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Mobile method? Traveling (with) ANT

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**Gunnar Thór Johannesson
Roskilde University**

gunnarjo@ruc.dk

Abstract:

This paper deals with Actor Network Theory (ANT). It seeks to clarify and stabilize ANT as an analytical framework useful for studying mobile and often messy relations. In order to cast light on the issue, first the ambiguity of ANT as a theory is briefly presented as well as its wider metaphysical relations. Second, the paper deals with confusing points of ANT, regarding its ontology and epistemology. It is argued that while ANT is able to provide a middle way between hard-core idealism and naïve realism it has been easy due to the looseness of ANT to slip into either of the extremes. Paradoxically, ANT then sometimes represents empiricist view on the research process or equally naïve and pure relativistic approach. The paper contends that as a methodological framework ANT is more fruitful when its position on these matters is clearer than it has been. Third, the paper seeks to provide ANT with some stabilization, which is necessary if ANT is to become mobile and/or messy method.

I. Introduction

Is Actor-Network Theory (ANT) a theory or a method? Given the name of ANT the answer to this question is not as clear as one would think. Yet, it is obvious: It is both. How could ANT be anything than a hybrid, a heterogeneous assemblage? This paper contends that this messy (mobile if you like) character of ANT is its prime strength as a productive analytical framework. When studying situations that are characterized by (in)mobilities, constituted by relational practices, it sounds reasonable to use methods that are sensitive to mobility and mess. The paper argues that ANT can serve as a messy, mobile method. It is not perfect and does not provide 'the answer' in a gospel format. It is in fact rather modest and thus also more mobile and admittedly messier than many other, more traditional theories.

The productivity of ANT as an analytical framework has however often been constrained because of its confusing position in regard to key ontological and epistemological questions. This is the case although much has indeed been written on the subject. Latour, (1993) describes for example the ontology of ANT and its project in brilliant way and many other authors have added to ANT in various ways (e.g. Callon, 1986, 1991; Law & Hassard, 1999). The problem is thus not a lack of literature and not even the lack of reasonable answers. Rather it is the lack of clarification and concomitantly stabilization of the approach. At the end of the day, ANT is still very loose orientation. It is meant to inhabit and carve out the 'middle kingdom' (Latour, 1993) between hard idealism and naïve realism but has remained somewhat constrained in its effort.

The reluctance on behalf of ANT's proponents to stabilize it can be seen as a sign of fear of creating still another monster within the social sciences. As we will see, this fear has not been without reason but often it has turned out to be paralyzing (Law & Hassard, 1999). When I argue for stabilization I'm not intending to stitch together an actor-network monster, first and foremost to gather the practical means necessary to travel with ANT. If one wants to travel in

the first place, the lack of stabilization is very likely to lead to disastrous results just as too rigid schedule. It is just as inconvenient to drive a car with no steering wheel as one with the steering wheel stuck in one direction, not the least when the road has the habit of taking twists and turns. I prefer cars with the productive feature of functional steering wheel, allowing turns both to left and right, although it of course means that one might occasionally take wrong turns. Thus, it is argued that in order for ANT to become really mobile method, it needs some stabilization.

The discussion below is meant to contribute to understandings of ANT as a messy, mobile method. As such, it is a kind of travel account as well as thoughts on how one creates travel accounts. First the paper keeps on discussing the ambiguity of ANT as a theory/method and then presents the wider relations of ANT and its main project. The third part of the paper deals with and to some extent performs the confusing position of ANT in regard to ontology and epistemology. The discussion is related to ethnomethodology and the concept of translation. Fourth, a stabilizing account of ANT is proposed.

II. Actor -Network Theory

Theory or method?

The question if ANT should be understood as a theory or a method revolves around if it is a framework for interpretation of the world in 'best' possible way or if it is an approach to engage with the world? In order to answer this question it is necessary to look into the relations of ANT to broader metaphysical perspectives. As a starting point though, lets hear what ANT's parents, Latour, Callon and Law have to say on the matter.

I will start by saying that there are four things that do not work with actor-network theory; the word actor, the word network, the word theory and the hyphen! (Latour, 1999a, p. 15).

So it is not a theory, or at least not a usable one and it even is doubtful if it has anything to do with actors, networks and hyphens. On same occasion, Law

reveals his desire to "...escape the multinational monster, 'actor-network theory' (Law, 1999, p. 2).

For Law, ANT is a theory but a monstrous one, it has become actor-network Leviathan (Callon & Latour, 1981). Callon (1986; 1991) is more quiet about if ANT is a theory or something else. Although it was him that coined the term 'actor-network theory' in the first place, (Latour, Forthcoming), judging from his writings, it seems to be clear that ANT is at least as much a method as a theory.

