

Is *Re*-modernization Occurring – And If So, How to Prove It? A Commentary on Ulrich Beck

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I HAVE been asked to test the project of reflexive modernization in the light of the anthropology of science and technology my colleagues and I have been developing over the years – and which bears the rather silly name of actor-network theory or ANT (Law and Hassard, 1999). I take this not only as an honour but also as a great opportunity since the social theory advocated by Ulrich Beck and his assistants is one of the most lively, creative and politically relevant forms of sociology developed in recent years – the only one, at any rate, which dares to present itself as a *general* theory, going all the way from the organization of the firm to the ‘normal chaos of love’, through the present conditions of scientific research and the turmoil of ecological crisis, without missing the *locus classicus* of state, sovereignty and nationalism, and so on, renewing, one after the other, all the chapters of sociology textbooks.

I will use the term ANT (actor-network theory) as if it was a real branch of social theory. This is largely an exaggeration, but indispensable in order to carry out my little acid test. To put it simply, ANT is an argument not about the ‘social’ but about the *associations* which allow connections to be made between non-social elements. ANT started with research into the history and sociology of science, tried first to provide a ‘social’ explanation of scientific facts, failed to do so, and then, from this failure, it drew the conclusion that it was the project of a social explanation of *anything* that was itself wanting (Latour, 1999b). It has since, from this new vantage point, proliferated somewhat erratically in many fields from management studies to religion, from economics to law.

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The first point of contact with ANT and what I will call from now on *re-modernization* (to avoid the misleading adjective 'reflexive' and keep some of the meaning of 'second' modernity) is to be found in the very notion of *risk* (Beck, 1992). From this early work on, Beck's notion of risk has been, in my view, misinterpreted, and so has his notion of what 'reflexive' means. Let me first clarify this difficulty by translating those two concepts in terms which are ANT-compatible. 'Risk' does not mean that people are nowadays leading a more dangerous life than before – this would fly in the face of all the life expectancy tables and would be an insult to the masses still dying in the throes of typically modern engineered famines. And of course 'reflexive' is not to be taken for 'reflexivity', as if people in the time of re-modernization were more 'aware' or 'conscious' than at earlier periods. Quite the opposite: 'reflexive' means, in my reading of it, that the unintended consequences of actions reverberate throughout the whole of society in such a way that they have become *intractable*. Thus, 'reflexive' does not signal an increase in mastery and consciousness, but only a heightened awareness that mastery is impossible and that control over actions is now seen as a complete modernist fiction. In second modernity, we become conscious that consciousness does not mean full control.

As to 'risk', it does not mean that we run more dangers than before, but that we are now *entangled*, whereas the modernist dream was to disentangle us from the morass of the past. A perfect translation of 'risk' is the word *network* in the ANT sense, referring to whatever deviates from the straight path of reason and of control to trace a labyrinth, a maze of unexpected associations between heterogeneous elements, each of which acts as a mediator and no longer as a mere compliant intermediary. For instance, you begin with a T-bone steak on your plate and you end up in the laboratory of a protein specialist showing you the tertiary structure of the now infamous prion, one of the possible causes of the so-called 'mad cow' disease. But in the mean time you have visited European Commission bureaucracies, the cattle farmers' unions, quite a few hospitals, and participated in a lot of scientific meetings (Barry, 2001). In brief, you have traced a network – a network, to prevent any objection from people not familiar with our use of the word, being not a thing in the world but the path traced by the researcher equipped with an ANT methodology during his explorations (Latour, in preparation).

I take the notions of risk or network as two similar ways of exploring the new type of complexities typical of late-, second or non-modernity once the black boxes of science and technology, so typical of the first modernities (I maintain a plural here for reasons developed below), have begun to leak hopelessly (Latour, 1999a). To put it differently, objects have become *quasi-objects*, bald facts have become dishevelled objects, or, to go back to the old German terms, *dings* have again become *things*, that is, complicated cases – *causa* in Latin – in need of some sort of judiciary or political assemblies, and no longer of any use for settling disputes or closing down

discussions (Thomas, 1980). Or, to use still other terms, matters of fact have become states of affairs.

