrid relations between subjects and objects as its starting point. Put briefly, we fully agree to Latour's reworking of the (former) object-pole: if anything, Latour should be credited with turning objects as 'matters-of-fact' into uncertain and disputed 'matters-of-concern' (Latour, 1996a; 2000; 2002). Instead, our basic issue with Latour's sociological empiricism has to do with the (former) subject-pole: is the new quasi-subject really so constituted, we want to ask, as to lend itself to *full description*? Will not something crucial be lost in our view of inter-subjective social life if we just 'go on describing'? As we aim to show, raising these classic-sounding questions in relation to Latour will allow us to explore some less-frequently travelled paths for a more general renewal of sociological methodology.

To be specific, we are not seeking here to defend some version of the sociology of the social, nor some version of 'social constructivism', both consistently and convincingly criticised by Latour (eg 2000; 2005). Instead, we are engaging in immanent critique. In other words, while the stance we develop opens up a space for more theoretical interpretation than allowed for by ANT descriptivism, it is still, we believe, in full accordance with Latourian principles,

which it complements and strengthens. In this sense, we think of ourselves as *re*constructing, not *de*constructing, ANT. Needless to say, raising questions of descriptivism and inter-subjectivity in relation to Bruno Latour is difficult, since part of his metaphysical programme consists exactly in denying the independence of what-was-formerly-known-as 'the subjective' and 'the social'. Latour's is really a theory of 'inter-objectivity', not of inter-subjectivity (see Latour, 1996b). Unsurprisingly, this has given rise to criticisms: humanists (and Marxists) worry about the 'generalized symmetry' of humans and non-humans (eg Vandenberghe, 2002), while critical realists worry about the consequent collapse of the 'stratified ontology' separating the level of actors and the level of structures (eg Elder-Vass, 2008). These criticisms of ANT are to be expected, but they bear little resemblance to the methodological commitments we champion in this article.

Rather, our concerns start from the suspicion that Latour may not be symmetrical *enough* in his dealings with (quasi-) objects and subjects, paying much more attention to the former than the latter. Partly, this flaw can be traced genealogically in ANT: this theory has always been more concerned with redistributing our notions of objectivity, particularly in the techno-scientific realm, than with re-assembling subjectivity (eg Latour, 1987). What concerns us, then, is whether such 'bias' is acceptable, given the extension of ANT into a *general* sociology of associations? And if not, how methodological reconstruction can be achieved, while staying true to the basic framework of Latour's social ontology? To frame this discussion, Latour's concepts of folding and working will constitute our point of departure, allowing us to get to the crux of what is problematic in his radical descriptivism. Hidden in these concepts, we want to argue, is a certain meta-methodological problem, having to do with the ways in which Latour seems to be 'heterogenizing' *human* actants in lieu of stabilizing non-humans.

Our own suggestions can be seen as part of a larger 'metaphysics of the social', which stresses the crucial issue of empirical *obscurity*, as opposed to the difficulties which Latour already acknowledges. Empirical obscurity, we will argue, constitutes the basis on which certain forms of theory – which we end up calling 'virtual theory' – are much more essential to the practice of sociological inquiry than Latour seems to explicitly acknowledge. In this attempt to sharpen ANT methodology, without relapsing into sociology of the social, we will introduce the concept of *quasi-actants*, developed as an alternative (or a supplement) to Latour's notion of black-boxes. This distinction is symmetrical to that of empirical obscurity and difficulty: Latour's black-boxes constitute tightly packed piles of relations (eg IBM as a black-box of actant-networks), which can nonetheless potentially be '(re-)opened' for full description. Quasi-actants, on the contrary, 'erase their traces' as they work on the social, making full description impossible due to empirical obscurity.

Throughout the article, issues of morality (broadly understood) will function as our main 'empirical' reference point, anchoring the methodological reflections. In this respect, we do not wish to enter into specifically moral

theorizing, various philosophical approaches to morality, an exploration of the normative aspects of ANT, or anything of the like. We simply cling on to moral convictions as an important embodiment of something traditionally understood to involve human subjectivity, inter-subjective understandings, and so on. Moral convictions, we might argue, constitute a 'hard case' for Latour's sociology of associations, since his radical descriptivism will have to engage some rather ephemeral and intangible phenomena. Further, focusing on morality allows us to 'follow Latour himself', in that he has explicitly reflected on this topic in relation to his philosophy of technology on several occasions (1992; 1999; 2002). Following this path will allow us to position quasi-actants and virtual theory as important ingredients of a reconstructed ANT landscape – a landscape which, once reassembled, will provide fertile ground for the future invigoration of sociology.[1]

2. Fold, work, and description in Latour's social metaphysics

Taking the article on *Morality and Technology: The End of the Means* (2002) as a point of departure, we encounter one of the more consistent expositions of the concept of the fold in Latour's work.[2] Folding, in Latour's usage, denotes a type of acting that produces socio-technical relations, through the connecting (in a network-relational sense) of one place and time with another that it would otherwise not have been connected to (Latour, 2002: 251; see also Latour, 1996b: 239). As such, any technology, or socio-technical hybrid, can be seen as accumulations of folds, of layers and compilations, of detours and re-orderings. Latour gives the straightforward example of a hammer, which folds into it a number of different temporalities: ore from the birth of the universe, wood that goes back a hundred years or so, and the factory producing the hammer ten years ago. The same goes for places as well: the hammer connects such spatially distant places as South-American forests, German mines, the tools department of the store etc., locations that would never have been connected outside of this particular technology (Latour, 2002).

According to Latour, this is exactly the characteristic of technology: it reworks, or folds, differences in space, time, and agency in new ways, creating new associations, and hence new patterns of social relations. This is what, in *Reassembling the Social* (Latour, 2005), is called 'work of mediation', that is, the work of crafting new actants, new hybrids, and new events. A mediator, in Latour's parlance, is the opposite of an 'intermediary', something which simply transports the action of other entities, as implied for instance by notions of a hammer as a 'mere tool'. Nothing, in Latour's social ontology, is ever a 'mere tool': the hammer always modifies the intentions and goals of its human co-actant. Action, in short, is 'not a property of humans *but of an association of actants*' (Latour, 1999: 182; emphasis in original). Implicit in this is Latour's version of anti-reductionism, which replaces the idea of causal reduction with what (using a Foucauldian expression) could be called 'causal multiplication'

(see Olssen, 2008). In methodological ANT terms, causal multiplication is achieved by following, and hence unravelling, all the connections folded into an object – that is, by *unfolding* it. If we think of the hammer (or any other technology) as a black-box, folding is equivalent to the work of black-boxing (see Latour, 1999: 183f); while unfolding corresponds to the well-known ANT slogan of 'opening the black-box', that is, re-describing it in detail. The crucial point is that, to Latour, while this re-description may be *difficult*, it should be possible in principle.