But why call it Actor-Network Theory then? Because it is a theory, "and a strong one, I think" (Latour, Forthcoming, p.). However, it is not a theory in the conventional sense, it doesn't say what the world is made of. It is a theory of what to study; it is "...a way to travel from one spot to the next, from one field site to the next, not an interpretation of what actors do..." (Latour, 1999a, p. 20-21). As such it can be seen more as an analytical framework than a 'traditional' theory. By traditional I mean, following Law: "a definite intellectual place within an equally definite intellectual space" (Law, 1999, p. 2). So, with considerable mess accepted, it is stated that ANT is both a method and a theory. It is a mobile method, a framework to travel with and at the same time a theory of this travel, i.e. a theory of *translation*. It provides means to travel and tools to engage with the relational practices of actor-networks.

If this conclusion seems sound, why should the parents of ANT want to dismantle it or even abandon it altogether? The answer lies in the vulnerability of ANT. It allowed itself to be taken at face value and thus lost its chance to meet the methodological ambitions of its parents. It got stuck, it became an immutable mobile through a (mis)understanding as a 'conventional' theory. There are at least two interrelated reasons for this conversion. First, it has to do with how the key concepts of ANT, actor and network, are conceptualized differently within ANT compared to traditional sociology. Second, is the confusion regarding key issues of ontology and epistemology that has not been cleared up

by proponents of ANT. For the remaining of this part, I will discuss the first point but will come back to the second in the next part of the paper.

The relations of ANT

ANT is inherently relational approach. The emphasis on the relationality of the world is shared by many other practice-oriented theories. That applies for example to the theories Thrift (Thrift, 1999) has grouped under the umbrella of Non-representational theory. It includes works by Mead, Wittgenstein, Deluze, Foucault, Bourdieu and Bakhtin, to name few. The common denominator for those adhering to relationalism is the view that the world should be conceived in processes and practiced, unfolding relations (Emirbayer, 1997). By contrast, the more classical view of the world conceives it as made of substances, where “...entites come first and relations among them only subsequently” (Emirbayer, 1997, p. 281).

What matters most for ANT are how these different perspectives on the world approach the ideas of actors, agency and network. Below I follow Emirbayer (1997) as he draws on the writings of the American philosophers, Dewey and Bentley on different philosophical currents. In their book “Knowing and the Known”, first published in 1949 Dewey and Bentley talk of two types of substantialism. On the one hand is *self-action* and on the other is *inter-action*, both of which are contrasting to *trans-action* or the relational view.

Self-action refers to the view that things/entites can act under their own powers independently of other forces. The relations between entites are here seen only as mediums for the agency of the independent actors. It is different if the incentive for the agency of the self acting individual is seen as external, stemming from the choices of other actors, as in rational choice theory or internal, where actors are seen to be following internalized norms. But, the idea of the self-propelling individual actor remains the core even in studies of structures or ‘macro’ like processes. Then the structure in question is given the status of self-activating entity.

The idea of inter-action depicts things/entities as independent but not self-propelling. Agency happens between or among solid actors, as if they were billiard balls (Emirbayer, 1997). This notion is well alive within sociology, not the least in variable research and social statistical analysis. Variables, i.e. the alleged causal factors are given agency; they act among the entities which "...provide merely the empty settings within which causation occurs – rather than being generated *by* them." (Emirbayer, 1997, p. 286, original italics).

The relational view, or what Dewey and Bentley calls *trans-action* perspective shifts the focus of analysis towards "aspects and phases of action, without final attribution to 'elements' or other presumptively detachable or independent 'entities' 'essences' or 'realities' and without isolation of presumptively detachable 'relations' from such detachable 'elements' (Dewey and Bentley in Emirbayer, 1997, p. 286). Thereby, the *transaction*, i.e. the dynamic relations becomes the starting point in analysis, as the 'individual entities' are part of those relations. This point has been central in semiotics, from the days of Saussure, through the structural anthropology of Lévi-Strauss and later in different versions of post-structuralism (Bourdieu, 1990; Foucault, 2003; Lévi-Strauss, 1977) as well as in other social theories, such as symbolic interactionism (Law, 1994).