A striking example of the shift from objects to quasi-objects, from matters of fact to states of affairs was provided to me while a storm, itself possibly due to global warming, delayed my flight from Paris to Munich by a day – while my luggage began tracing one of those unexpected dances so typical of ‘risk society’. While waiting, I read in the *International Herald Tribune* (30 October 2000) the following incredible piece of news. Judges in the Microsoft anti-trust case, who had requested a crash course in the basics of computer science, were denied such a briefing because of the impossibility of defining the computer as a black box:

Among the many problems that the bitterly divided antitrust combatants agreed on was the likelihood that Mr Hite’s briefing [the ‘teacher’ in the course] would stray into issues in dispute. For example, Mr Hite said he had planned to discuss the function of operating systems. But the very question – What is an operating system? – was the focus of extensive testimony during the trial.

William Kovacik, an antitrust professor at George Washington University who followed the trial, said the idea of a briefing was a good one, but that judges had ‘miscalculated the extent to which there are bitter disputes over the technology itself’.

‘As we have seen’, Mr Kovacik said, ‘the minute he would begin to define the term “browser”, there would have been a fistfight in the courtroom.’

That’s it! It is done and the question settled: we are no longer in the modern world when even the computer, that absolute icon of control and calculation, cannot be defined impartially in front of judges without generating fistfights in the courtroom! Modernists have certainly ‘*miscalculated*’ the extent to which there are bitter disputes over the technology *itself*. We are entangled for good, which, of course, great novelists had realized all along (Powers, 2000).

Another way of stating what is common to ANT and re-modernization, is to use the economists’ notion of externality. Externalities are produced by any calculation as whatever cannot be taken into account (Callon, 1998). Externalities can be positive or negative. Put quite simply, second modernity is first modernity *plus* its externalities: everything that had been externalized as irrelevant or impossible to calculate is back in – with a vengeance. This is nowhere clearer than in the ecological crisis: there is no longer any outside that can be considered as irrelevant – literally *anything* has to be taken into consideration. There is still work needed to produce the separation between inside and outside – for instance to renew economic calculations, to absorb new values and exclude others – but this work is now visible as one type of work among a lot of others, not as what defines

the tasks at hand. Instead of the *surfaces* so typical of first modernities – the ‘domains’ of science, of economy, of society, the ‘spheres’ of politics, values, norms, the ‘fields’ of symbolic capital, the separate and interconnected ‘systems’ so familiar to readers of Luhmann, where homogeneity and control could be calmly considered – we are now faced with the rather horrible melting pots so vividly described by historians and sociologists of science (Haraway, 1997). But contrary to what social scientists believe, although rather monstrous at first sight, those melting pots are neither beyond description nor beyond political action: they just require other definitions of what empirical enquiries and representations mean. One could say that, 70 years further on, we are led finally to what John Dewey focused on: social sciences have to create the *public*, defined by him as what cannot be mastered by anyone but that can be *represented*, over and over again, by the social sciences and the humanities (Dewey, 1954 [1927]). The prefix ‘re’ in re-modernization takes on the same meaning as the one in representation. This is where the contrast between the methods and expectations of ANT and reflexive modernization should be most interesting. How can the public, in Dewey’s sense, be generated anew?

Empirical enquiries are of course dependent on the theory one is trying to prove. This is all the more true for such a wide-ranging theory as that of re-modernization. Many objectors have argued against Beck and his colleagues that side-effects are just that: *side-effects*, and that the grand project of modernity will soon take care of them to resume its straight march forward. It is very difficult to *prove* that side-effects are so numerous that their proliferation has eaten up projects to the point where the projects themselves have been transformed beyond recognition. What will convince a die-hard modernist that the first modernity has ended?

