

On recalling ANT

Bruno Latour

Abstract

The paper explores one after the other the four difficulties of actor-network theory, that is the words 'actor', 'network' and 'theory'—without forgetting the hyphen. It tries to refocus the originality of what is more a method to deploy the actor's own world building activities than an alternative social theory. Finally, it sketches some of its remaining potential.

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! Four nails in the coffin.

The first nail in the coffin is I guess the word 'network', as John Law indicates in his paper in this volume. This is the great danger of using a technical metaphor slightly ahead of everyone's common use. Now that the World Wide Web exists, everyone believes they understand what a network is. While twenty years ago there was still some freshness in the term as a critical tool against notions as diverse as institution, society, nation-state and, more generally, any flat surface, it has lost any cutting edge and is now the pet notion of all those who want to modernize modernization. 'Down with rigid institutions,' they all say, 'long live flexible networks.'

What is the difference between the older and the new usage? At the time, the word network, like Deleuze's and Guattari's term *rhizome*, clearly meant a series of *transformations*—translations, transductions—which could not be captured by any of the traditional terms of social theory. With the new popularization of the word network, it now means transport *without* deformation, an instantaneous, unmediated access to every piece of information. That is exactly the opposite of what we meant. What I would like to call 'double click information' has killed the last bit of the critical

cutting edge of the notion of network. I don't think we should use it anymore at least not to mean the type of transformations and translations that we want now to explore.

The second nail that I'd like to hammer into the coffin is the word 'actor' in its hyphenated connection with the notion of 'network'. From day one, I objected to the hyphen because inevitably it would remind sociologists of the agency/structure cliché, or, as we say in French, of the *'pont aux ânes'* of social theory. Most of the misunderstandings about ANT have come from this coupling of terms, one that is much too similar to the traditional divides of social theory.

The managerial, engineering, Machiavellian, demiurgic character of ANT has been criticised many times. More exactly, critiques have alternated, quite predictably, between the two hyphenated poles: one type of critique has turned around the actor, the other turned around the network. The first line of criticism has insisted on the Schumpeterian, male-like, hairy gorilla-like character of ANT; the second line of criticism has focused instead on the dissolution of humanity proposed by ANT into a field of forces where morality, humanity, psychology was absent. Thus, the actor-network was split into two: demiurgy on one side; 'death of Man' on the other.

No matter how prepared I am to criticise the theory, I still think that these two symmetrical critiques are off target even though the very expression of 'actor-network' invites this reaction. The original idea was not to occupy a position in the agency/structure debate, not even to *overcome* this contradiction. Contradictions, most of the time and especially when they are related to the modernist predicament, should not be overcome, but simply ignored or bypassed. But I agree that the hyphenated term made it impossible to see clearly the bypass operation that had been attempted.

Let me try to refocus the argument. Let us abandon the words 'actor' and 'network' for a moment and pay some attention to two operations, one of *framing* (see the chapter in this volume by Michel Callon) and one of *summing up*.

It is not exactly true that social sciences have always alternated between actor and system, or agency and structure. It might be more productive to say that they have alternated between two types of equally powerful *dissatisfactions*: when social scientists concentrate on what could be called the micro level, that is face to face interactions, local sites, they quickly realize that many of elements necessary to make sense of the situation are already in place or are coming from far away; hence, this urge to look for something else,

some other level, and to concentrate on what is not directly visible in the situation but has made the situation what it is. This is why so much work has been dedicated to notions such as society, norms, values, culture, structure, social context, all terms that aim at designating what gives shape to micro interaction. But then, once this new level has been reached, a second type of dissatisfaction begins. Social scientists now feel that something is missing, that the abstraction of terms like culture and structure, norms and values, seems too great, and that one needs to reconnect, through an opposite move, back to the flesh-and-blood local situations from which they had started. Once back to the local sites, however, the same uneasiness that pushed them in the direction of a search for social structure quickly sets in. Social scientists soon realize that the local situation is exactly as abstract as the so called 'macro' one from which they came and they now want to leave it again for what holds the situation together. And so on *ad infinitum*.

It seems to me that ANT is simply a way of paying attention to these two dissatisfactions, not again to overcome them or to solve the problem, but to follow them elsewhere and to try to explore the very conditions that make these two opposite disappointments possible. By topicalizing the social sciences' own controversies, ANT might have hit on one of the very phenomena of the social order: may be the social possesses the bizarre property of not being made of agency and structure at all, but rather of being a *circulating* entity. The double dissatisfaction that has triggered so much of the conceptual agitation of the social sciences in the past would thus be an artefact: the result of trying to picture a trajectory, a movement, by using oppositions between two notions, micro and macro, individual and structure, which have nothing to do with it.