Actors and networks

ANT has taken its cue from the broad paradigm of relationalism described above and developed its specific version. Its major aim is to escape both hard-core idealism, such as naïve social constructivism, and equally naïve realism. Much in line with general relationalism, actors are perceived as network effects and unconceivable without relations. An actor without a network is nothing and hence, the solid individual actor is non-existent (at least theoretically although it can appear as such in practice). The starting point for research is the networks, the transactions (or translations) out of which the actors emerge in the end. That is, the work, the practices and performances that happen in our relations. The

social is understood as recursive process (Law, 1994). That implies two things: First, that what we see as social structures or single actors are ongoing processes, 'ordering accomplishments' or relational effects and second; that these processes are self generating (Law, 1994, p. 15).

It is possible to say that ANT draws on two kinds of transactional theories, post-structuralism and symbolic interactionism. At the same time however, ANT departs both these perspectives with its focus on heterogeneous ordering of society. Drawing on post-structural semiotics, not the least the writings of Foucault (Foucault, 1995, 2003) ANT focus on how the order we experience in our world is accomplished. But instead of dealing with order of things it emphasizes the process of ordering. It thus adds time to the more synchronic Foucauldian perspective of order (Law, 1994). The process of ordering inherently involves interaction between actors over time and here ANT touches on symbolic interactionism. It departs from the latter by sticking to and taking the relational materialism inspired by Foucault to the edge, out of which comes the principle of generalized symmetry. Very simple put, the principle of general symmetry states that both the categories of nature and society should be explained from the same vantage points and thereby that there is no qualitative difference between those categories. It thus seeks to bypass well known dualistic notions of modernity that have divided our worlds into purified categories of for example humans and non-humans, mind and body, local and global.

The principal of general symmetry has clear implications for how ANT conceives actor. An actor is:

"Any element which bends space around itself, makes other elements dependent upon itself and translate their will into a language of its own. ...It defines space and its organization, sizes and their measures, values and standards, the stakes and rules of the game" (Callon & Latour, 1981, p. 286).

An actor is thus a network of bits and pieces (Law, 1994), and that applies to humans as well as non-humans. Humans would only be naked bodies without their props and it is only through interaction – networking – with materials they

become human actors; that is, when they have ordered the working relations between different bits and pieces (Law, 1994). It is important to note that we are not talking about interaction between humans on the one side and other entities on the other, but how all actors are hybrids and how concomitantly, agency is spun between different actors in networks. Agency thus comes to: "represent a collective capacity for action by humans and non-humans" (Cloe & Jones, 2004). All kinds of networks of ordered relations can be actors, at least at certain moments. Governments, laws and machines are all made of heterogeneous stuff, social, cultural and material. The props, the technology, or the materials together with *net-work*, that is our performances, is what makes our relations, us as actors, our societies and indeed our places durable (but hardly ever permanent) (Callon & Latour, 1981; Latour, 1991).

The concept of network has also a different meaning for ANT than within traditional social sciences. The traditional view is that networks are mediums or channels between nodes (solid actors). The network concept thus stands for "transport *without* deformation" (Latour, 1999, p. 14, original italics). Within those channels, (symmetrical) reciprocal exchange of various sorts can take place, for example of information, trust, goods and money.

ANT emphasizes the *work* inherent in networks. Hence, network means something similar to translation or series of transformations. In order to study actors it is necessary to look into the relations comprising them, i.e. the networks of their translations. Networks and translation is thus a way to "shuttle back and forth" (Latour, 1993, p. 3) between different effects. For ANT the concept is:

More supple than the notion of system, more historical than the notion of structure, more empirical than the notion of complexity, the idea of network is the Ariadne's thread of these interwoven stories (Latour, 1993, p. 3).

Network is thus a mean to travel, in order to get from one place to another one has to *network* and simultaneously the networks produce certain effects – the very places we travel to and from. Yet, the idea of reciprocity is not altogether absent from ANT's conception of network. As Law (2001) has shown, the

concept also refers to certain type of relational continuity that is based on reciprocal relations between heterogeneous elements. It thus highlights specific practices that are necessary for stabilizing network relations. In some sense the concept of network is both similar and different from the more traditional view, it sticks to the reciprocity but adds the idea of translation. It can be said, that all networks imply translation but not vice versa. Other kinds of relational continuity than networks are indeed possible (Law & Mol, 2001). I will discuss the concept of translation below, but lets first sum this part up by coming back to the question if ANT is a monster, or in any case something else than its acronym says it is.

Taken at face value, ANT can be understood as a theory of order that can impose itself on the whole world. Anything is then seen as a network and ANT turns into yet another grand-narrative that thinks it is providing the truth about our existence. This conversion is exactly what Law and Latour are concerned about when they want to dismantle it. They are worried that ANT has become an immutable mobile, i.e. a framework that one can apply on everything, and get the same (tidy) conclusions, namely that the order of the world can be understood as network. ANT has lost its innocence for as Law explains: “we’ve reached the point where every man, woman, child and dog seems to be talking of networks” (2002, p. 4). It is not enough talking (let alone barking) about networks if one doesn’t leave behind rooted conceptions of actors and networks and indeed theories. The value of ANT should not lie in its ability to reproduce existing orders, rather in opening them up and provide means to travel around in messy worlds.