My own solution – not shared, I hasten to say, by anyone in ANT – is even more strange since I have argued that ‘we have never been modern’, claiming that there never was a time when modernity’s interpretation of itself described its deeds adequately. I have even argued that this discrepancy between self-representation and practice was not due to the banal distance between words and things, theory and practice, consciousness and life, but that it was fully *functional*: it was *because* the moderns took themselves to be so thoroughly *disentangled* from the shackles of the past that they were so *efficient* at *entangling* themselves, and all the other nations, with everything on earth and beyond, in ways that other civilizations could never have dared to do. It is only if you are absolutely convinced that science and society do *not* mix that you can mix them so thoroughly as to produce the mess in which we are stewing today. Thus, for me, the originality of the moderns never relied on some ideal of science, some definition of freedom or the individual, some peculiar geographic or civic or legal infrastructure, some religion or philosophy, but in one very efficacious estrangement from their own practice which allowed them to do the exact *opposite* of what they were saying. While all the other civilizations we know were – with great

care and caution, or at least with great misgivings – connecting the state of their societies and the state of the cosmos, those who declared themselves moderns could simultaneously affirm that there was no connection whatsoever between cosmos and society, *and* in the same breath begin to experiment on a scale hitherto impossible with new and frightfully dangerous connections between cosmos and society – the atomic bomb being, of course, the culmination of this strange mixture before global warming took over as the ultimate learning experience of a really *explicit* mix between cosmos and society. Is a modern person someone who says ‘I am just doing science’ – and who produces, as a sort of aside, a mere afterthought, a completely new society . . . ?

This difference in approach between my version of ANT and re-modernization has important consequences for the empirical tests of the two theories one might expect. Beck and his group work on the assumption that there has been something like a first modernity, which – 30, 20, 10 years ago – began to give way to a *second* modernity with very different characteristics (Beck et al., 1994). For my part, I only have to show that something has changed in the relation between what the moderns had been doing without saying and what – for the last 10, 20 or 30 years – they now are *explicitly* saying. To put it too simply, for Beck and his group the proofs have to be in the *substance* of the phenomena they study, for me only in the *collective interpretation* given to phenomena which, all along, have never been modern.

This difference is especially clear in the history of facts and machines science students have developed over the years: one after another the modernist heroes of science have been turned into thoroughly non-modern entanglers. They have been, so to speak, anthropologized. This is true of my Pasteur as well of Steven Shapin’s Boyle (Shapin, 1994), Simon Schaffer’s Newton, Norton Wise’s Kelvin, Peter Galison’s Einstein (Galison, 2000). For each one of those heroic figures one can say that the modernist explanation of the science they were doing at the time bears at best an *uncertain* relation to what they were doing. And this is not due simply to the usual revisions of historical interpretations: Newton was at once purifying his science and linking it to the whole cosmos, from the alloys of golden pounds at the Mint he was directing to the inner thoughts of God (Schaffer, 1997). And I add again: it is because of this distance between their gesture of purification and their practice of entanglement that they were such good and creative scientists, such effective modernizers. So, for me, historians of science have retrospectively constructed a non-modern history of Western science, but the same could be said of all the other symbols of the modern period from markets (Polanyi, 1945) to technologies, to what is called modern art (Clark, 1999).

This difference in the anthropological perspective introduces a nuance in the empirical test one should look out for. The danger for Beck and his group is that there are so many contradictory definitions of modernities that it would be almost impossible to distinguish the traits that could be said to

be typical of 'second modernity'. Objectors could always say: 'Yes, but this new definition of individualism, science, company, labour, etc. was already present in the 18th, 19th or early 20th century.' It spoils Beck's argument but it feeds mine since my point is that modernity has always been an interpretation thrown on to an anthropological puzzle triggered by an entirely different dynamic, much as Noah's son threw his coat to avoid seeing the stark nakedness of his father. On the other hand, where my test fails is when the shift from implicit to explicit makes no difference at all. This is the acid test for my theory: since I argue that the incredible freedom and creativity of the moderns was due to nothing but the ability for their right hand to ignore what their left hand was doing: when this connection becomes visible, they should *lose* freedom and creativity. When all the externalities are brought visibly back in, when the side-effects are forever attached to the projects, when unwanted consequences proliferate even before the causes are triggered, then the life of the moderns should become miserable, brutal and short. Disentangling has become impossible and thus the feeling of time will be entirely different – even though the moderns are simply falling back on 'business' or at least 'anthropology as usual'.