Now, having established some conceptual premises, we get to a crucial point of Latour's work on morality and technology: his language of hybrids does not only concern acts traditionally viewed as 'object-centred', such as hammering in a nail, but is to be applied equally for acts traditionally viewed as moral or social. To use one of Latour's own famous examples, in the US context of conspicuous rates of hand weapon killings, it is neither 'guns' nor 'people' that 'kill people', but rather the hybrid 'citizen-gun' (see Latour, 1999: 176ff). Many sociologists, no doubt, would start searching for 'cultural' explanations here, thus missing the obvious role played by the availability of guns and their person-transforming capabilities. When, in *Reassembling the Social* (2005: 205ff), Latour talks of the 'circulation of subjectifiers', it is precisely this effect of (what used to be called) objects on (what used to be called) subjects he is aiming at. For this reason, morality is not something that can be reserved for human ends alone – indeed, no fundamental subject-object divide can be maintained (see, eg, Latour, 1999). Instead, Latour pushes a strong 'non-humanism' by arguing that 'without technological detour, the properly human cannot exist' (2002: 252). In this, rather than reducing subjects to the being of objects, Latour seems to be granting objects the becoming of subjects: the constant process of entering into new associations.[3]

However, this is exactly where our suspicion of asymmetry in Latour's methodology kicks in because, although he attempts to dissolve the subject-object divide into generalized symmetry, and although he hybridizes morality and technology, he seems one-sidedly interested in the *object folds and foldings* of society. In other words, he seems to have curiously little to say on how human moral convictions fold (quasi)-objects, that is, on *subject folds and foldings* (of itself, of other subjects, and of quasi-objects). Indeed, Latour defines human sociality in general by its ability to fold, or hybridize, itself into things, claiming that 'any time an interaction has temporal and spatial extension [ie is folded], it is because one has shared it with non-humans' (Latour, 1996b: 239; also Strum and Latour, 1987). Furthermore, as mentioned, Latour entertains the notion of dissolving the subject into circulations of subjectifiers; that is, of dissolving subjectivity into (quasi)-objectivity, not the inverse way around (Latour, 2005). What was supposed to be an object-subject-hybrid thus tends toward a different line of reasoning: the subject as object-object-hybrids. This is a tricky point, because in one sense Latour is right: also things contain morality, because human and non-human actants are inextricably bound up together. Consequently, our argument with Latour can be put

non-aggressively, by simply noting that compared to the folding of non-humans, Latour has little to say on *human* folds, including what consequences such foldings have for sociological methodology.[4] In a nutshell, while on the one hand dissolving the subject-object divide into hybrids, Latour seems on the other to be *heterogenizing* the (former) subject on behalf of the (former) object (see also Law, 2002). Or, put differently: to ground human folds in the folding of things.

On this point, we find it difficult to follow Latour. Moral convictions can hardly be described as mediated (in the Latourian sense) by technological things *alone*. To be fair, Latour does seem to acknowledge this point, stating that 'obviously, a person is not constituted solely in the act of grasping a tool' (2002: 253). Further, as if stating what is only common sense,[5] he goes on to say that 'of course, the moral law is in our hearts, but it is also in our apparatuses' (ibid.: 253). The problem is that Latour says very little about this 'heart', in which morality is presumably enfolded. Now, on whichever ontology we adopt, it seems persuasive to suggest that bodies (with its hearts, brains, and so on) contribute to morality, that they transports moral convictions from one place-time to another as a more-or-less (un-)conscious memory (see Watson, 1998).[6] Further, it seems reasonable to describe this human body-work as indeed a work of folding: our bodies fold moral 'choices' in the here-and-now, as up against childhood events, inter-personal relations, yesterdays' TV-shows, and so on – in quite the same way as do material objects. The implication of such an argument for sociological methodology, and particularly for the ability to fully *describe* such associations, is exactly what is at stake in our concept of the quasi-actant.

To explore these methodological consequences, however, we need first to look more closely at Latour's philosophy of science, in terms of how social science *works* in a performative sense. In his article on *The Politics of Explanation* (1988b), Latour distinguishes two fundamentally different ways of relating phenomena, A and B, in scientific practice. In the standard approach, A is used to correlate, predict, or comment on B; in the second approach, this very work of abolishing explanatory distance is itself taken as object, thus displaying the extended scientific work of making up explanations. To take an example, Latour's interest in statistics would have more to do with how statisticians work to dissolve, say, the empirical distance between education and income – by using questionnaires, indexes, constructing variables, and so on – than with the statistical relation between the two phenomena as such. Empirically, education is not 'like' income, but statistics works on both – eg by representing them in numbers – thereby making the latter predictable from the former. Statistics thus abolishes distance through a kind of interpretation, but by describing the work of the statisticians, the same distance can be fully displayed, unfolding the many translations. This is the sense in which Latour wants to move from explanation to description: from explanations of action-at-a-distance (eg how education influences income) to descriptions of work through *mediators* (eg statistical representations and other 'inscription

devices').[7] Indeed, failing to pay attention to mediators and instead inventing 'hidden' hyper-causes, modern-day sociologists, according to Latour, problematically create and maintain their 'Great Divides' between action and structure, micro and macro, cause and effect (Latour, 2005; see van Krieken, 2002; Schinkel, 2007).[8]

To sum up, by exploring this notion of social science as performative work, we can now clarify Latour's position on the issue of explanation versus description: in his new politics of sociological method, the former is simply to be dissolved into the latter. Work, in the Latourian methodological sense, is to create *and* display the folded (and often black-boxed) relations which make something 'explainable' by something else. The example of morality can now be resumed, because moral convictions too, just like statistics, on the one hand reduces, translates, and interprets situations. Robbery, for instance, is translated into an offence against justice, perhaps against the law of property, demanding imprisonment. In short, moral convictions *work*, in the Latourian sense. On the other hand, morality is itself a folded phenomenon: as argued, it is embedded in networks of bodies, institutions, and things.[9] Here, however, our methodological concern re-emerges. Whenever moral convictions, in analogy with the hammer, 'does something' in a given situation, it satisfies the Latourian definition of an actant. But can the foldings and workings of moral convictions be pursued, traced, mapped, in just the same way as that of the hammer? We might assume that moral life is not only more *difficult* to describe, as Latour would have it, but that it is constitutively *obscure* in its workings. Morality, we want to argue, 'erases its traces'; and, by analogy, so too does other intangible social phenomena like affects and beliefs.

In exploring how this claim forces us to rethink the Latourian position on description and explanation, let us first visit a related set of issues. Perhaps our reading of Latour so far has been too literal: perhaps Latour relies to a far greater extent than we have allowed for on 'common sense', and hence on the adequacy of common sense explanation? In the next section, we argue that indeed he does – only to continue by pointing to some of the unsafe footings of common sense.

