Part I: SITUATED KNOWLEDGES

Chapter 1
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Epistemology under attack:
constructivist approaches of knowledge

The term 'constructivism' presently serves as a useful container-concept for many different strands of thinking about issues of science and knowledge. From a constructivist perspective, the classical Kantian question regarding the transcendental conditions of possibility for knowledge has become obsolete. Rather than ask the speculative question how (true) knowledge is *possible*, it is more productive to go and see how knowledges are actually *made*. As a consequence, attempts to map the a priori conditions of human knowledge - prior to our experience, but also prior to the historical and social conditions which constitute the context of knowledge acquisition - make little sense. An increasing number of empirical studies undermine the presumption that 'true' knowledge can be regarded in terms of its accurate representations of a world 'out there'.[1] They rather foster a historicist awareness of the relativity of the validity of knowledge claims, and bring to mind that any vantage point from which the accuracy of a discursive account is decided, inevitably starts from other accounts. There seems to be no recourse to any first foundation outside discourse, outside language. Hence, language is not so much the transparant means of communication with which we speak about reality - it thoroughly constitutes that shared reality. Language is primarily conceived of in its performative dimension: to use words to speak *about* the world is at the same time a way of acting *in* and *upon* that world. Likewise, subjects of knowledge are not the autonomous, transcendental source from which knowledge emanates, but particular, embodied and situated persons, constituted as subjects in and through language. Thus, the Kantian project of epistemology is under heavy attack from constructivist thinkers of all sorts and conditions.

In this chapter, my account of constructivism will be organized around the works of Richard Rorty, Michel Foucault and Bruno Latour. What makes their work fit the label of constructivism? To what extent do their approaches of knowledge coincide, and what are their main points of divergence? In addressing these questions I will particularly concentrate on their respective treatment of the issues of representation and the subject. Next comes the question how each of them handles the various imputations of relativism alleged against them. Finally, I will address the question as to how these replies might be helpful with respect to the problem guiding this study, i.e. to develop an account of knowledge which both allows for the radical contingency of truth-claims, and the unconditional commitment to some of such claims.

1. Edification: Richard Rorty

According to the Dutch philosopher Pieter Pekelharing, the Kantian Copernican Revolution boiled down to the substitution of a *visual* model of knowledge, in which objectivity was conceived of as a relationship between a representation and what it represents, for a *juridical* model of knowledge, which takes objectivity to be a form of accordance with rules, to be tested before the tribunal of pure reason (Pekelharing 1988). The subsequent postmodern turn, instigated by historicist thinkers such as Hegel, Nietzsche, Heidegger and Wittgenstein, would involve the replacement of the image of the philosopher

as a *judge*, with the image of the philosopher of a *translator*.

With this account, Pekelharing captures in a nutshell the kind of transformation Richard Rorty would want to bring about in Western philosophy. In his by now standard work *Philosophy and the Mirror of Nature* (1980), Rorty takes issue with what he perceives as the overall tendency within modern Western philosophy to put questions of epistemology first. Ever since Descartes' positing of *cogito ergo sum* (the first certainty to be grasped after methodologically putting everything into doubt), the human mind is perceived as 'the mirror of Nature'.[2] But Rorty convincingly shows how the mind (this 'Glassy Essence', as he calls it), the mental part of the Cartesian split, can be seen as a historical, linguistic invention which enabled philosophy to acquire the same professional status as mathematics. The modern "triumph of the quest for certainty" (Rorty 1980: 61) was gained at the expense of the ancient image of philosophy as the search for practical wisdom. Since the 17th century, epistemology became the discipline which grappled with questions concerning the possibility of accurate representations, busy "inspecting, repairing, and polishing" its (non-existent) mirror (1980: 12). In Rorty's eyes, epistemology is nothing but the expression of a desire for constraint and control (315). In its attempt to lay down universal foundations, it leads to a policing of thought: "immutable structures within which knowledge, life and culture must be contained" (163).