Another proviso should be introduced before we can begin to envision the right tests for the two parallel arguments. This is more tricky since here the gap between Beck's enterprise and ANT is much wider. To put it simply, ANT is a direct descendant of Garfinkel's ethnomethodology. One could say that it is a hybridization of Garfinkel for humans and Greimas for non-humans – in fact, I discovered recently that it is an illegitimate grandchild of Gabriel Tarde (Tarde, 1999). But nothing could be further from Beck's theory than ethnomethodology since he remains, on that ground, an unreconstructed social theorist, roaming freely through the 'whole' of society without showing the least interest in the practical and local conditions making this 'whole' visible (Latour and Hermant, 1998). This introduces a greater difference between the two theories: in a Tarde–Garfinkel–ANT sort of framework, any sociology, no matter how powerful, is just one ethnomethod among others, competing on the ground with all the other ethnomethods, most of them more powerful, produced by the 'actors themselves'. It does not mean that social theories are not useful, respectable and accurate; it just means that they *add* their influence, detours, interpretations to the plot which they can in no way explain or replace. Beck, as far as I can judge from his own writing, does not balk at placing himself firmly in the God's-eye privileged position occupied before him by Durkheim or Weber or Bourdieu. His interpretation of what the actors are doing aims at explaining what society is and how it functions. On his own account, it is not one of many 'master narratives' competing in the daily intricacies of practices for accountability with many other interpretations generated by the actors. It is an accurate description of what is happening out there.

This is not a defect, of course, since social theory in this classical form has always occupied such a quasi-judicial position. But it means that the test for proving the development of re-modernization will be rather different:

for me, one can test whether or not the *theme* of re-modernization, as it is articulated in the general press, in academia, in bar conversations, in the bedrooms, at 10 Downing Street between Mr Blair and Mr Giddens, does actually modify the interpretations of what people are doing compared to, say, a Bourdieu-type definition of what late symbolic capitalism is. Actors *equipped* with different master narratives of what modernity or second modernity is will indeed take different tacks, make different choices, will present themselves differently. But those shifts will be *tiny inflections* which have to be considered against a background of practices of an entirely different nature – which only an anthropological enquiry can retrace.

For Beck, however, the proof of the existence of re-modernization is not only a change in master narrative but a real modification of the stuff out of which practice itself is produced. Here we find again the distinction between a change in substance (that Beck favours) and a change in interpretation (that seems to me much more plausible and, above all, provable). I have no special sympathy for the notion of master narratives but neither have I any reason to reject them since in the social theory I work with, there is *no other way* to build a society than thrashing out, through a sort of lasso-like movement, constantly new interpretations of what gathers us together. This is the only way to build Dewey's public, since society does not exist as a *sui generis* entity but as what has to be locally achieved. This is the Garfinkelian watershed which, it seems to me, it is difficult to ignore. But for those like Beck who believe there is a society out there that can be described, if not completely objectively at least with a great degree of confidence that does *not* depend on the actors' own reflexive achievement, this reduction of re-modernization to a *new* master narrative might seem unfair – or even offensive. Yet my overall enthusiasm for Beck's project cannot balance my feeling that there exists a great difference between BG and AG sociologies (meaning of course 'before' or 'after' Garfinkel!).

Once the parallels and the discrepancies between the two arguments have been sketched, it is possible to work out some of the common sites where the phenomena of re-modernization can best be observed – and observed in such a way that they could count in the eyes of the vast majority of social scientists who still believe modernity is the unsurpassable horizon of our times, that the aim of the social science is still to emancipate actors from their obscurantist past. I said 'count' rather than 'convince' since sociologists of science know better than anyone else that to convince a colleague one needs to change *worlds* rather than just accumulating proofs, since each of these can be reinterpreted or pushed aside. The social sciences have always been connected to a political project, and of course this applies to our social sciences too. The pragmatic test is to see whether talking in terms of re-modernization does make a difference or not for the emergence of a public assembled along different lines. But this is a bit premature since, for the time being, *we don't know if we are talking about a phenomenon that has taken place or not!* Maybe second modernization has never occurred –

and maybe I am entirely wrong to say that we have never been modern. We are a bit like the specialist in global warming 10 years ago, uncertain whether they were warning about an impending disaster or registering statistical flukes in the overall stable patterns of climates.