3. Common sense explanation: Latour's unsafe ally

The argument so far is that Latour attempts to abolish theoretical explanations into descriptions of folding work. This position, however, can be further elaborated, by noting that Latour does not quite seem ready to abandon theory altogether: with ANT, he notes (2005: 220f), theory is 'a negative, empty, relativistic grid that allows us *not* to synthesize the ingredients of the social in the actors place'. While minimalist, Latour's 'relativistic grid' of theory may here be taken as his attempt to confront the circularity of the description-explanation conundrum. More precisely, Latour seems to implicitly be struggling with the familiar claim that theoretical interpretation is, in principle, the

fundamental condition for description, since social effects can never be perceived directly – only states of affairs can. For example, 'I will not learn from a No Smoking sign why some people obey it while many others ignore it' (Collins and Yearley, 1992: 318).[10] Observing that fewer people smoke in rooms with No-Smoking signs than in ones without would be a simple statement of facts; we never really *see* the chain of effective associations. The crucial point is that an effect, such as that of a No Smoking sign, not only cannot be established from the actant alone (as Collins and Yearley note), but neither from the actant *and* its surroundings taken together! Ultimately, the unfolding of social effects – or, in Latourian parlance, of chains of eventful mediation – is a question of interpretive explanations that can only be rendered *probable* by description. In social science practice, there is neither pure explanation nor pure description, only various 'hybrids' in-between.

This, however, is *not* how Latour positions his methodological attempt to dissolve the 'modernist' ontology of causes and effects into fully describable chains of mediation. Rather, in his own investigations, he manoeuvres by invoking a kind of (reconstructed) common sense thinking.[11] In most familiar, taken-for-granted contexts, descriptions can be made *sufficiently* detailed as to contain the necessary elements of explanation and interpretation within the limits of conventional reasonableness. Quite commonly, such description will take the shape of a 'followable' narrative, given that narration is the syntax of common sense explanation (Abbott, 2004: 33). Against this background, it comes as little surprise that Latour prefers a sociology of 'small histories' to one of grand abstractions (see Latour, 1996a); nor that his work on the transportation system *Aramis* adopts the stylistic genre of a detective story (see Austrin and Farnsworth, 2005). In various types of familiar settings – including familiar genres of narrative – further explicating the elements of 'theoretical' interpretation would quickly become banal. Here, it is worth noting that such everyday settings, filled with culturally coded and thus 'unnoticeable' interpretive procedures, was exactly what constituted the starting point of Garfinkel's ethno-methodological programme (see Bertilsson, 2004: 378); and that Latour is, in many ways, an explicit heir to Garfinkel's study of the common-sensual practices of actors in a variety of taken-for-granted social contexts (Garfinkel: the home; Latour: the laboratory). Where they differ, however, is on the question of method: Garfinkel thought that social codes could only be made visible (ie described) by deliberately *breaching* them; Latour, on the other hand, is content to simply 'follow the actors', seemingly believing that social codes are there on the surface, to be described directly.

The problem of description-versus-explanation does not, however, disappear this easily; in fact, it routinely sneaks back into Latour's own writings, albeit in ways unacknowledged by him. To make this point clearer, let us look briefly at another of Latour's analytical examples, this time co-written with Michel Callon. In writing about the strategies and actions of the Renault enterprise in developing their electric car, the authors at one point state (quite matter-of-factly) that 'Renault wants to remain autonomous and indivisible,

itself deciding what will be the social and technical future of the industrial world' (Callon and Latour, 1981: 290). Evidently, this quotation performs one of the oldest tricks of the sociology of the social: it connects (in a quite 'jumpy' way!) the economically constrained black-box of Renault with its response (action) to various outside pressures (commercial, political, technical, moral). This amounts to a common sense explanation, since an element of description is supplied with what appears to be 'reasonable' and 'self-evident' interpretation, this time relying on what we might call a 'generalized Machiavellianism' of power-maximizing and strategy-oriented action. However, again stating what is rather obvious: this interpretation is opposed by much available literature (theoretical and empirical) on the subject of why and how companies act the way they do.[12] An interpretative choice is being made, but it is not set out explicitly *as* a choice, only presented as something resembling *fact*.

Latour, we should stress, does occasionally acknowledge this point about the inevitability of theoretical interpretation, for instance when talking about the uncertainties and responsibilities of social scientific work (Latour, 2005: 127f). Still, he seems to consider it a banal point, not worthy of much attention (see Latour, 1988b). As we have tried to show with this small example, however, problems might run deeper than Latour wants to acknowledge: at stake is the inability to methodologically stratify the treatment of different levels of uncertainty in dealing with empirical observations; and hence ultimately of specifying what makes for a *good* description (see Savage, 2009). These limitations in methodological self-reflection become crucial, we believe, in the context of Latour's widened field of theoretical application of ANT into *all* of sociality, particular given his tendency to 'heterogenize' the folds of human actants. In the following section, we attempt to rectify the imbalance by way of the concept of quasi-actants. Put briefly, we want to argue that the social world cannot be *completely* reduced to its genealogy of concrete associations (at least not by the sociologist trying to reconstruct it), and that 'responsible description' thus requires a modified set of concepts from those of Latour's vocabulary. Again, however, it is important to stress that ours is a reconstruction, not a deconstruction, of Latourian ANT.

4. Quasi-actants: empirical difficulty versus obscurity

When dealing with a complex social phenomenon such as moral convictions, one analytical option – which Latour draws attention to in *Morality and Technology* (2002) – will be to reduce the phenomenon in question to its specific genealogy of relations (folds and work). This, however, seems only a theoretical option: in social practice, moral obligations amongst human actants are likely to foster a bewildering array of open-endedness, obscurity, and controversy. Further, reducing a phenomenon like morality to its specific genealogy would be to miss the crucial role that moral convictions come to play in social life, by becoming 'self-referential' in their performance and

reproduction. As soon as moral convictions are constructed in the minds and languages of human actants (including all the material folds this implies), one way of 'putting it to use' is to simply *refer* to it, in social interaction, as something valid or even universal. The same is true for collective representations such as 'British society', 'democracy', 'youth culture', and so on – in short, a great deal of the vocabulary of the sociology of the social so vehemently denied by Latour. All of these complex symbolic compounds have the *potential* to become what we will refer to as quasi-actants. The following exposition is meant to elaborate this concept, drawing on various intellectual resources all in the vicinity of Latour's own work – and hence to position the concept clearly in relation to his descriptivist methodology.

At various points, Latour comes close to acknowledging the phenomenon of quasi-actants. For instance, in *We Have Never Been Modern* (1993: 117), Latour refers to Deleuze and Guattari's *Anti-Oedipus* (2004a) through the notion of 'territories', which he contrasts to that of his own 'networks' (1993: 117). In Latour's paraphrase, the term territoriality becomes an inclusive allegory for all the invisible 'ethers' of 'society', all of the 'hidden social structures' that are to be conceptually dissolved into a network ontology. Deleuze and Guattari themselves, however, entertain a slightly different take on territoriality. A major point of their critical work is to show that, even though social territories (in the widest sense) may have no 'essential' or 'transcendent' existence, they nevertheless exercise considerable social power, since we are liable to constantly *employ* them socially. This is what *Anti-Oedipus* suggests: even though the Oedipus complex may be a fallacy – a neurosis disciplining the 'schizophrenic' nature of humans – it has come to encrypt us in Freudian triangles of mother, father, and child. Since, as Deleuze and Guattari notes (2004a: 76), 'we are forcibly confronted with Oedipus and castration', as analysts and social actors we need to confront this territorializing entity, living its own life in our heads, in psychology textbooks, and on the couches of psychoanalysts. In the language of *A Thousand Plateaus* (Deleuze and Guattari, 2004b: 11): movements of de- and re-territorialization are inextricably caught up in one another, and need to be analyzed as such.