In his proposals for an alternative, anti-representationalist view of knowledge, Rorty draws from several dissident, anti-metaphysical currents within Western philosophy, such as American pragmatism (Dewey), linguistic behaviourism (Wittgenstein), existentialism (Heidegger), hermeneutics (Gadamer), deconstructivism (Derrida).[3] One of the strings he is harping on time and again is that analytical philosophy has not carried through the linguistic turn to its proper end.[4] In its perception of language *as a medium* between an inner 'mind' and a world 'out there', analytical philosophy merely shifted the problem of how to bridge the distance between subject and object, to the problem of which of the two language is a medium for: does it (primarily) express the perception of the subject, or does it (primarily) represent objects? In the wake of this, analytical philosophy wrongly focused on the level of *sentences*, on conditions governing the truth-values of propositions. In Rorty's eyes, a pragmatist view of knowledge offers the way out. From this perspective, language can be conceived of in terms of *vocabularies*. Vocabularies cannot be deemed 'true' or 'untrue'. They are tools for dealing with, rather than representing the world. The value of vocabularies is dependent on their usefulness, their efficiency, on what we can *do* with them. In this respect, Rorty assents to the Wittgensteinean version of behaviourism, which takes it that judgements of the 'truth' or 'untruth' of sentences only make sense within the confines of a particular *language game*. Ultimately, however, to claim that a certain statement is 'true', is no more than "an automatic and empty compliment which we pay to beliefs which are successful in helping us do what we want to do" (1980: 10).

In any case, as truth-values can only be ascribed to linguistic entities, to claim that there is a *truth* 'out there' makes no sense. This does not imply, however, that there is no *world* 'out there'. Rorty would not subscribe to such a radically anti-realist (i.e. idealist) ontology. What he objects to, however, is a realist notion of 'the world' such that it is conceived of as "*so* 'independent of our knowledge' that it might, for all we know, prove to contain none of the things we have always thought we were talking about" (1982: 14), an option kept open by the Kantian distinction between things in themselves and things as they appear to us. Such a world would have to remain so unspecified, that it would become an empty notion, either referring to something abstract like the ineffable cause of our (sense) perceptions, or to everything which at that moment is out of our focus. Ultimately, so Rorty, there is no non-linguistic way in which we can decide about the nature of non-linguistic reality. He questions those versions of realism which assume that there is a way to grasp how the world is, independently of our own perception of it. Thus

Thomas Nagel's 'intuitive realism', as Rorty labels it, suggests that philosophy should be able to do justice to our intuition that "there is something which it is like to be a bat", whereas Rorty would prefer to ask what it is in our current life form that makes us perceive such an intuition as indisputable (1982: xxxiii).

Hence, no matter his minimal recognition of a kind of ontological realism, Rorty's epistemological take is of a radically anti-realist vein. This is also how he understands the notorious Derridean slogan that there is nothing outside of the text. Derrida's assertion stands, according to Rorty, in so far as it is not an ontological claim, but rather a rejection of the philosophical language game of ontology itself - of attempts to conceptualize what 'is' *tout court*. Rorty much appreciates what he calls the "shadowy, deconstructive, good side" of Derrida's work (1982: 99). He draws an analogy between the deconstructivist stand on the Kantian vocabulary of representation and reality, and the secularist's position concerning theological vocabularies of God: both would rather dodge (to them boring) questions regarding their 'belief' in either. Deconstructivists see little sense in asking how things 'really' are. Rorty regrets, however, that Derrida (as Heidegger before him) did not stick to his negative mode, but developed a "luminous, constructive, bad side" as well (99). That is: in trying to account for what language is about (if not about representing reality) Derrida tends to become 'philosophical' again. His theorizing of language in terms of 'writing' and 'the trace', according to Rorty, comes dangerously close to a metaphysics of language, rather than keeping to "a relaxed, naturalistic, Darwinian view of language" (and consequently of knowledge) which sees it as no more than a useful set of tools, that helps the (human) species to survive (1991b: 3).

For Rorty, the great gain of a deconstructivist approach lies exactly in what it does *not* say, in the way it for instance *avoids* talking about the 'subject' or the 'object' of knowledge, or of "this quasi-thing called language" (1991b: 6). By leading the way out of the 'fly-bottle' of representationalism, deconstructivism, with other post-metaphysical forms of writing, would have a therapeutic, if not down-right liberating effect. It would offer us vista's of other ways of coping with the world and our lives.[5]