III. Travelling (with) ANT

The vulnerability of ANT does not only stem from its radical conceptions of rooted ideas. Its own position is at times confusing and it is easy to read it as a contradicting project. How one reads it also depends on ones own position and

aims with the reading. What do we want to do? Do we want to get to transparent explanation of the approach or do we make do with a practical understanding of its potentials? The confusion may also be inherent in the assemblage that ANT is. ANT can be understood as an actor-network made of heterogeneous parts. As we have seen it is to a large extent based on relationalism but then it takes on board other more or less related ideas for example from Saussurian semiotics, Foucauldian post-structuralism and even symbolic interactionism and pragmatism. An assemblage like this has implications that have to be sorted out if ANT is to be meaningful approach. Those implications have to do with the ontology of ANT and concomitantly the epistemology it evokes, and perhaps most importantly, the interrelation between ontological and epistemological practices.

ANT has in fact rather firm understanding of ontology. Nicknames such as semiotics of materiality (Law, 1999) and 'actant-rhizome ontology' (Latour, 1999 citing Lynch) give good idea of ANT's conceptions about what the world is like. It is basically relational (Latour, 1993). At a ground level, ANT endorses a flat ontology much in a similar way as Non-representational theory. This is an:

"irreducible ontology in which the world is made up of billions of happy or unhappy encounters, [...] It follows that in this 'fibrous, thread-like, wiry, stringy, ropy, capillary' space time of encounters and paths, paths and encounters, there are no stable and complete orders, only tentative and fractional orderings (Thrift, 1999).

The focus is thereby on the surface, on the actions and practices that comprise the ordering of the world. The 'fluid' may be seen as a root metaphor for this ontology. It emphasizes mobility, practices and ambiguity but although the world is comprised of fluid relations it is only half the story.

ANT takes heterogeneous materials into account, that is, various elements that can, depending on context, serve as immutable mobiles or stabilizing actants in networks. This principle of general symmetry may in first instance only be possible due to the flat ontology but the implication of the general symmetry is in fact a 'practical' stratification of the world. In other words, our world, the

real, is not flat. Actors simply can't begin their network from scratch each and every time they wake up in the morning. Our world is ordered, it has shapes that often tend to last in time; they are durable although never permanent. So, although everything is flow-like it 'flows' on a different speed. This moreover means that different aspects of networks (can) have different competences. There are structures (networks and/or aspects of networks) that affords different powers in different time-spaces. This is a point that ANT proponents have been reluctant to touch on (Thrift, 1999), as they think it would weaken their argument about flat relational-materialism ontology.

But does it weak their argument? I'm not so sure. To state that the reality is constructed through 'billions of encounters', practices and *network* of heterogeneous actants doesn't have to mean that all actor-networks do necessarily afford the same competences. There are differences, to be sure, between actors, between humans and non-humans, between society and nature. Both categories are constructed through relational practice but that doesn't gloss over the very real difference between them. The real world we dwell in and experience is stratified and it is us, which together with multitude of other elements spin out those orderings or those stratifications through daily practices. Technologies and materials are perhaps the most important elements in all ordering process as they make things last. "Technology is society made durable" as Latour would have it (1991).

The problem with ANT has been its unwillingness to come to terms with the implications of the networked combinations and recombinations of encounters or relations. That is, simply put "...how these coming together can have qualities or have qualities brought to them" (Cloke & Jones, 2004, p. 194). This has lead to an approach that renders itself easy to read as empirical realism, i.e. that is what we can observe is all what exist (Sayer, 2000). This has again led to what seems like empiricist epistemology, all the more stranger for the two key notions of ANT: Relational materialism and translation.

When it comes to knowledge production, ANT seems to imply rather simple route from the empirical material at hand to the conclusions of research. Latour, for example, argues that one should not interpret the actions of the actors under study, merely describe what is happening (Latour, 1999a, 2002). It thus seems that the ontology proposed is not grounded in the epistemology practiced. That is, although the world is relational and becomes through continuous translation, our knowledge, the accounts of those translations should depict the real untranslated.