Latour, however, shows rather little regard for analyzing the re-territorializing performances of specific social events. While he is right in noting that the social is not organized in 'societies', if we nevertheless employ society's various languages and 'enact' it *as such*, it will come to play a quasi-independent role (Deleuze and Guattari, 2004a: 101). Interestingly, what Deleuze and Guattari are pointing to here is close to the famous 'Thomas theorem' in classic symbolic interactionist sociology: 'if men define situations as real, they are real in their consequences' (Thomas and Thomas, 1928: 572). As a present-day heir to both Garfinkel's ethnomethodology and American pragmatism (see Latour, 2004b), Latour really *should* have no objections against this fundamentally 'performative' dictum. Even so, he has characteristically little to say about the meaning and consequences of

social-symbolic 'territorial' performances (like 'society' and 'moral convictions') in networking human actants. This is exactly the asymmetry we are pointing to, and trying to correct, through the concept of quasi-actants.

If actors keep 'defending' the territories, the structures, the social, the cultural, and so on – of what significance is it, then, that they 'are not there', according to Latour, if we still employ them, manage them, and thereby turn them into quasi-actants? The situation is parallel to that of Nietzsche, who famously proclaimed that 'God is dead'. Deleuze and Guattari reminds us that this point of Nietzsche does not entail that God will no longer play any role: 'what takes so long in coming *to consciousness* is the news that the death of God makes no difference *to the unconscious*' (2004a: 117; italics in original). To paraphrase on one of Latour's better-known claims (1993), and contra his own interpretation: 'that we realize that the world has never been modern may not make much difference to *our modernity*'. Latour's argument for leaving 'territoriality' (in the broad sense) behind in sociology must therefore, somehow, rest on the assumption that these powerful symbolic effects not only 'do not exist' – but that they do not exist *at all*. In other words, that they are not (or, no longer) employed and performed, once we have unfolded their genealogy of associations, showing that God, the Moral Imperatives, Oedipus, and so on, where never really prime essences of the social.

This, however, seems highly implausible. Arguably, it runs counter to the idea of genealogy as a question of power-inflicted historical constructions of subjectivities, rather than any search for 'origins' (see Foucault, 1984). Closer still to the phenomenon of moral convictions, Nietzsche (1997: 23) observed the following as to the socially 'hereditary' properties of such entities: 'when the habit of some [morally] distinguishing action is *inherited*, the thought that lies behind it is not inherited with it' (1997: 23). What is interesting to note is that, according to this line of reasoning, the work of producing moral distinctions is 'lost' or 'forgotten' in its transmissions (if it was ever perceived in the first place), but moral habits as such are not. We *ourselves*, as Deleuze and Guattari suggest, 'summon' moral convictions, and with them other social 'territories', but these constructions from then on come to play a performative and self-referential role in social life. In other words, the fact that moral convictions are not 'transcendental' does not imply that they do not exist *at all* – that bodies, symbolic language and so on, does not perceive and reproduce this obscure 'social unconscious'. This is what we want to convey through the notion of the quasi-actant.

Just like a premonition of Latour, Nietzsche (1999) proclaims that 'morality is constructed', fabricated in stinking workshops! But contrary to Latour, Nietzsche's intervention is meant to highlight how, at the same time, moral codes are awarded genuineness by human actants – they neglect its genealogy, thus providing it with a life, a (quasi-)actant-ship, that lies beyond the material-semiotic construction of it.[13] It is important to realize why raising these Nietszchean-Deleuzian (and symbolic interactionist) points in connection with Latour does not lead back to Durkheimian sociology of the social, but on

the contrary attempts to smooth out Latour's own asymmetry: society, moral convictions, group identities are not simply 'out there' – they are 'worked-out-there' by subject-object hybrids. Thus, while we indeed aim to level out some of Latour's inter-objectivist biases, we would still agree to his ontological point about the fundamental inseparability of minds, bodies, and symbols (and their quasi-subjects) from the material world (and its quasi-objects). However, it should also be clear why the work of quasi-actants is fundamentally distinct from the 'materialist' work on which Latour bases his second empiricism: the Latourian dictum to 'just go on describing' is in need of re-specification, because quasi-actants, such as moral folds, are *fundamentally obscure* – not just difficult to uncover.

Having stated this, it is symmetrically important to emphasize that the term quasi-actant is not just a metaphysical category, or for that matter a black-box for unexplainable empirical observations; on the contrary, the performative existence of quasi-actants can be demonstrated empirically without much trouble. Religious zeal, 'war on terror', neo-liberal ideologies, ethnic identities, moral-legal commandments (such as 'do not steal'), and so on, these are all partly quasi-actants – something that *acts* in social life with primary reference to itself. These quasi-actants obviously *also* form part of networks, just like a hammer. Quasi-actants such as moral-legal commandments, however, do not call attention to themselves simply as constructions – if that was the case, there would be no point in criticizing Latour – but rather as semiotic-material elements that, from here on, act *as if* they were 'transcendental', thus by reference to themselves in their performative impact on the social world (see Bertilsson, 2008). Simply put, these are the bases on which we interpret situations and judge other people's actions, enabling us to go on in social life. But these quasi-actants have no easily identifiable 'social form': unlike hammers or indeed human individuals, they exist only in and through continuous and collective employment.

Although quasi-actants will often embed human-centric concerns, however, this in itself does not lead into any reintroduction of Great Divides between subjects and objects. Quasi-actants, we note, *are* folded into things – and not only guns, No-Smoking signs, and speed bumps, but also constitutions, police forces, economic markets, and so on. All of these symbolic-material relations are amenable to description, Latourian style; what *cannot* be fully described, however, are the exact interpretive steps by which quasi-actants come to do particular work in specific social situations.

4.1. Notes on black boxes versus quasi-actants

As already noted, the concept of quasi-actant is meant as a supplement to Latour's notion of a black-box. Hence, at this stage, it is fitting to compare the two concepts – which, superficially, might resemble each other – in a direct way. By black-boxes, Latour (and Callon) refers to a set of stabilized relations; more specifically, in ANT language, 'an actor grows with the number

of relations he or she can put into black boxes' (Callon and Latour, 1981: 284f). Can 'society', we may ask, be said to be a 'black box' in this sense? Evidently, this would only be as an umbrella term covering a network of actants in concrete relations – hence the dictum that 'society explains nothing but must itself be explained'. But to actants somehow enrolled, in a network sense, into 'societies' through beliefs, practices, and socio-material relations, society enjoys a form of 'quasi-existence' – society quasi-acts on them as something they *relate to*. Indeed, as shorthands for relatively stable bundles of associations, Latour acknowledges the social existence of collective representations such as 'IBM', 'France', and 'lower-middle class' (see Latour, 2005: 11). However, contrary to these Latourian black-box examples – large-scale corporations, nation-states, social classes – the concept of quasi-actant is meant, in a positive sense, to encompass those very entities of collective social 'ether' renounced by his sociology: societies, moralities, identities, subjectivities. Further, compared to the mechanistic metaphor of the black-box, employing the concept of quasi-actant is, we believe, more conceptually appropriate in most standard social science settings, including those of companies and nations, where the very actant-ship of these intangible entities is at stake.