The key question is to move from anecdotal evidence to data. Another pressing question is to differentiate our data from those that prove *post-* rather than *re-*modernization. Beck is not very much interested in post-modernity since he has no place in his own periodization between first and second modernity. But for me, who considers sociologies to be more or less creative interpretations thrown upon times that tick because of other mechanisms, postmodernism is very important as a competitor to Beck's sociology or my anthropology. Postmodernity has many definitions but it offers, at its core, a theory of the way time flows and how connections are established between heterogeneous phenomena. Since it relies so much on what it claims to replace – I have defined it as 'disappointed modernism' – it is close to many of the attitudes re-modernization is interested in tracking. But since it remains so thoroughly modernist, its proliferation, if proven, will always be at the expense of re-modernization, especially the latter's *positive* and political efforts. Hence the crucial importance of making the test fine enough to discriminate between the two interpretations of post- and re-modernization.

We are now prepared to tackle the hard questions: supposing a scholar is intent on checking whether or not something has changed in the way modernity has progressed in the last 20 years, what should he or she look for? And, if possible, what sort of *quantum* should be gathered? The quantitative dimension of social-scientific data cannot be escaped if one wishes to avoid the essayistic or prophetic tone, or if one is not satisfied with case studies.

Here are some of the items we might want to discuss and for which I of course play the devil's advocate since my goal here – indeed my brief – is to provide an adequate test for our common undertaking.

Is 'modern' becoming a negative adjective? What is missing is a background that could be used as a baseline to detect whether or not there has been a shift in people's feeling about modernization. It would be tremendously useful to have opinion polls of a very classical sort to see with what other adjectives the adjective 'modern' is associated in 2000, compared to, say, 1990 and 1960. This could be done retrospectively through sociolinguistic tools. And it would be fascinating to do cross-cultural comparisons among European nations. My hunch here is that modern has lost two of its features: it no longer means something is incontrovertibly good and, more importantly, it is no longer associated with a coherent set of values and objects. For instance my neighbours in Bourbonnais call 'traditional' the 'modernist' agriculture of the 1980s. But this is anecdotal and any study of re-modernization requires a map of the usage of words it replaces. Everyone, in France at least, is trying to fiddle around with the accusation

of 'reactionary', except no one can agree any longer who is progressive, and which attitudes are progressive . . .

Are objects slowly replaced by quasi-objects? Like Beck and his group I have a strong feeling that the more we go on, the less we read about incontrovertible, bounded, mastered, black-boxed, expert-ruled innovations. The little example above about the Microsoft trial is typical of many tell-tale signs. But we are all strongly biased to detect precisely those events which signal, for us, a shift away from *hypes*. Are we right in claiming that those sparrows are indicating a change of season? One look at the Internet literature, for instance, or at the human genome flood of news, shows strong signs of an unreconstructed, unrepentant hype promising exactly the same sort of glorious tomorrows as in the 1950s with nuclear energy, or in the 1960s with cybernetics, or in the 1970s with computers, and so on. How do we prove, quantitatively, that objects are now presented in a more 'risky' fashion, that is, with their unwanted consequences and with their uncertain and puzzled makers and users *attached* to them? Can we calculate in the general press for instance the *ratio* between the number of hyped technological news and the number of 'risky' and cautionary tales? And check that between 1980 and today this ratio has been modified? Then, we would have a proof of a sea change – provided of course we can operationalize the notion of risky description (Rogers, 2000).