In order to clarify this it is useful to step back a little and turn to the older sibling of ANT, ethnomethodology. The two central questions for ethnomethodology from the beginning have been about social order and meaning, i.e. how social order is achieved through mutually meaningful practices of persons (Rawls, 2002). The key idea of the founder of ethnomethodology, Harold Garfinkel, is that the social order we perceive in everyday life demands work on behalf of the actors involved in that order, for coming into being, and for being recognized as meaningful by the actors. The actors 'staffing' each scene, i.e. a place where local orders materialize, must thus have some methods for achieving the order that they mutually construct (Rawls, 2002). Rawls (ibid. p. 6) defines ethnomethodology in following way:

[Ethnomethodology] is the study of the methods people use for producing recognizable social orders. "Ethno" refers to members of a social or cultural group (or in Garfinkel's terms, members of a local social scene) and "method" refers to the things members routinely do to create and recreate the various recognizable social actions or social practices.

Both these approaches are thus concerned with the same problems and seek to solve them in similar way. ANT has been described as an extension of the project of ethnomethodology (Latour, 1999a). Extension because:

The ethnomethodologists forget to include in their analyses the fact that ambiguity of context in human societies is partially removed by a whole gamut of tools, regulations, walls and objects of which they analyze only a part. We must now gather up what their analysis leaves out and examine with the same method the strategies which enlist bodies, materials, discourses, techniques, feelings, laws, organizations (Callon & Latour, 1981).

Similar to ANT, ethnomethodology cannot be considered a theory in the conventional sense, and neither can it be seen as a coherent method. It is an approach, an orientation or perhaps best: "...a study policy" (Garfinkel, 1967, p.vii). Garfinkel's position is heavily influenced by Durkheim, not the least by his statement that "the objective reality of social facts is sociology's most fundamental phenomenon." (Durkheim in Rawls, 2002, p. 20). But far from the usual positivist interpretation of this statement Garfinkel chooses to interpret it in more constructivist manner. Thus, social facts are in his view socially constructed phenomena and the task of sociologists should be to trace and understand how they are accomplished (Garfinkel, 1967; Rawls, 2002). For Garfinkel:

Social "facts" are [...] sounds and movements, witnessable actions on the part of participants in social gatherings, that must be recognizable to others as actions of a very particular sort, in order for social processes to have any coherence, or intelligibility, for participants (Rawls, 2002, p. 21).

Any researcher must thus above all follow these witnessable actions and describe the process of ordering. Only through a detailed study of 'real' practices can one hope to discover the local social orders people achieve.

As we see, there are many communalities between ANT and ethnomethodology. An important common feature is the relationalism, i.e. the view that the order we experience is an effect of relational practice. But while ANT adds materialism to the picture and thus hints to the practical stratification of the world, ethnomethodology remains steadfastly flat. It thus becomes a kind of baboon sociology (Callon & Latour, 1981) that doesn't recognize material structures or any other types of extra social stabilization.

Turning to the research process, ethnomethodology may be described as empiricist (Alvesson & Sköldberg, 2000). It heavily emphasizes detailed description of the empirical reality, i.e. the witnessable actions and seems to strive for mirroring the reality as it is produced by the actors. Ethnomethodologists do thus not engage in any interpretation of the ordering process they are describing and deny that they know any better than the actors themselves. We should simply trust the actors.

ANT, has often echoed the standpoint of ethnomethodology although with the criticism of lack of materialism (Latour, 1999b, 2002). ANT is supposed to focus on description of actor-networks, trace the practices of actors and recount their *network*. There is no need for explanation or for drawing on an abstract theoretical system for interpretation. That would be to impose our will on the actor-network we are studying (Latour, 2002; forthcoming). Latour is clearly arguing against the conventional understanding of theory. His desire is not to provide the best or the true meaning/understanding of the actions of actors. He is confident that actors know most of the time perfectly well what they are doing. However, his stress on pure description undermines the otherwise great importance of translation.

The concept of translation is adopted from the French philosopher Michel Serres (Brown, 2002), and refers to the net-work process through which actors come into being. The concept thus highlights the practice of actors, how they must constantly work in relations to assemble an order to live by. Serres treats translation as the process of establishing communication or making connections (Brown, 2002, p. 5). It is thus the process evoked when networks meet, or more specifically, translation is “the message between points” (Brown, 2002, p. 7). Drawing on Serre’s insights, Callon (1991) talks of translation as basically triangular operation. “It involves a translator, something that is translated, and a medium in which that translation is inscribed.” (p. 143). Translation is thus dependant on more or less material intermediaries. It is important to note that the intermediaries are not like ‘structural pipes’ transporting the social product (Law, 1994, p. 15) but become the message.