In particular, the concept of quasi-actant allows us to escape the dichotomous 'swing' between actants and black-boxes in Latour's semiotics-inspired social ontology. To illustrate this point, let us take up again the example of Latour and Callon (1981): Renault, in their view, is fundamentally still *just* a comprehensive network of concrete relations – shorter or longer, more or less stabile, more or less extended. The entire impetus of ANT would be to 're-open' this black-box and examine its constitutive relations. Against this backdrop of Latourian social ontology, while 'Renault' is certainly a black-box, deciding whether it is *also* and simultaneously an actant seems to be a somewhat arbitrary analytical procedure. On the one hand, as a black-boxed macro-entity, ANT highlights how 'Renault' is fundamentally a conglomerate of factories, employees, contracts, company cars, and so on. Nevertheless, as already noted, Latour and Callon seem to have no problem imputing (rather common-sense-like) actant-ship on this hybrid conglomerate, endowing it with quasi-intentions. This seems to us an unsatisfactory solution to classic issues of 'methodological individualism', based on an unresolved tension between semiotics and theoretical nominalism in Latour's writings. Fundamentally, it seems, at the level of social ontology, Latour-the-nominalist wants us to realize that 'Renault' is not a 'real' actant, but rather shorthand for an extensive black-boxed network. *Actors* may use 'Renault' as a semiotic actant in their speech-acts, but *Latour-the-analyst* must re-translate it into a black-box.

Contra this procedure, we emphasize how the concept of quasi-actants allows us to immediately grasp the way in which symbolic-material entities like Renault are invoked and employed variably in social life, often with great consequences. To give a simple example: on the stock exchange, exactly what

part(s) of 'Renault' will 'make a difference' in actor's economic calculations is obscure in empirical terms, enfolded as it is in an environment of rapid information turnover, rumours, and advanced mathematical modelling (see Knorr-Cetina and Brügger, 2002).[14] Here, talking about Renault as a quasi-actant seems much more adequate than the black-box metaphor. In other words, it is exactly Renault-as-symbolically-*enacted* – that is, as quasi-actant – which investors and financial speculators on the stock exchange refer to in their work and talk. So, indeed, Renault can be dissolved (by Latour) into contracts, employees etc., thus displaying its constitutive relations. But when someone, sometimes, to some extend, consciously or unconsciously, invokes Renault-as-one-actant, such a Latourian analysis would, by its nature, leave out important empirical realities.

By way of summing up, the methodological problem with Latourian descriptivism can thus be put more pointedly: he has left out a certain category of folds – those supported by the symbolic and performative powers of human actants – which are distinct from purely 'material' folds in terms of their social effects. The difference between black-boxes and quasi-actants lies, first, in the constitutively obscure origins of the latter, and second, in the putting to use of imaginary-symbolic objects, such as the external 'coming-into-being' of moral convictions, group identities, and so on. In short, folded subjectivities produce quasi-actants, to which Latour pays little attention. If one accepts this argument, it then becomes much harder to defend a pure common sense descriptivist position, since the influence of our experiences, of other actants' work on us, on later 'choices' ('moral' folds) constitute a different order of uncertainty and obscurity from that of things folding morality ('material' folds). Again, this argument does *not* entail any privileging of imaginary-symbolic actants in the explanatory efforts of social scientists – we are not regressing into some version of 'social constructivism'. Rather, in parallel to what Latour has already done for non-humans, turning them from matters-of-fact to matters-of-concern, our concept of quasi-actant simply performs a similar operation at the level of human actors.

We are now also in a position to briefly revisit Latour's before-mentioned attempts to 'heterogenize' humans into a circulation of subjectifiers (or 'plug-ins') (Latour, 2005: 207ff). True to his black-box line of reasoning, these concepts helpfully point to the concrete, material folds and work producing different kinds of 'generic' personalities, be it 'homo economicus' in economics textbooks, 'users of dishwashers' in technological guidelines, and so on. By using the language of subjectifiers, Latour is attempting to avoid another Great Divide, this time between psychology and sociology, the divide between intrinsic (person) and extrinsic (society). However, since – as we have argued – the empirical 'gap' of action execution is always constitutively obscure (rather than simply difficult to describe), too often Latour is forced to retreat into another one of his methodological dictums: 'if it leaves no visible trace, leave it blank'. To counter the limitations of this empiricist agnosticism, our concept of quasi-actant is designed, instead, to allow certain obscure forms of

social-symbolic 'objectifiers' – like moral concerns, identities, desires – to (re-)gain an explicit role in empirical inquiry, without fundamentally breaking with ANT social ontology.

A similar kind of argument can be made in relation to Latour's notion of 'panorama', set forth in *Reassembling the Social* (2005: 183ff) as a conceptual ANT innovation, denoting the way actors contextualize each other by symbolically invoking social wholes, such as 'globalization', in specific speech-acts. Like other aspects of the social territory, Latour stresses, panoramas should be documented in the specific: who is doing the projecting, by what media, towards which audience, and so on. This, we believe, is valuable and suggestive; however, it once again leaves unspecified just how the social analyst is supposed to fully *describe* the process whereby, as Latour notes (2005: 189), panoramas end up equipping actors with 'a desire for wholeness and centrality'. The continuous and collective enactment of such 'desires' for social meaning-wholes – whether moral convictions, group identities, or grand narratives of modernity – is simply not fully describable, since their social effects extend beyond their visible presence. In short, if we want to know what panoramas *do* as quasi-actants in social life, some level of interpretation is called for.[15]

The important point, in sum, is that whereas Latour's use of common sense description might have been acceptable when confined to studies of technoscience, it emerges as insufficiently attentive to quasi-actants at the moment when ANT is extended into the entire field of sociology. This line of criticism, evidently, serves to re-open questions of the proper use of theory in sociological inquiry, given that forms of interpretation (either common sense or theoretical) will inevitably influence the way social life is 'unfolded'. Space prevents us from pursuing this question fully; however, by way of drawing this article to its conclusion, we want to suggest what seems to us a promising way of 'hybridising' Latourian empiricism with theoretical work, in what we call virtual theory. In taking up this discussion, we again aim to stay true to fundamental tenets of ANT, this time related to the *advantages* of common sense description: that it stays attentive to the multifaceted folding of situated social actants. The question, of course, is how such empiricist attentiveness can be combined with a view to the obscurity of quasi-actants – a question, which seems to us to point beyond Latourian empiricism and into wider issues of contemporary sociological method.