If this bypassing strategy is accepted then perhaps a few things are clarified: ANT concentrates attention on a movement—a movement well demonstrated by the successive shifts of attention of the dissatisfied social scientist. This movement has many peculiar features. The first one is the redescription of what was earlier perceived as having to do with the macro-social. As it has been understood even, I think, by the harshest critics of ANT, the network pole of actor-network does not aim at all at designating a Society, the Big Animal that makes sense of local interactions. Neither does it designate an anonymous field of forces. Instead it refers to something entirely different which is the *summing up* of interactions through various kinds of devices, inscriptions, forms and formulae, into a very local, very practical, very tiny locus. This is now well known

through the study of accounting, managerial practice (Power, 1995), organization studies (Czarniawska, 1997), some sociolinguistics (Taylor, 1993), panoptica (or what I now call 'oligoptica', Latour and Hermant, 1998), economics, the anthropology of markets, and so on. Big does not mean 'really' big or 'overall', or 'overarching', but connected, blind, local, mediated, related. This is already an important contribution of ANT since it means that when one explores the structures of the social, one is not led away from the local sites—as it was the case with the dissatisfied social scientist—but *closer* to them.

The second consequence is less well developed but equally important: actantiality is not what an actor does—with its consequence for the demiurgic version of ANT—but what *provides* actants with their actions, with their subjectivity, with their intentionality, with their morality. When you hook up with this circulating entity, then you are partially provided with consciousness, subjectivity, actoriality, etc. There is no reason to alternate between a conception of social order as made of a Society and another one obtained from the stochastic composition of individual atoms. To become an actor is as much a local achievement as obtaining a 'total' structure. I will come back to this aspect in a moment, but the consequence is already important: there is nothing especially local, and nothing especially human, in a local intersubjective encounter. I have proposed 'interobjectivity' as a way of phrasing the new position of the actor (Latour, 1996).

The third and very puzzling consequence is that, by following the movement allowed by ANT, we are never led to study social order, in a displacement that would allow an observer to zoom from the global to the local and back. In the social domain there is no change of scale. It is so to speak always flat and folded and this is especially true of the natural sciences that are said to provide the context, the frame, the global environment in which society is supposed to be located. Contexts too flow locally through networks, be these geography, medicine, statistics, economics, or even sociology. This is where ANT has used the insights of sociology of science—including of course the sociology of the social sciences—as much as possible: economies emerge out of economics; societies out of sociologies; cultures out of anthropologies; etc. The topology of the social, John Law is right, is rather bizarre, but I don't think it is fractal. Each locus can be seen as framing and summing up. 'Actor' is not here to play the role of agency and 'network' to play the role of society. Actor and network—if we want to still use those terms—

designates two faces of the same phenomenon, like waves and particles, the slow realization that the social is a certain type of circulation that can travel endlessly *without* ever encountering either the micro-level—there is never an interaction that is not framed—or the macro-level—there are only local summing up which produce either local totalities ('oligoptica') or total localities (agencies).

To have transformed the social from what was a surface, a territory, a province of reality, into a circulation, is what I think has been the most useful contribution of ANT. It is, I agree, a largely *negative* contribution, because it has simply rendered us sensitive to a fourth consequence which is also the most bizarre: if there is no zoom going from macro structure to micro interactions, if both micro and macro are local effects of hooking up to circulating entities, if contexts flow inside narrow conduits, it means that there is plenty of 'space' in between the tiny trajectories of what could be called the local productions of 'phusigenics', 'sociogenics' and 'psychogenics'.

'Nature', 'Society', 'Subjectivity' do not define what the world is like, but what circulates locally and to which one 'subscribes' much as we subscribe to cable TV and sewers—including of course the subscription that allows us to say 'we' and 'one'. This empty space 'in between' the networks, those *terra incognita* are the most exciting aspects of ANT because they show the extent of our ignorance and the immense reserve that is open for change. But the benefit that can be drawn from this vast empty space 'in between' network trajectories is not clear yet because of a third difficulty that I now have to tackle.

The third nail in the coffin is the word theory. As Mike Lynch said some time ago, ANT should really be called 'actant-rhizome ontology'. But who would have cared for such a horrible mouthful of words—not to mention the acronym 'ARO'? Yet, Lynch has a point. If it is a theory, of what it is a theory?