So, what is the alternative to this philosophy-gone-wrong? In *Philosophy and the Mirror of Nature*, Rorty wishes to replace epistemology with hermeneutics. Whereas epistemology, so he claims, gives the philosopher the role of "the cultural overseer who knows everyone's common ground", a hermeneutic would be more like "the Socratic intermediary between various discourses" (1980: 317). In the first case, the philosopher is the a guardian of rationality: he shows the common ground of all the contributions in a dispute, thereby making way for (rational) agreement. He poses as a *judge* who stands above all warring parties. In the second case, the idea of a common ground is set aside. The hope for rationality and connections now lies in the variety of discourses which, although not bound by any underlying unitary matrix, make ongoing conversations possible. The 'rational' actor, within this perspective, will accept the jargon of the interlocutor, instead of reducing the message to his own terms. The philosopher has become a *translator*. Hermeneutics, so Rorty emphasizes, is not meant to be a new theory of knowledge. It rather is about new and more interesting ways of expressing ourselves. In a sense, philosophy would return to its ancient roots, and put the striving for practical wisdom first again. Its task would be one of *edification*: to try and understand 'strange' discourses, ways of thinking which seem incommensurable with our usual ways of thinking, or to create new vocabularies in order to make new sense of familiar surroundings. Edification, so Rorty, could be seen as 'abnormal' discourse, like Kuhn's description of 'abnormal' science. It is incommensurable with prevailing norms of rationality and intelligibility, but precisely for this reason it may have revolutionary potential: it might offer us new ways of seeing, new ways of 'being' even.
From this hermeneutical perspective, there is no going back to last foundations, no going back to some

natural starting-point before language, independent of any vocabulary or cultural vantage point. From a realist position, such as Thomas Nagel's, it is necessary, our limited capacities as finite beings notwithstanding, to try and distance ourselves from our own particular - often parochial - point of view, so that we may grasp reality as it is. Rorty finds such efforts vain and undesirable.[6] It would be better to 'cure' people (especially Western philosophers, who are tainted with it most) from this need for transcendence by a moral education which "tries to sublimate the desire to stand in suitable humble relations to nonhuman realities into a desire for free and open encounters between human beings, encounters culminating either in intersubjective agreement or in reciprocal tolerance" (1991a: 8). A thus 'enlightened' human being would recognize the inevitable contingency of even his most fundamental starting-points. As a philosopher, he would no longer seek universally valid knowledge about knowledge. His focus would shift to the relevance of the context of conversation within which knowledge is to be understood (1980: 389). To keep the 'conversation of mankind' going, he would not construct yet another new philosophical system. His contribution would merely be 'reactive' and 'edifying'.

The epithet 'enlightened' should be taken with an ironical twist here. Indeed, a thus morally raised individual would be 'liberated', i.e. freed from all kinds of unresolvable and practically useless metaphysical problems which held him captive. But, this liberation does not yield new certainties. It will not provide the individual with an alternative light to the light of Reason. The postmodern knower cannot boast of any ultimate insight or basic certainty. As Rorty notes in *Philosophy and the Mirror of Nature*, the notion of the edifying philosopher is paradoxical: as a philosopher, he is expected to justify his views with the help of arguments, but as an edifyer, he would merely want to offer a different vocabulary, tell different stories.

In later articles, Rorty tacitly makes a slight shift in his vision of the 'new' philosopher. He speaks of the edifying intellectual now as an *ironist* - as someone who is in continuous doubt about even his[7] 'final' vocabulary, i.e. about the set of words he uses to justify his beliefs and actions. The ironical position is at right angles to the position of the *metaphysician*, i.e. the philosopher who questions our common sense beliefs, but does so without problematizing the final vocabulary which generates these beliefs. The ironist, on the other hand, is sensitive to the possible worth of other people's different final vocabularies, and acknowledges that it is impossible to rationally undercut vocabularies that conflict with his own. He knows that his final vocabulary cannot be universalized. It may up till now have proven useful and valid for his own life, for his own 'self-creation' - this is no guarantee it will also work for others. If he therefore sets out to show the value of his final vocabulary, he knows that rational argumentation will not do the job. Instead, he offers 'exemplary' accounts of his views, his self, his life. As the public expression of a private self, the edifying role of the ironist shows more resemblance to that of the poet than to the earlier suggested role of the translator.