5. Concluding reflections: re-folding theory into ANT empiricism?

In this article, we have explored ways in which Bruno Latour's newly formulated and comprehensive sociological programme – dubbed 'sociology of associations' (2005) – poses serious challenges of a meta-theoretical and methodological character. Setting forth his ANT agenda of redistributing our notions of 'objectivity' primarily within studies of science and technology,

Latour has shown comparatively little regard to the symmetrical processes through which 'subjectivity' works in 'objectifying' itself into various performances of socio-material reality. In short, while attempting to maintain a generalized symmetry between human and non-human actants, more often than not, Latour seems in practice to be 'heterogenizing' human subjectivities onto a background of materially stabilized, and technologically shaped, assemblages. This is nowhere more apparent than in Latour's analyses of how moral convictions are folded into material things like hammers and guns; here, his analyses leaves us short of understanding, let alone describing, how bodies, symbols, and subjective desires simultaneously contribute to the process of forging socio-technical effects.

While sympathetic to Latour's overall call for a sociology of associations – arguably one of the most exciting attempts in recent years of renewing the sociological enterprise from scratch – we take issue with his problematic reliance on common sense interpretation, embedded in the dictum to 'just go on describing'. Instead, we call attention to the irreplaceable role of empirical obscurity, encountered when describing ephemeral social phenomena such as moral codes, group identities, and desires that constitutively 'erase their traces' while acting on the social. We dub this phenomenon 'quasi-actants', showing how Latour's (second) empiricism fails to deal adequately with it, and how it might nonetheless be re-integrated into ANT. Here, the concept of quasi-actant works to supplement notions of black-boxes and panoramas. As pointed out, such a conceptual reconstruction of ANT symmetry simultaneously entails a rethinking of the description-explanation-interpretation conundrum, in particular creating space for more 'positive' contributions from particular forms of theory in the empiricist sociology envisaged by Latour.

On this concluding note, we believe our argument on Latour, empiricism, and quasi-actants carry more general consequences for on-going methodological debates in sociology, particularly in terms of how his promising notion of 'negative theory' might be made productive for sociological inquiry. Here, we agree with Latour's injunction that, if left unchecked, 'positive' social theory easily develops into a highly problematic way of silencing the voices of empirical actants (see Latour, 2005: 220ff). In an important analogy, Latour compares the discipline of sociology to that of topology, with the aim being to follow the actants through 'hills and valleys', instead of jumping between theoretical 'levels' such as those of actors (micro) and structures (macro), as portrayed in 'standard' social theory (Latour, 1983: 153ff). Taking this concern seriously, we nevertheless maintain that certain forms of theoretical interpretations are called for, when confronted with the empirical obscurities of quasi-actants. Hence, we want to suggest that one way of fruitfully re-folding sociological theory into ANT ontology is to think in terms of *virtual* theory. We end with some thoughts on this reconstructed ANT, and how it enables a more general recasting of core issues in sociological method.

With virtual theory, we follow Fraser (2006; 2009) in her sociological appropriation of this Deleuzian term, understood broadly as that dimension of the actual which is not directly observable – and which hence requires some work of conceptual abstraction.[16] The function of virtual theory would thus be to provide just enough conceptual mobility for the sociologist to 'go on describing', in the face of inerasable empirical obscurity in the social landscape. Rather than relying on common sense interpretation, and instead of the Latourian dictum to 'leave it blank' (that is, denying the problem), such a notion of theory implies an attempt to deal in explicit and reflected ways with the radical uncertainties implied by any description of social reality. By contrast to typological approaches to social theory – which seek to define general social essences and their causal connections – virtual theory entails an analytical commitment to remain sensitive to the dynamic, non-causal, and intensive patterns of relational social life (see DeLanda, 2002). At the same time, however, it also entails a commitment to move 'beyond' actual-states-of-affairs, by attending to the creative work involved in making connections between different levels of abstraction (Fraser, 2009). This 'beyond' is constituted by conceptual categories of *what could be*: both at ontological and immediate empirical levels, conceptual distinctions institute a crucial 'counterfactual' space for on-going work of re-interpretation in the social sciences.

Common sense and theory, on this account, are two degrees of the same process of inquiry: theory is common sense with a higher degree of explication and reflexivity about counterfactuals (see Abbott, 2004). Hence, virtual theory constitutes an opening for dealing with the difficulties accompanying obscure quasi-actants, such as those highlighted in this article: moral convictions, group identities, desires, and other imaginary-symbolic social performances. Taking the sophisticated analytical frame developed by Latour as conceptual baseline, the question for virtual theory in any piece of inquiry should thus be: what *further* conceptual work is required in order to *make sense* of this specific quasi-actant? (see Holbraad, 2004). Theory, here, is explicitly co-developed with empirical descriptions. In this sense, we are simply adding a positive value to the negative theory posited by Latour: in virtual shape, theory is a reflected way of dealing with the necessary choices entailed in giving any 'account' of the social world – and thereby of 'responsible' accounting as such (Fraser, 2006). In other words, when invoking theory, the ideal should be *to explicate the grid of uncertain possibilities* – not to act as a synthetic surrogate for silencing the multiplicity of empirical voices.

In practice, Latour's work acknowledges this point; at the level of meta-theory, however, he is limited by a strict version of descriptivism. This seems all the more curious when considering the fact that, among the few sociologists referenced positively by Latour, French neo-pragmatists Luc Boltanski and Laurent Thévenot can be said to exemplify exactly the notion of virtual theory set out here. In their work on the sociology of moral life (1991), Boltanski and Thévenot incorporate explicit elements of theoretical interpretation,

developed through a reading of classical philosophies of the common good, in combination with detailed inquiries into everyday instances of social conflict, justification and critique. In developing their 'justificatory regimes', Boltanski and Thévenot are *not* claiming these as latent 'causal structures', an underlying reality revealed by omnipotent sociologists. Indeed, their six regimes have no *actual* empirical existence, in the same sense that 'society' has no actual empirical existence. Instead, as analytical categories formatted by social scientists out of more-or-less coherent everyday grammars, what these 'virtual' regimes do is to *artificially* enhance empirical similarities and differences, reveal regularities across sites, explicate interpretations and possibilities, and assist in further social science reflection.

In short, the conceptual work of Boltanski and Thévenot – like creative and empirically sensitive conceptual work before them in sociology – function much like Latourian 'inscription devices' in furthering social science inquiry. Only they do so by encompassing high levels of *conceptual* abstraction, in making connections not only between formal political philosophy and everyday moral reasoning, but by explicating their own interpretive relation to those epistemic traditions that have shaped the moral objects under study (see Brown, 2010). In general terms, when treated as contingent quasi-actants, theoretical concepts serve to protect us from unfortunate intellectual folding-habits: like models, virtual theory institutionalizes a space for reflection on the 'coding' of empirical sense-data. Pure habit, after all, would rather work as a non-substantiated maintenance of taken-for-granted categories. In the final analysis, our notion of virtual theory thus corresponds to the meta-methodological argument sketched out in the beginning of this article: Latour's distinction between description and explanation is *itself* artificial, denying their necessary hybridisation.