It was never a theory of what the social is made of, contrary to the reading of many sociologists who believed it was one more school trying to explain the behaviour of social actors. For us, ANT was simply another way of being faithful to the insights of ethnomethodology: actors know what they do and we have to learn from them not only what they do, but how and why they do it. It is *us*, the social scientists, who lack knowledge of what they do, and not *they* who are missing the explanation of why they are unwittingly manipulated by forces exterior to themselves and known to the social scientist's powerful gaze and methods. ANT is a way of

delegitimizing the incredible pretensions of sociologists who, to use Bauman's forceful expression (Bauman, 1992), want to act as legislators and to open yet another space for interpretive sociology. Far from being a theory of the social or even worse an explanation of what makes society exert pressure on actors, it always was, and this from its very inception (Callon and Latour, 1981), a very crude method to learn from the actors without imposing on them an *a priori* definition of their world-building capacities. The ridiculous poverty of the ANT vocabulary—association, translation, alliance, obligatory passage point, etc.—was a clear signal that none of these words could replace the rich vocabulary of the actor's practice, but was simply a way to systematically avoid replacing their sociology, their metaphysics and their ontology with those of the social scientists who were connecting with them through some research protocol—I use this cumbersome circumlocution to avoid the loaded term 'studying', because ANT researchers cannot exactly be said to 'study' the other social actors.

I agree that we have not always been true to the original task, and that a great deal of our own vocabulary has contaminated our ability to let the actors build their own space, as many critiques have charitably shown (Chateauraynaud, 1991; Lee and Brown, 1994). This weakness on our part does not mean, however, that our vocabulary was too poor, but that, on the contrary, it was not poor enough and that designing a space for the actors to deploy their own categories is a much harder task than we thought at first—and this applies of course to this notion of deployment itself. From the very beginning, ANT has been sliding in a sort of race to overcome its limits and to drop from the list of its methodological terms any which would make it impossible for new actors (actants in fact) to define the world in their own terms, using their own dimensions and touchstones. John Law and Annemarie Mol have used the word fluid (Mol and Law, 1994), Adrian Cussins, the word trails (Cussins, 1992), Charis Cussins, the word choreography (Cussins, 1996). All of these words designate in my view what the theory should be and what the excessive diffusion of 'double-click' networks has rendered irretrievable: it is a theory that says that by following circulations we can get more than by defining entities, essence or provinces. In that sense, ANT is merely one of the many anti-essentialist movements that seems to characterize the end of the century. But it is also, like ethnomethodology, simply a way for the social scientists to access sites, a method and not a theory, a way to travel from one spot to the next, from one field site to the next, not an interpretation of

what actors do simply glossed in a different more palatable and more universalist language.

I have often compared it to perspective drawing (Latour, 1997), because of this peculiar relation between an empty construction that is nonetheless strictly determined but which has no other aim than disappearing once the picture is left to deploy its own space. I am well aware of the limits of this metaphor since there is hardly a more constraining method than three dimensional perspectival drawing! Yet the image has its advantage: ANT does not tell anyone the shape that is to be drawn—circles or cubes or lines—but only how to go about systematically recording the world-building abilities of the sites to be documented and registered. In that sense, the potentialities of ANT are still largely untapped, especially the political implications of a social theory that would not claim to explain the actors' behaviour and reasons, but only to find the procedures which render actors able to negotiate their ways through one another's world-building activity.

The fourth and last nail in the coffin is the hyphen that relates and distinguishes the two words 'actor' and 'network'. As I have indicated above, it is an unfortunate reminder of the debate between agency and structure into which we never wanted to enter. But it is also a place holder for a much bigger problem, one that we have become aware of only very slowly, and whose impact will be very much felt in the future. By dealing simultaneously with human and non-human agencies, we happened to fall into an empty space between the four major concerns of the modernist way of thinking. We were not conscious of this coherence at first, but learned it the hard way when we began to understand that those who should have been most interested in our work, that is social scientists, including those of SSK (the Sociology of Scientific Knowledge), turned out to be its harshest critics (Collins and Yearley, 1992; Bloor, 1998). Their social explanation did not seem to us to hold water: the very definition of society was part of the problem not part of the solution. How could that be possible, and how could sociology of science trigger such entirely different research programs?

ANT slowly drifted from a sociology of science and technology, from a social theory, into another enquiry of modernity—sometimes called comparative, symmetrical, or monist anthropology (Descola and Palsson, 1996). The difference between ANT and the masses of reflection on modernity and post-, hyper-, pre- and anti-modernity, was simply that it took to task all of the components of what could be called the modernist predicament simultaneously.