This outline of the philosopher as the ironist inventor of a public self betrays a particular conception of the subject of knowledge. The exemplary accounts of the ironist writer start from the presumption that one's self, one's personal identity, is not a pre-given essence to be discovered by introspection and analysis; nor is this self to be taken as the source or origin of these exemplary accounts. More than that, the whole idea that there is something like a 'human essence', a quality or set of qualities which we all share as human beings, is discarded. Freud, so Rorty claims, created a whole new vocabulary which enables us to account for our idiosyncratic life history as a narration of our specific way of coping with our environment, rather than presenting our life as a particular specimen of 'human life' in general (1989: 23-43). The Freudian 'de-divinization' of the self in fact involved a liberating deconstruction of the Kantian moral conscience as something pertaining to a universal, inner or 'core' self. It acknowledged moral consciousness as a product of cultural and historical circumstances. Henceforth, self-*knowledge* has nothing to do with getting to know one's inner self; it rather amounts to self-

creation. Ideally, it consists of the invention of a new language, of new metaphors, which give expression to (although it would be more suitable to say: which construct) the peculiarities and idiosyncracies of this particular individual.

Philosophy, in Rorty's foreseen post-metaphysical culture, would be a private undertaking of intellectuals who shape their work according to the model of the artist rather than the scientist. They problematize what is taken for granted, speak of 'making' rather than 'finding', are interested in novelty rather than convergence to the old, redescribe rather than infer, introduce new words rather than analyze familiar ones. In short: an ironist stand would transform philosophy into a form of 'culture criticism' (Rorty 1989: 81).

Both metaphysicians and ironists, Rorty argues, provide redescriptions which are not necessarily phrased in the terms of the actors involved. Both approaches might be experienced as humiliating, as they do not take seriously the (perspectives of the) people whose lives are redescribed. Still, there is a crucial difference, so Rorty claims. The metaphysician substantiates his stories with arguments, thus suggesting that his perception is more true to reality than the actor's common sense accounts. In doing so, he feeds the illusion that he is educating and empowering his subjects; he would help them see through outward appearances. The ironist refrains from such assurances. He puts his redescriptions on a par with the stories told by the people involved. Instead of revealing from a meta-position the 'Truth' about themselves and their lives, he engages in reciprocal dialogues. Therefore, in the end, the ironist's redescriptions are less humiliating than those of the metaphysician.

Such defense of ironical accounts as morally superior to metaphysical expositions did not safeguard Rorty (or his fellow deconstructivists) from allegations of intellectual irresponsibility. Should not philosophers do something more than be narcissisticly concerned with projects of self-creation, or creative re-descriptions of their culture? Does not the ironist stance have devastating political consequences, in depriving us of any firm foundation for defending our (i.e. the West's) most important achievements, such as the recognition of basic human rights, the value of democracy, the principle of non-discrimination, freedom of speech, etc.?

Rorty's reply to these doubts starts with a firm distinction between the private and the public. He is convinced that it is impossible to invent one single vocabulary, to develop one vision, which could do justice to both spheres of life. Their closest affiliation is achieved in the classical liberal ideal, as already expressed by John Stuart Mill, of a just and free society as a society which lets its citizens be as "privatistic, 'irrationalist' and aestheticist as they please so long as they do it on their own time - causing no harm to others and using no resources needed by those less advantaged" (Rorty 1989: xiv). This is the political stance 'liberal ironists' would take, so Rorty claims, and he reckons himself among them.[8] As liberals, they believe that cruelty is the worst thing we can do. As ironists, they take their most fundamental beliefs, their 'conscience', as contingent and without firm grounds. Consequently, a liberal ironist does not have a (non-circular) answer to the question *why* cruelty would be the greatest vice (xv).[9] The crucial point is that whereas 'metaphysicians' are certain that such silence clears the way for all kinds of evil, Rorty maintains that his inability to give reasons for being moral, will not keep the ironist from remaining faithful to his conscience. The liberal ironist's aversion for cruelty and humiliation will make him supportive of social institutions and practices which foster justice and solidarity. But this does not imply that the private vocabulary of self-creation and the public vocabulary of justice and solidarity can be synthesized - nor that they need to be. Both merely help us 'do' different things, things which are equally important. Whereas the vocabulary of justice reminds us that we are members of a community and as such have a moral commitment to our fellow-members, the vocabulary of self-creation reminds us to that we also have a responsibility to make (something of) our own lives, no matter what or how

conventions and social expectations ask us to be (1982: xiii-xvi).

I agree with Rorty's very consistently carried through deconstruction of the philosophical traditions of metaphysics and epistemology. I welcome the potentially liberating effects of such deconstructions, especially their consistent debunking of any form of essentialism. However, I do have some problems with Rorty's version of constructivism.