We hope now to have shown how a simultaneous introduction of quasi-actants and virtual theory into an ANT social ontology leads us away from Latour's own empiricism, and towards something we might call a 'new interpretive descriptivism'. Here, quasi-actants introduce a fundamental uncertainty in any sociological description: one now has to explicitly choose to interpret the work of actants as *either* an employment of quasi-actants *or* as 'independent' mediation. Since this is a choice of interpretation, it can always be questioned in subsequent rounds of enfolding – and, contrary to the employment of black-boxes and panoramas in standard ANT, this choice is now forced out into the open. Virtual theory cannot tell us 'what we are looking for', but it can structure the evaluation of possibilities and uncertainties: 'what actually happened here?' is the meta-question that renders our reconstructed sociology of associations *accountable*. With quasi-actants and virtual theory, in short, we are not regressing into sociology of the social, but elaborating a more symmetrical symmetry than the one advocated by the sociological empiricism of Bruno Latour. This is why our criticism is strictly immanent: Latourian sociology of associations remains the most promising candidate in contemporary sociology for seriously addressing the core

problem of empirical obscurity, once it comes to methodological terms with its own Nietzschean, Deleuzian, and symbolic-interactionist legacies.

Notes

1 It is important to stress that ANT is a collective endeavour, encompassing – alongside Latour – the work of Michel Callon, John Law, and others. For the purpose of this article, we focus strictly on the version of ANT presented by Latour in *Reassembling the Social* (2005), as embodying his sociology of associations. Arguably, Latour's take on sociological methodology is subtly distinct from that of ANT co-founder John Law (eg 2002); however, exploring these relations is beyond the scope of this article.

2 The Leibnizian-Deleuzian lineage (or folding) of this term is not important here, since Latour develops the concept in his own idiosyncratic way. Latour refers to Deleuze's book on Leibniz, simply called *The Fold: Leibniz and the Baroque* (1993), adding that his usage of the concept of fold is 'less Leibnizian than Deleuze's' (Latour, 2002: 248).

3 'Being' and 'becoming' are heavily loaded philosophical terms, but here we simply employ them as illustrations of Latour's way of dealing with subjects and objects. Latour's own primary reference in this regards is Whitehead, and his processual ontology of events. See, eg, Latour, 1999: 152f. For a discussion of this philosophical lineage in Latour's work, see Fraser, 2006.

4 Characteristically, in the one article where Latour *does* take up the question of human folds directly, in speaking about the body (2004a), what interest him are the technological devices through which bodies learn to be affected (by things like smells). We return to Latour's concept of 'circulation of subjectifiers' in section 4.1.

5 In the next section, we dig deeper into Latour's problematic alliance with common sense explanations.

6 By 'hearts and brains' we are simply alluding to the work of bodies in mediating moral convictions, along lines suggested casually by Latour himself. We do not want to suggest that such convictions are essentially *in* or *of* these body-organs; like other quasi-actants, moral convictions are heterogeneous phenomena, constituted both bodily, symbolically, and materially. This will become clearer as the article proceeds.

7 'Inscription device' is one of the oldest terms of ANT, stemming from Latour's anthropology of science (eg Latour and Woolgar, 1979), and connoting the many (mostly technical) devices through which experimental matter (rats, chemical substances) are translated into notes, texts, or graphs.

8 Latour's (2005) criticism of existing sociological theory is all the more scathing, because it relates to his more general critiques of the 'Modern Constitution' and its Great Divides between Society and Nature (1993). Surprisingly, whereas his fellow ANT co-authors Michel Callon (economics) and John Law (sociology) have both taken up the topic of the performative impacts of social scientific work, Latour himself has written relatively little on this issue (but see Latour, 2004b). On our part, the example should not be perceived as an appeal for abandoning the use of statistics in sociology.

9 In the actor-network literature, a number of conceptual alternatives to networks have arisen over the years: Michel Callon (2005), for instance, now speaks of 'agencements' as collectives of human beings, institutions, technical devices, and so on, with specific heterogeneous actors taking their shape from such collective assemblages. Latour himself has suggested speaking of 'work-nets' rather than networks, to capture this sense of dynamic co-agencies. While important, however, these conceptual refinements are not crucial for us in establishing our point about quasi-actants.

10 While we refer to Collins and Yearley on this specific point, our general questioning of Latour's methodology bears only superficial resemblance to that expressed in the so-called 'epistemological chicken' debate (see also Callon and Latour, 1992).

11 Indeed, in his work on the *Politics of Nature* (2004b: 242), Latour is careful to restore the notion of common sense to epistemological glory: 'whereas it may be permissible to force good sense somewhat with venturesome arguments, it is always necessary to verify that one is finally rejoining common sense'.

12 So, depending on theoretical paradigm, other analysts might focus on how the employees of Renault identify socially with the company as a meaningful entity; how Renault as an organization is committed to values of techno-scientific progress and environmental protection; etc. etc.

13 Throughout his work on moral convictions, Nietzsche of course talks mainly of Christianity, with its chaste nuns and church fathers depicted – we might say – as an extended network of psychological resentment (see Nietzsche, 1997; 1999). Given that Latour has recently written extensively on Catholic faith, this provides an interesting area for exploring the limitations of his 'anti-transcendental' descriptivist approach (see Holbraad, 2004), clearly contrasting to that of Nietzsche. For a more systematic analysis of the Nietzschean legacy in Latour's work, see Bruun Jensen and Selinger, 2003.

14 One only has to think of the ongoing financial crisis to grasp some of the 'prodigious effects' produced by the obscurity of quasi-actants – in this case, the circulation of expected, that is, virtual profit.

15 Latour, on his part, primarily invests his panoramas with *political* effects: the task of gradually composing collective life. While space prevents us from pursuing this point, compared to our notion of quasi-actants, this seems to us a prematurely limited role.

16 In *Reassembling the Social* (2005: 59), Latour at one point (in a footnote) relate his own concept of mediators to this Deleuzian terminology: concatenations of mediators, he suggests, 'actualize virtualities'. Tellingly, however, Latour at no point specifies what this notion of virtualities implies in terms of his own methodological vocabulary. For more on the relation between Latour, Deleuze and the virtual, see Fraser, 2006.

References

Abbott, A., (2004), *Methods of Discovery: Heuristics for the Social Sciences*, New York: W.W. Norton and Company.

Austrin, T. and Farnsworth, J., (2005), 'Hybrid Genres: Fieldwork, Detection and the Method of Bruno Latour', *Qualitative Research*, 5 (2): 147–165.

Bertilsson, M., (2004), 'The Elementary Forms of Pragmatism: On Different Types of Abduction', *European Journal of Social Theory*, 7 (3): 371–389.

Bertilsson, M., (2008), 'On law, power and society: a view of a moral dialectic', in Wahlgren, P. (ed.), *Law and Society*, Stockholm: Stockholm Institute for Scandinavian Law: 33–44.

Boltanski, L. and Thévenot, L., (1991), *De la Justification*, Paris: Gallimard.