The reason why it could not stick to a theory of social order is that the whole theory of society soon appeared to be enmeshed in a much more complex struggle to define an epistemological settlement about: (a) what the world is like *outside* without human intervention; (b) a psychology *inside*—an isolated subjectivity still able to also comprehend the word out there; (c) a political theory of how to keep the crowds at bay without them intervening with their unruly passions and ruining the social order; and finally (d) a rather repressed but very present theology that is the only way to guarantee the differences and the connections between those three other domains of reality. There is not one problem of deciding what society is, a second of explaining why there is a psychology, a third of defining politics, and a fourth of accounting for the deletion of theological interests. Instead there is only *one* single predicament which, no matter how entangled, has to be tackled at once. To sum it up in one simple formula: 'out there' nature, 'in there' psychology, 'down there' politics, 'up there' theology. It is this whole package that by happenstance ANT called into question at once.

There is no room here to review the whole question—I have done so elsewhere (Latour, 1999)—but only to indicate the consequences for one possible future of ANT. ANT is not a theory of the social, any more than it is a theory of the subject, or a theory of God, or a theory of nature. It is a theory of the space or fluids circulating in a non-modern situation. What type of connection can be established between those terms, other than the systematic modernist solution? This is, I think, clearly the direction of what is 'after' ANT and what would begin to solve a number of the worries expressed in the contributions to this book.

Let us not forget that the first thing we made circulate is nature and reference, that is the 'out there' box. I was struck to see that none of the writers, in this book or at the conference from which it derived, mentioned social constructivism and the recent Science Wars. Clearly the treatment of the collective of scientific reality as a circulation of transformations—is it even necessary to say again that reference is real, social and narrative at once?—is now, if not taken for granted, at least clearly articulated. If ANT can be credited with something, it is to have developed a science studies that entirely bypasses the question of 'social construction' and the 'realist/relativist debate'. It is not, it never was, a pertinent question, even though it still amuses many people who are not familiar with either science studies or ANT. Social theory is now allowed to have as many points of contact, as many correspondences, with a bountiful

reality as there are circulating references. ANT can gorge itself on realities without having to spend a single moment excusing itself for not believing in an 'outside' reality. On the contrary, it is now able to explain why on earth the modernist had the bizarre idea of making reality 'outside'.

What I call the 'second wave' of science studies has offered (is offering) the same sort of treatment to the other sphere—'in there'. Subjectivity, corporeality, is no more a property of humans, of individuals, of intentional subjects, than being an outside reality is a property of nature. This new tack is so well represented in the papers in this book that there is no need to develop the point here (see the chapter by Annemarie Mol). Subjectivity seems also to be a circulating capacity, something that is partially gained or lost by hooking up to certain bodies of practice. Madeleine Akrich's work, the chapter by Emilie Gomart and Antoine Hennion for this book, the work I am doing on ethnopsychiatry (Latour, 1996), the work of Charis Cussins, the new book by Marc Berg and Annemarie Mol (Berg and Mol, 1998), all have the character of, so to speak, redistributing subjective quality *outside*—but of course, it is a totally different 'outside' now that epistemology has been turned into a circulating reference. The two movements—the first and the second wave, one on objectivity, the other on subjectivity—are closely related: the more we have 'socialized' so to speak 'outside' nature, the more 'outside' objectivity the content of our subjectivity can gain. There is plenty of room now for both.

What is next? Clearly the 'down there' aspect of the modernist predicament, namely political theory as indicated by a small but growing body of work (see work by Dick Pels). Not a single feature of our definition of political practice escapes the pressure of epistemology ('out there') and psychology ('in there'). If we could elicit the specificity of a certain type of circulation that is turning the Body Politic into one, that is, some type of circulation that 'collects' the collective, we would have made an immense step forward. We would have at last freed politics from science—or more exactly from epistemology (Latour, 1997)—a result that would be quite a feat for people who are still often accused to have politicized science beyond repair! From the recent work in political ecology, or in what Isabelle Stengers call 'cosmopolitics' (Stengers, 1996; Stengers, 1997), I am rather confident that this will soon come to fruition. The political relevance that academics always search for, somewhat desperately, cannot be obtained without a relocation of the extraordinary originality of political circulation.

What about the half hidden sphere above, that has been used as a guarantee for the rest of the modernist systems? I know this is a very risky territory since if there is anything worse than dabbling with non-humans, it is to take theology seriously. This line of work is not represented at all, I agree, in this book. Yet, I think that it is in theology that the notion of circulation is the most rewarding, precisely because it quickly rejuvenates a tissue of absurdities (what has become a tissue of absurdities) because of the shadow cast by the notion of a Science and by the notion of Society. Morality that seems totally absent from the engineering dreams of ANT, may be very abundant if we care to take it also for a certain type of circulation.