Is the difference between nature and society breaking down? Here again, one familiar with controversies over national parks, rivers, water, air, landscapes, etc. will be struck by the diminishing efficacy of the pure nature/pure culture boundary. More exactly the hard *labour of boundary making* between the two will become highly visible – as visible as the building of a fence around a park to make it 'wild' (Western et al., 1994). And of course, there is no better sign of the dismantling of a distinction than when it becomes visible as such – same thing with race, gender, science and non-science, etc. But here again, are we not terribly biased in favour of those signs, whereas modernists could very well argue that bringing the peace and consensus of natural laws still remains the only safe way to obtain a liveable political arena? Each example of what we consider a breakdown of the nature/culture distinction could be taken by modernists as a provisional hiccup. Sociolinguistic tools would be very useful here to settle the matter by showing whether nature is used nowadays in conjunction with words that indicate disputes, uncertainties and controversies. But has the work been systematically done (Macnaghten and Urry, 1998)? Is a new trend over the last decade or so really detectable?

Another problem for this indicator would be to differentiate it from the postmodern ways of breaking boundaries by ironizing them without putting them into a new positive political and institutional mould (Cronon, 1996). How is the distinction made, for instance, between cyborgs – the complacent eulogizing of techno and natural mixtures – and what we would call hybrids, or risky, or dishevelled quasi-objects? What are the tell-tale signs that

the breaking of the nature/culture boundary is taken as a chance to assemble 'parliaments of things' – at the level of sub-politics or at the level of grand politics? My own study of water is highly ambiguous on that score. A systematic comparison of all the cases might shed some light on the trends there.

Is time flowing differently in first, post- and re-modernization? Time's directional flow is at once a very collective and a very intimate experience, which can certainly be mapped out in some sort of detail since, after all, a great deal of work has been done by historians to account for modernist feelings about progress (Yack, 1992). The period after the fall of the Berlin wall is certainly different from that of the Cold War, or the post-war, inter-war or pre-1914 periods, or turn of the century, the 1848 revolutions, and so on. But how are we to operationalize those fine differences? Yet, has the feeling of progress really diminished? Is it not the only great narrative that is proposed in countless political platforms and editorials? Can we prove that the Great Leap Forward is no longer the way the future is presented to us? Even of postmodernism – which is above all a different way of recording the succession of epochs – can we empirically say that it has entirely overcome the modernist ethos? Even in architecture, the birthplace of postmodernism, we still get very ambiguous signals. But maybe it is this very ambiguity that can be used as a handle to get good data on this question. Maybe it is the case that there has been a detectable shift from a time of *succession* to a time of *coexistence*, all the times – now in the plural – being simultaneously at work and represented without the past being abolished. Hence the feeling of 'reaction', 'neo-archaism' and so on (Sahlins, 2000).

Are subjects becoming quasi-subjects? If the status of objects is being deeply modified in re-modernization, there should be a concomitant change in the status of subjects. It would be really odd if mastery was slowly being eroded on the side of science and technology while a new subject was regaining force and becoming even more master of itself. Odd but perfectly possible; history moves in strange disjointed ways. Here again we need an empirical way to test the two possibilities, and here again the difference with postmodern subjects will be very difficult to detect. What Luc Boltanski calls the 'city by projects' or the 'connexionist human' has both characters: from the modern it has kept the call for unlimited freedom, but it is thoroughly postmodern in recognizing no durable attachment except the maximization of its own movement through connectionist space (Boltanski and Chiapello, 1999). How do we differentiate this self-employed, self-exploited, self-made '*roi-moi*', to use Pierre Legendre's expression, from a re-modernized subject? The key difference should appear, quite logically, in the relation between the former subjects and the quasi-objects now offered to them. This is the great interest of the work on genetics (Strathern, 1992), the brain, emotions, physiology and so on, because the destiny of the subject is entirely different when seized by the urge for naturalization – in the modernist way – and the attachments to 'cycles of objectivity'

(Berg and Mol, 1998). Objectification, reification should appear, in our data, no longer as the only way for a subject to 'have a body'.