First, despite his end-of-philosophy-rhetoric, Rorty remains loyal to the intellectualism inherent in the tradition of Western philosophy. In the tacit assumption that words would be the most used, or the most suitable tool to cope with our environment for 'all of us', he seems inclined towards a verbalist position. As if all people primarily live by words, as if only living by words would be valuable. But, in fact, there are other activities, and other material and immaterial 'things', which sometimes do that job equally well - perhaps even better. Think of the image of 'body language', think of music, or of visual arts. In typifying ironists as people who "spend more time placing books than in placing real live people" (1989: 80), Rorty makes of his anticipated postmodern subject quite an intellectualist character, who suspiciously resembles the classical 'man of letters'.

Secondly, the announced endings (of epistemology, of metaphysics, of science as the paradigmatic branch for knowledge), are presented as the announcement of a revolutionary moment within the history of modern thought - a moment which, because of its deconstructive character, would have a truly liberating and morally uplifting potential. However, it remains unclear what happens *after* the revolution, after our being freed from our metaphysical quandaries. The promise is that from then on, every human being will have the opportunity, if not the task, to instigate his or her own small, private revolutions, i.e. to invent new vocabularies, to produce 'abnormal' discourse. It seems as if, for an ironist, it suffices to be a 'culture critic', *no matter* what the content or impact of the criticism. So long as their (re)descriptions are new and original, authors (but could/should not everyone be (like) an author?) have fulfilled their responsibility towards themselves and their fellow citizens. To me, this smells of a romantic kind of decisionism - not unexpectedly a charge also made against existentialist thinkers such as Heidegger and Sartre. Although Rorty argues that texts (novels, poetry, social inquiry) may sensitize readers to instances of cruelty and humiliation, and widen their idea of who belongs to 'us', to 'our community', his general framework suggests that the *making* of a choice, or the *invention* of a new vocabulary, is of greater (moral) weight than what the choice is actually for, or what it is that the vocabulary helps us cope with.

This problem is closely associated with a third aspect of Rorty's thinking that I take issue with, which is his dearly held distinction between the public and the private. These would be two fundamentally different spheres of life, with concomitant different vocabularies, helping people to live up to the different ethical tasks of (private) self-creation and (public) solidarity and justice.[10] Although Rorty suggests that these spheres have equal moral weight, in his outline of the position of the (liberal) ironist, the private good of self-creation gets priority over the public good of solidarity, that is, according to the liberal credo, so long as it does not harm others. One problematic point, glossed over completely by Rorty, is that the question whether a particular activity *counts as* harmful or injust to others, can be a fiercely contested issue. For some, to spend one's money on a luxurious dress might already show a lack of solidarity with the less privileged, whereas for others anything goes, so long as one does not directly and physically abuse a fellow human being. Another problematic point is that the distinction between the private and the public itself has been contested as well, especially by feminist scholars. In a critical assessment of Jürgen Habermas' theory of modern society, Nancy Fraser for instance pointed out that the allocation of certain activities, such as child rearing or having sex, to the private sphere, hides from view the public or political aspects of power and domination which might be at work here (Fraser 1989). A

possible response to this could be that Rorty's private sphere is meant to be really 'private', i.e. to refer solely to the relation of an individual to herself, and to no one else. An unconvincing response, I would say, as such a radically private self is virtually non-existent: our selves are always constituted in relation to others, and we are inevitably members of communities, chosen or given. Even our most private projects of self-creation do not take place in a social vacuum.[11] Considering his conception of the subject as always constituted through historical and local circumstances, Rorty would undoubtedly have to acknowledge this.

This brings me to my last point of contention: how, given Rorty's emphasis on the primacy of vocabularies and life worlds, would it be possible for subjects to make something 'new', to engage in 'abnormal' discourse', at all? In describing Rorty's view of self-knowledge as a form of self-creation, I inserted the word 'ideally', because this Nietzschean way of 'knowing-thyself' actually is granted only to 'superman', or, in Rorty's terms, to the 'strong poet'. Thus, his envisioned liberation of metaphysical illusions seems to be reserved for the happy few: for those who are 'strong' enough (or who live under material and immaterial conditions which enable them?) to acknowledge the contingency of their selves, and create themselves and the world they inhabit anew everyday.[12]

2. Genealogy: Michel Foucault

Despite his enthusiastic appraisals of edification as the invention of new vocabularies, most of Rorty's energy is spent in argumentative jousts with the tradition of Western (especially analytical) philosophy. In persistently arguing why the argumentative genre of discourse has become obsolete, his texts contradict themselves on the performative level. While asserting that 'stories are all we have', Rorty does not give us (new) stories to live by.