Brown, S., (2010), 'Between the planes: Deleuze and social science', in Jensen, C. B. and Rodje, K. (eds), *Deleuzian intersections in science, technology and anthropology*, New York: Berghahn Books.

Bruun Jensen, C. and Selinger, E., (2003), 'Distance and Alignment: Haraway's and Latour's Nietzschean Legacies', in Ihde, D. and Selinger, E. (eds), *Chasing Technoscience: Matrix for Materiality*, Indianapolis: Indiana University Press: 195–213.

Callon, M. and Latour, B., (1981), 'Unscrewing the Big Leviathan: how actors macrostructure reality and how sociologists help them to do so', in Knorr-Cetina, K. and Cicourel, A.V. (eds), *Advances in Social Theory and Methodology: Towards an Integration of Micro- and Macro-Sociologies*, London: Routledge and Kegan Paul: 277–303.

Callon, M. and Latour, B., (1992), 'Don't Throw the Baby out with the Bath School! A Reply to Collins and Yearley', in Pickering, A. (ed.), *Science as Practice and Culture*, Chicago: University of Chicago Press: 343–68.

Callon, M., (2005), 'Why Virtualism Paves the Way to Political Impotence: A Reply to Daniel Miller's Critique of The Laws of the Markets', *Economic Sociology: European Electronic Newsletter*, 6 (2): 3–20.

Collins, H.M. and Yearley, S., (1992), 'Epistemological Chicken', in Pickering, A. (ed.), *Science as Practice and Culture*, Chicago: University of Chicago Press: 301–326.

DeLanda, M., (2002), *Intensive Science and Virtual Philosophy*, London: Continuum.

Deleuze, G., (1993), *The Fold: Leibniz and the Baroque*, Minneapolis: University of Minnesota Press.

Deleuze, G. and Guattari, F., (2004a), *Anti-Oedipus: Capitalism and Schizophrenia*, London: Continuum.

Deleuze, G. and Guattari, F., (2004b), *A Thousand Plateaus: Capitalism and Schizophrenia*, London: Continuum.

Elder-Vass, D., (2008), 'Searching for realism, structure and agency in Actor Network Theory', *The British Journal of Sociology*, 59 (3): 455–473.

Foucault, M., (1984 [1971]), 'Nietzsche, Genealogy, History', in Rabinow, P. (ed.), *The Foucault Reader*, London: Penguin Books: 76–101.

Fraser, M., (2006), 'The ethics of reality and virtual reality: Latour, facts and values', *History of the Human Sciences*, 19 (2): 45–72.

Fraser, M., (2009), 'Experiencing Sociology', *European Journal of Social Theory*, 12 (1): 63–81.

Holbraad, M., (2004), 'Response to Bruno Latour's "Thou shall not freeze-frame" ', *Mana. Estudos de Antropologia Social*, 10 (2): 349–376.

Knorr-Cetina, K. and Brügger, U., (2002), 'Traders' Engagement with Markets: A Postsocial Relationship', *Theory, Culture and Society*, 19 (5–6): 161–185.

Latour, B. and Woolgar, S., (1979), *Laboratory Life: The Social Construction of Scientific Facts*, London: Sage Publications.

Latour, B., (1983), 'Give me a laboratory and I will raise the world', in Knoor-Cetina, K. and Mulkay, M. (eds), *Science Observed: Perspectives on the Social Study of Science*, London: Sage Publications: 141–170.

Latour, B., (1987), *Science in Action: How to Follow Scientists and Engineers through Society*, Cambridge MA: Harvard University Press.

Latour, B., (1988a), *The Pasteurization of France*, Cambridge MA: Harvard University Press.

Latour, B., (1988b), 'The Politics of Explanation: An Alternative', in Woolgar, S. (ed.), *Knowledge and Reflexivity: New Frontiers in the Sociology of Knowledge*, London: Sage Publications: 155–177.

Latour, B., (1992), 'Where Are the Missing Masses? The Scoiology of a Few Mundane Artifacts', in Bijker, W.E. and Law, J. (eds), *Shaping Technology/Building Society*, Cambridge MA: MIT Press: 225–58.

Latour, B., (1993), *We Have Never Been Modern*, Cambridge MA: Harvard University Press.

Latour, B., (1996a), *Aramis, or, the Love of Technology*, Cambridge MA: Harvard University Press.

Latour, B., (1996b), 'On Interobjectivity', *Mind, Culture, and Activity*, 3 (4): 228–245.

Latour, B., (1999), *Pandora's Hope: Essays on the Reality of Science Studies*, Cambridge MA: Harvard University Press.

Latour, B., (2000), 'When things strike back: a possible contribution from 'science studies' to the social sciences', *The British Journal of Sociology*, 51 (1): 107–123.

Latour, B., (2002), 'Morality and Technology: The End of the Means', *Theory, Culture and Society*, 19 (5–6): 247–260.

Latour, B., (2004a), 'How to Talk about the Body: The Normative Dimensions of Science Studies', *Body and Society*, 10 (2–3): 205–229.

Latour, B., (2004b), *Politics of Nature: How to Bring the Sciences into Democracy*, Cambridge MA: Harvard University Press.

Latour, B., (2005), *Reassembling the Social: an Introduction to Actor-Network-Theory*, Oxford: Clarendon.

Law, J., (2002), 'On Hidden Heterogeneities: Complexity, Formalism, and Aircraft Design', in Law, J. and Mol, A. (eds), *Complexities: Social Studies of Knowledge Practices*, Durham: Duke University Press: 116–141.

Nietzsche, F., (1997 [1881]), *Daybreak: Thoughts on the Prejudices of Morality*, Cambridge: Cambridge University Press.

Nietzsche, F., (1999 [1887]), *On the Genealogy of Morals*, Oxford: Oxford University Press.

Olssen, M., (2008), 'Foucault as Complexity Theorist: Overcoming the problems of classical philosophical analysis', *Educational Philosophy and Theory*, 40 (1): 96–117.

Savage, M., (2009), 'Contemporary Sociology and the Challenge of Descriptive Assemblage', *European Journal of Social Theory*, 12 (1): 155–174.

Schinkel, W., (2007), 'Sociological discourse of the relational: the cases of Bourdieu and Latour', *The Sociological Review*, 55 (4): 707–729.

Strum, S.S. and Latour, B., (1987), 'Redefining the social link: from baboons to humans', *Social Science Information*, 26 (4): 783–802.

Thomas, W. I. and Thomas, D. S., (1928), *The Child in America: Behaviour Problems and Programs*, New York: Knopf.

Van Krieken, R., (2002), 'The paradox of the 'two sociologies': Hobbes, Latour and the Constitution of modern social theory', *Journal of Sociology*, 38 (3): 255–273.

Vandenberghe, F., (2002), 'Reconstructing Humants: A Humanist Critique of Actant-Network Theory', *Theory, Culture and Society*, 19 (5–6): 51–67.

Watson, S., (1998), 'The Neurobiology of Sorcery: Deleuze and Guattari's Brain', *Body and Society*, 4 (4): 23–45.