Law draws attention to what this means when he writes:

[Translation] is a verb which implies transformation and the possibility of equivalence, the possibility that one thing (for example an actor) may stand for another (for instance a network) (1992 p. 5).

The important point here is that when something is translated it is to some extent transformed and therefore is translation also always a betrayal (Law, 1997). A translated actor is not the same as the original, or better, it is both

similar and different. All communication is translation so this process is inherent in our lives.

Actors translate other actors through networking with them. We do it all the time just as we are translated all the time. Through translation we become what we are, we move back and forth through different space-times. In practice, translation is, as Callon and Latour state:

...all the negotiations, intrigues, calculations, acts of persuasion and violence, thanks to which an actor or force takes, or causes to be conferred on itself, authority to speak on behalf of other actor or force. 'Our interests are the same', 'do what I want', 'you cannot succeed without going through me'. Whenever an actor speaks of 'us', s/he is translating other actors into a single will, of which s/he becomes spirit and spokesman [...] S/he grows. (Callon & Latour, 1981, p. 279).

It is a never ending story of "changing recursive *processes*" (Law, 1994, p. 18, original italics). 'Changing' because just as actor can grow by recruiting ever more actors under his/her power it can diminish, crumble down and disappear. Translation is precarious process, which demands a lot of work if it is supposed to create what appears as a solid order.

According to this, all research is translation. What we do when we are studying other actors is in fact actor-network construction. We translate actor-networks into our own actor-networks. The statement that we should only describe and that the explanations come through description doesn't really make sense for ANT. It turns a blind eye towards the inherent distortion in all research which is striking as one of the prime strengths of ANT is its potential to highlight the ambiguous process of translation.

Latour's position, the emphasis on pure description, is related to his refusal to interpret the practices of actors. I agree that people can live their lives without sociologists or anthropologists or other interpretative cults of experts. But we don't have to agree with much of hermeneutics and look for "the best" interpretation though we accept that interpretation is inherent in our knowledge production. Just as to accept that we don't know necessarily better doesn't mean that our knowledge or understanding of certain actor-networks is of no use what

so ever. Actually, to state that we should just trust the actors and describe their reality is to accept the view that there is one best interpretation of the world, that is the interpretation of the others. It comes also very close to the absolute relativism of naïve idealism, as such a statement means that the researchers never have to take any responsibility of the knowledge they produce. Translation is a concept of communication, and although our research accounts are somewhat different from the mirror image of reality empirical realism would like to provide, they are also similar.

IV. Relational realism - mobile method

Mobility becomes with its other – immobility. For ANT to become a mobile method, it needs certain amount of immobility, that is to say stabilizing positioning. As we have seen, using ANT makes it easy to slip into either extreme of realism or idealism. In order to clarify one possible position of ANT I will discuss its ontology briefly in relation to the philosophy of critical realism, but then move towards epistemological questions, focusing on the possible processes of knowledge production.

Perhaps it is the materialism that ANT endorses that makes one wonder if the ontology of ANT has really more in common with realism than constructivism. There is probably no final answer to that question as it would also be fatal to place ANT into one or another rigid categories. Yet, it is worthwhile to highlight some of the elements of realism that definitely are part of the actor-network of ANT. As discussed above, the naïve realism that Latour, seems to adopt from time to time is not tenable for ANT research, but there are other versions, such as critical realism, that are more moderate and can serve as a background for positioning of ANT.

Critical realism as developed by Roy Baskhar and especially Andrew Sayer, within geography, has important features in common with much of social constructionism (Hansen & Simonsen, 2004; Sayer, 2000). The basic argument

of critical realism (as for other versions of realism) is that the world is to some extent independent of our knowledge of it. That is to say, that the world exists regardless of what we think about it (Sayer, 2000). The reason for accepting this claim of realism is:

...the evident *fallibility* of our knowledge – the experience of getting things wrong, [...] If, by contrast, the world itself was a product or construction of our knowledge, then our knowledge would surely be infallible, for how could we ever be mistaken about anything? (Sayer, 2000, p. 2, original italics).

Realism and especially critical realism does thus not have to represent a simple correspondence between the reality and Truth. According to critical realism, some of the basic elements of the 'real' are not directly observable. These structures or causal mechanisms affect our lives independently of our knowledge of them though that does not mean that they are completely unknowable (Hansen & Simonsen, 2004). Critical realism has thus no magic formula to discover the Truth but still holds the view that something can be said about reality and some descriptions or explanations are better than others (although all are fallible).

These basic premises lead to what Sayer terms stratified ontology, which has three layers (Sayer, 2000): The 'real', the 'actual' and the 'empirical'.