But how much of this is wishful thinking, in spite of the work done by historians and sociologists of medicine and genetics? Can we really prove that quasi-objectification has indeed generated new kinds of attachments that would look really different from modernist and postmodernist subjectivities? Again there is anecdotal evidence, but where are the masses of data? It is also perfectly possible that re-modernization has touched the objects deeply – because of the new doubts about science and technology – but not yet the subjects, who are still carried forward by the great scenario of modernism – postmodernism adding simply a new spin, a new acceleration to the search for freedom. If this was the case, we would *not* find any proof of re-modernization in the realm of subjectivities.

Is the economy shifting from infra- to supra-structure? Objects and subjects in modernism were connected by a largely naturalized economic infrastructure studied scientifically by economics. Normally, the shift to re-modernization should be even more vivid in the domain of the relations entertained by new quasi-subjects attached to quasi-objects. But this is where the data are even more uncertain than with changes in subjectivities. The last 20 years have seen an unprecedented re-naturalization of economics from the right – freed from the competition of socialism – and from the left – deeply entrenched in economic reasoning (see Bourdieu, 2000 and his critic Favereau, 2001). Together with the theme of globalization and neo-liberalism, it seems that all the indicators, far from showing a second modernization, bear witness to an expansion of modernization *with a vengeance* (Callon, 1998). Or else, re-modernization means nothing but 're-engineering' and the advent of the 'network society'.

Yet the work of socio-economists and anthropologists of goods and accounting could be interpreted as registering a deep shift away from naturalization towards a *re-socialization* of the economic infrastructure slowly brought back to a superstructural level (Cochoy, 1999). Such is the crucial distinction introduced by Callon between 'economics' and 'economy', the latter being absorbed as the performative activity of the former (Miller, 1992). Marx walked on his head and is put back on his feet . . . But this is an academic undertaking: does it prove that in the public consciousness, the economy has undergone such a gigantic sea change? The indicators are clearly not there. It does not prove that the change has not occurred, but that the tell-tale signs will not count as incontrovertible data in the eyes of, for instance, traditional economists.

To conclude this article and answer the question raised at the beginning of this section, one can see that the data to be gathered in order to *prove* the advent of a substantial phenomenon called re-modernization are not easy to come by and, so far, are not thoroughly convincing. If it is easier to demonstrate that things are changing fast for quasi-objects, there is as yet no clear indication that subjects have stopped being moderns and become

quasi-subjects; still less are there clear signals that something has changed in the economic connection between quasi-objects and (quasi-?) subjects.

This is where the difference between re-modernization as a master-narrative and re-modernization as the accurate description of a substantial sea change in contemporary societies should be highlighted again (I put it aside momentarily to test the strength of various potential indicators). The power of a social theory is different in both cases and should be evaluated differently. Re-modernization might not describe what has already happened, but it can offer a powerful lever to make new things happen. This is where the difference between descriptive and normative theories breaks down. It makes perfect sense, for me, to *propose an interpretation* of science, subjectivities and industry that builds Dewey's public, even though the proof is not all there. After all, this is exactly what the modernist thinkers, from Rousseau to Weber, have always done. Where was the proof that rationalization was occurring in Weber's time? It was just as ambiguous and disconnected as the proof for re-modernization today. To be sure, social scientists are not demiurges, nor do they occupy a vanguard position, but it is also their duty, in the situation of common ignorance so typical of public space, to offer alternatives to earlier versions of the social link. On that score, re-modernization is a powerful proposition because it shifts attention from the mainstream – so visibly modern or postmodern – to the discrepancies, cracks, failures and side-effects, and it claims that, with all those bizarre and disconnected phenomena, barely visible to the majority, it can produce a coherent picture of a European world which has outgrown progress.

Note

This article was initially a comment on the work done by Ulrich Beck and his group in Munich, during a site visit he asked me to do in November 2000.