The point on which I want to conclude is somewhat different from that of John Law. In his chapter, he asks us to limit ANT and to tackle complexity and locality seriously and modestly. As with several of us, he is somewhat terrified by the monster that we have begot. But you cannot do to ideas what auto manufacturers do with badly conceived cars: you cannot recall them all by sending advertisements to the owners, retrofitting them with improved engines or parts, and sending them back again, all for free. Once launched in this unplanned and uncharted experiment in collective philosophy there is no way to retract and once again be modest. The only solution is to do what Victor Frankenstein did *not* do, that is, not to abandon the creature to its fate but continue all the way in developing its strange potential.

Yes, I think there is life after ANT. Once we have strongly pushed a stake into the heart of the creature safely buried in its coffin—thus abandoning what is so wrong with ANT, that is ‘actor’, ‘network’, ‘theory’ without forgetting the hyphen!—some other creature might emerge, light and beautiful: our future collective achievement.

References

- Bauman, Z. (1992), *Intimations of Postmodernity*. London: Routledge.
- Berg, M. and A. Mol (1998) (eds), *Differences in Medicine: Unravelling Practices, Techniques and Bodies*, Durham, North Carolina: Duke University Press.
- Bloor, D. (1998), ‘Anti-Latour.’ *Studies in History and Philosophy of Science*.
- Callon, M. and B. Latour (1981), ‘Unscrewing the Big Leviathan: How Do Actors Macrostructure Reality’. *Advances in Social Theory and Methodology: Toward an Integration of Micro and Macro Sociologies*. K. Knorr and A. Cicourel. London: Routledge. 277–303.
- Chateauraynaud, F. (1991), ‘Forces et faiblesses de la nouvelle anthropologie des sciences.’ *Critique* (529–530): 458–478.

- Collins, H. and S. Yearley (1992), 'Epistemological Chicken'. *Science as Practice and Culture*. A. Pickering. Chicago: Chicago University Press, 301–326.
- Cussins, A. (1992), 'Content, Embodiment and Objectivity: The Theory of Cognitive Trails.' *Mind* 101(404): 651–688.
- Cussins, C. (1996), 'Ontological Choreography: Agency for Women Patients in an Infertility Clinic.' Pages 166–201 in M. Berg and A. Mol, *Differences in Medicine*, Durham, N. Carolina: Duke University Press.
- Czarniawska, B. (1997), *Narrating the Organization*, Chicago: The University of Chicago Press.
- Descola, P. and G. Palsson (eds) (1996), *Nature and Society: Anthropological Perspectives*. London: Routledge.
- Latour, B. (1996), 'On Interobjectivity—with discussion by Marc Berg, Michael Lynch and Yrjö Engelström.' *Mind, Culture and Activity* 3(4): 228–245.
- Latour, B. (1996), *Petite réflexion sur le culte moderne des dieux Faitiches*. Paris, Les Empêcheurs de penser en rond.
- Latour, B. (1997), 'Socrates' and Calicles' Settlement or the Invention of the Impossible Body Politic.' *Configurations* Spring(2): 189–240.
- Latour, B. (1997), 'The Trouble with Actor Network Theory.' *Soziale Welt* 47: 369–381.
- Latour, B. (1999), *Pandora's Hope. Essays on the reality of science studies*. Cambridge, Mass.: Harvard University Press.
- Latour, B. and E. Hermant (1998), *Paris ville invisible*. Paris, La Découverte-Les Empêcheurs de penser en rond.
- Lee, N. and S. Brown (1994), 'Otherness and the Actor-Network: the Undiscovered Continent.' *American Behavioral Scientist* 37(6): 772–790.
- Mol, A. and J. Law (1994), 'Regions, Networks, and Fluids: Anaemia and Social Topology.' *Social Studies of Science* 24(4): 641–672.
- Power, M. (ed.) (1995), *Accounting and Science: National Inquiry and Commercial Reason*. Cambridge: Cambridge University Press.
- Stengers, I. (1996), *Cosmopolitiques—Tome 1: la guerre des sciences*. Paris, La découverte and Les Empêcheurs de penser en rond.
- Stengers, I. (1997), *Power and Invention*. Minneapolis: University of Minnesota Press.
- Taylor, J.R. (1993), *Rethinking the Theory of Organizational Communication: How to Read an Organization*. Norwood, New Jersey: Ablex Publishing.