First, the real is whatever exist, be it natural or social, regardless of whether it is an empirical object for us, and whether we happen to have an adequate understanding of its nature. Secondly, the real is the realm of objects, their structures and powers. Whether they be physical, like minerals, or social, like bureaucracies, they have certain structures and causal powers, that is, capacities to behave in particular ways,...(Sayer, 2000, p. 11).

The actual refers to what happens if and when the powers of objects are activated or when the objects (that can be human beings) take action. So, while the ability to work belongs to the real the activity of working belongs to the actual. The empirical refers to experience, which can be related both to the real and the actual. The empirical comes clearest into play when connected to something unobservable. Just the fact that something can't be observed does not mean that it is not real or can't be actual. Unobservable entities can have

observable effects and so the empirical is broader here than for example in empirical realism that states that what is observable is all what exist (Sayer, 2000). A central implication from this ontology is that:

...powers may exist unexercised, and hence that what has happened or been known to have happened does not exhaust what could happen or have happened. The nature of the real objects present at a given time constrains and enables what can happen but does not pre-determine what will happen. (Sayer, 2000, p. 12).

The ontology of critical realism provides alternative reading of the elements of realism that can be detected within ANT. Similar to critical realism, ANT thinks of our world as real, including both constraining and enabling effects. The collective agency of actor-networks is 'actual' much in the same sense as within critical realism, as that observable agency does not have to exhaust the ontological potentials of given actor-network. It could produce different effects through other translations.

The difference between the two approaches is clearest at the point of stratification. Critical realism starts from the premise that the world is stratified while ANT approaches the world as being constantly in the process of being stratified. The stratification of the world is thus due to our work, our network together with heterogeneous elements. So although ANT shares with realism the belief that the world exist independently of our knowledge of it the main question for ANT is still how certain ontological potentials are being realized through relational practices. In other words, how our world is realized.

But does this fit? Can something exist independently of our knowledge and still become through relational materialism? Yes. First of all, ANT can't say that humans are necessary elements in all networks although they must be there if we, the humans, shall know of it. Non-human agency has thus to be taken seriously. Secondly, the concept of translation implies distortion, distance and mobility over distance. If the real would be dependant on our knowledge we would not have to translate all the time, it would imply no-movement or complete immobility. If we 'know it all' there is no need to translate. It may thus

be argued that the real as independent of our knowledge is necessary for relational materialism through which our world(s) become. It is the reason for constructing relations, making connections, for travelling and translation. We might thus call the ontology of ANT relational realism although there is hardly need for one more name tag to stick on the body of ANT. We are now getting closer to questions of epistemology. If we adopt this ontology, how should we approach knowledge production?

At this point I think we have to depart from the otherwise useful doze of critical realism. And we should neither go any near naïve realism. We don't have to accept the epistemological project of realism, which is to produce better and/or truer explanations of single reality, just because we accept elements of realism in the ontology of ANT. The reality is constructed and it is both real and relational, real as it exist outside our knowledge of it and relational as it changes when we engage with it. We have to translate it through relational practices. All research thus becomes a translation process and thereby it seems reasonable to endorse a relational epistemology.

The 'weak' or situated epistemology, Thrift (1999) proposes is one way to stabilize ANT. Contrary to realism, the situated epistemology of 'non-representational theory' does not seek to produce representations of the world. Thrift is inspired by Wittgenstein writing, that:

The difficulty - I might say – is not that of finding a solution but rather of recognizing as the solution something that looks as if it were only a preliminary to it...This is connected, I believe, with wrongly expecting an explanation, whereas the solution of the difficulty is description, if we give it the right place in our considerations. (Wittgenstein in Thrift, 1999, p. 296).

The situated epistemology thus provides us with description, but not in the fashion of empirical realism, more in the sense of useful translation. Drawing on Haraway (1991) Thrift identifies four important conditions for this epistemology. First, concepts have to be seen as indefinite and which purpose is to resonate. They do thus not imply a final level stabilization. Second, knowledge is always contextual. It is stemming from certain position in a specific space time. Contrary

to the 'god-tricks' of absolute relativism and totalizing objectivism, situated epistemology creates knowledges that are partial, locateble and critical (Haraway, 1991). Third, infra - reflexivity (Latour, 1988) is important for situated epistemology and fourth:

Theory becomes a *practical means of going on rather than something concerned with enabling us to see, contemplatively, the supposedly true nature of what something is.* (Thrift, 1999, p. 304, original italics).