References

- Barry, Andrew (2001) *Political Machines: Governing a Technological Society*. London: Athlone Press.
- Beck, Ulrich (1992) *Risk Society: Towards a New Modernity*. London: Sage.
- Beck, Ulrich, Anthony Giddens et al. (1994) *Reflexive Modernization: Politics, Tradition and Aesthetics in the Modern Social Order*. Stanford, CA: Stanford University Press.
- Berg, Marc and Anne-Marie Mol (1998) *Differences in Medicine: Unraveling Practices, Techniques and Bodies*. Durham, NC: Duke University Press.
- Boltanski, Luc and Eve Chiapello (1999) *Le Nouvel Esprit du capitalisme*. Paris: Gallimard.
- Bourdieu, Pierre (2000) *Les Structures sociales de l'économie*. Paris: Le Seuil.
- Callon, Michel (ed.) (1998) *The Laws of the Market*. Oxford: Blackwell.
- Clark, T.J. (1999) *Farewell to an Idea: Episodes from a History of Modernism*. New Haven, CT: Yale University Press.
- Cochoy, Franck (1999) *Une histoire du marketing: discipliner l'économie de marché*. Paris: La Découverte.

- Cronon, William (ed.) (1996) *Uncommon Ground: Rethinking the Human Place in Nature*. New York: Norton.
- Dewey, John (1954 [1927]) *The Public and Its Problems*. Athens: Ohio University Press.
- Favereau, Olivier (2001) 'L'économie du sociologue ou penser (l'orthodoxie) à partir de Pierre Bourdieu', pp. 255–314 in Bernard Lahire (ed.) *Le Travail sociologique de Pierre Bourdieu: dettes et critiques*, revised and expanded edn. Paris: La Découverte.
- Galison, Peter (2000) 'Einstein's Clocks: The Place of Time', *Critical Enquiry* Winter: 355–89.
- Haraway, Donna (1997) *Modest Witness@Second Millennium: The FemaleMan® Meets OncoMouse™*. London: Routledge.
- Latour, Bruno (1999a) *Pandora's Hope: Essays on the Reality of Science Studies*. Cambridge, MA: Harvard University Press.
- Latour, Bruno (1999b) 'When Things Strike Back: A Possible Contribution of Science Studies to the Social Sciences', *British Journal of Sociology* 51(1): 105–23.
- Latour, Bruno (in preparation) *ANT: A Travel Guide*. Oxford: Oxford University Press.
- Latour, Bruno and Emilie Hermant (1998) *Paris, ville invisible*. Paris: La Découverte–Les Empêcheurs de penser en rond.
- Law, John and John Hassard (eds) (1999) *Actor Network and After*. Oxford: Blackwell.
- Macnaghten, P. and J. Urry (1998) *Contested Natures*. London: Sage.
- Miller, Peter (1992) 'Accounting and Objectivity: The Invention of Calculating Selves and Calculable Spaces', *Annals of Scholarship* 9(1–2): 61–86.
- Polanyi, Karl (1945) *The Great Transformation*. Boston, MA: Beacon Press.
- Powers, Richard (2000) *Plowing the Dark*. New York: Farrar, Straus and Giroux.
- Rogers, Richard (ed.) (2000) *Preferred Placement: Knowledge Politics on the Web*. Maastricht: Jan Van Eyck Editions.
- Sahlins, Marshall (2000) *Culture in Practice*. New York: Zone Books.
- Schaffer, Simon (1997) 'Forgers and Authors in the Baroque Economy', paper presented at the meeting 'What is an Author?', Harvard University, March.
- Shapin, Steven (1994) *A Social History of Truth: Gentility, Civility and Science in XVIIth-century England*. Chicago, IL: University of Chicago Press.
- Strathern, Marilyn (1992) *After Nature: English Kinship in the Late 20th Century*. Cambridge: Cambridge University Press.
- Tarde, Gabriel (1999) *Monadologie et sociologie*, réédn. Paris: Les Empêcheurs de penser en rond.
- Thomas, Yan (1980) 'Res, chose et patrimoine (note sur le rapport sujet–objet en droit romain)', *Archives de Philosophie du Droit* 25: 413–26.
- Western, D., R.M. Wright et al. (eds) (1994) *Natural Connections: Perspectives in Community-based Conservation*. Washington, DC: Island Press.
- Yack, Bernard (1992) *The Longing for Total Revolution: Philosophic Sources of Social Discontent from Rousseau to Marx and Nietzsche*. Berkeley: University of California Press.

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