This is quite a different view from realism but goes well together with the relationalism of ANT. Following Thrift, plugging ANT to 'non-representational theory' ANT can be seen as a theory "...intent on seeking *relational* rather than representational understandings;" (304, original italics). So although always translating, and thus interpreting actor-network realities into new actor-networks, ANT should not be seen as producing the best interpretation in a disclosive manner, although it may provide disclosive skills (Thrift, 1999). It is not about producing networks although it can be applied to do just that. ANT can provide means to travel in the world as well as producing travel accounts.

This needs clarification. First of all, how is the Wittgensteinian description different from the empiricist mirroring of ethnomethodology? Second, how is it capable of providing disclosive skills? Once again we come to the concept of translation. Translation is inherent in the relational understanding of ANT. If we think about the relationship between researcher and the actors, networks or cases s/he is working with, it can be characterized as a translation process. Pretending to mirror the reality of the actors would be equal of crossing oneself out of the actor network the research becomes. It implies that one believes in one reality, or a final level of reality, and that the researchers don't have to take responsibility of their mirroring. S/he sees from nowhere. This is neat solution although not very exciting procedure. Another way would be to rely on traditional methods such as hermeneutics and construct the best interpretation, that is, the solution, more or less independently of actors. The third possibility that ANT is striving for is basically to make connections. Instead of creating monologues of the actors or of the researcher it produces a version of the actor-

network under study with the researcher added¹ through which “...webs of connections called solidarity in politics and shared conversation in epistemology” (Latour, 1988, p. 191) are produced.

The knowledges that come out of research are thus versions of actor-networks – descriptions – where the researchers play a decisive role. Our accounts of actor-networks are not the same as the original (real), they are both similar and different. This difference might actually be of most importance for the actors we are studying. Nobody likes to be mimed in the long run or to be passively defined by others. Many, on the other hand, like to create connections, talk and exchange ideas with others, about their lives and situations. The knowledge we thus produce should therefore be meaningful for the actors involved. Only then can it provide the means to go on – what Thrift calls disclosive skills.

This brings to the fore Mol’s ideas about ontological politics (1999) Here is neither time nor place to do justice to her arguments. But it is worth noting that ANT can be described as practicing ontological politics. That implies that reality is multiple and highlights the notions of intervention and performance.

“These [notions] suggest a reality that is *done* and *enacted* rather than observed... reality is manipulated by means of various tools in the course of a diversity of practices (Mol, 1999, p. 77, original italics).

According to this, ANT is doing and enacting versions of reality through its (travel) accounts and thus adding to or multiplying the real actor-networks under study. It thus takes part in and affects the happenings of the world.

V. Concluding remarks

This paper is an actor-network about ANT. It has discussed some of the ambiguities of ANT and sought to create a version of ANT that is stabilized enough to provide a productive framework for analysis of relational practices. This version should be seen as a descriptive story, a travel account that also

¹ Of course it is the researcher who is the main initiator and engineer of this production.

opens up possibilities of travel. Within the overall story rests another shorter, more simple but more dramatic tale. That is the *networked* version of Latour as a naïve realist. This tale is in fact a detour but never the less a necessary part. The network, or what Latour (1988) would call “empire building” that it manifests is one of the reasons why ANT needs a certain stabilization. Not in order to take turns on Latour as a naïve realist but an open ended one, one that provides potential means to go on instead of producing ‘final level’ explanations about how the things really are.

This is not to say that there is no confusion about. I don’t want to admit that I have wasted your time completely. The confusing position of ANT is real as it is all too easy to build empires by mustering up actors such as Latour, empirical realism and Garfinkel. ANT can be used to do just that, construct network explanations for us to see whatever we like. The short horror story performed on few pages above is a specific translation of ANT based on the desire to see clearly. And in order to see clearly or give things and theories final explanations, they have to be hold still, framed into black-boxes and kept that way. The argument running through the whole paper, above and below this dead-end street, is on the other hand that ANT can also provide us with means to travel; it can become a mobile, messy method. Possible routes are presented in part IV. Linking the ontology of ANT to the philosophy of critical realism is one way to clarify the standpoint of ANT and the weak or situated epistemology described by Thrift (1999) and Haraway (1991) is able to run parallel to it. This argument dissolves the stable, immobile network view on ANT and Latour. And thus we can go on.

Are those routes not black-boxes? In a way they are, if one understands all relational consistency as a black-box. But this stabilization affords more mobile research practices that do not demand that the world rests still. The aim is not to build empires, stitch together monsters that can answer all the questions by saying the world is made of networks between solid nodes. Rather to highlight some means ANT affords to travel the distance between the

'knowing and the known' and produce meaningful accounts of that travel. It might just be time to hit the road and take the consequences of this stabilization.

VI. References

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