This is certainly not an objection that could be brought up against the work of Michel Foucault. Foucault's 'critical histories of Western thought'[13], rather than engaging in systematic, rational discussions with philosophical adversaries or predecessors, trace the historical-discursive conditions of particular modes of thought. Thus, Foucault deprives these modes of thought of their self-evidence, and exposes supposedly 'eternal truths' as particular, time- and culture bound ways of looking at the world. Foucault's 'archeological' and 'genealogical' surveys, from his history of madness up to his history of sexuality, testify to a fascination with the conditions under which, in Western thought, certain entities got constructed as the legitimate 'subjects' and 'objects' of knowledge. Foucault was not interested in the possibility of knowledge in the metaphysical, speculative sense. His aim was to dig up the historical course of what he called 'problematizations' (Foucault 1989: 85). His writings are much appreciated precisely for the way they "free up the possibilities for new forms of life" and "prepare the way for new forms of experience", as one of his sympathetic critics put it (Sawicki 1991: 96).

Foucault's earlier studies link up with a current within French epistemological thought which was wary of metaphysical speculation, and concentrated instead on the actual, historical developments of scientific disciplines. The main representatives of this approach, Gaston Bachelard and George Canguilhem, subscribed to a constructivist outlook on scientific knowledge. For Bachelard, an object is only conceivable within the theoretical system in which it is made into an object of research. Foucault adopted Bachelard's view of the history of scientific knowledges as a discontinuous whole, marked by 'epistemological ruptures' which cannot be explained by the internal logics at work within a particular scientific discipline. Bachelard, however, being a natural scientist by training, took microphysics and the theory of relativity as the paradigmatic sciences. His 'rational constructive' outlook was inspired by a

firm belief in the constitutive role of mathematics for the construction of scientific theories. In this respect, Foucault's work comes closer to that of his teacher Canguilhem. From Canguilhem, Foucault learned about the constitutive role of concepts for the interpretation of scientific 'data', as well as for the emergence of new scientific insights. And he shared his particular interest in the life sciences, such as biology, medicine, psychology and psychiatry. Foucault's histories of the emergence of 'reason' and 'madness', or of 'health' and 'sickness', resonate the design of Canguilhem's earlier study into the concepts of the 'normal' and the 'pathological' within the medical sciences. Finally, with Canguilhem, Foucault is sensitive to the practical and discursive context (including the use of experimental techniques and tools) in which such concepts happened to get their specific meaning.[14]

In some important respects, however, Foucault's project takes leave of those of his predecessors. Most notably, despite their constructivist and anti-foundationalist strain, both Bachelard and Canguilhem sticked to a belief in scientific truth and progress, and relied on a firm distinction between 'prescientific' or 'mistaken' views on the one hand, and 'scientific' or 'true' conceptions of reality on the other. Foucault's stance boils down to a more sceptical position. Phenomena such as the 'normal' or the 'pathological' are not perceived as things or essences that preceed their discovery or the words with which they are named. His assumption rather is that they actually were constructed as such through the discursive processes that named them. Whereas Bachelard and Canguilhem remained interested in questions of truth and falsity, Foucault wants to know about the historical conditions of possibility for truth discourses to emerge.[15]

With *Les mots et les choses*, published in 1966, Michel Foucault wrote one of the substantive parts of his 'critical history of Western thought'. This 'archeological' study consists of a reconstruction of the rules or organizing principles which underly and preceed the bodies of knowledge of three successive epochs.[16] Whereas Rorty's *Philosophy and the Mirror of Nature* deals exclusively with the philosophical tradition, Foucault's book crosses the disciplinary boundaries of different scientific domains (i.e. philology, biology and political economy)[17] in order to look for their (historically contingent) common ground - for the *episteme* that functioned as a subconscious layer for these truth discourses. As a consequence, and compared to Rorty, Foucault's account provides for a far more complicated picture of Western thought. Rather than sketching the Cartesian/Kantian paradigm as the dominant Western view of knowledge since the 17th century, Foucault distinguishes three periods: Renaissance (the end of which is marked by the publication of Cervantes' *Don Quichotte* in 1605), the Classical Age (during which Descartes' work is central) and Modernity (starting at the end of the XVIIIth century with the Kantian *Critiques*).

The Renaissance conception of knowledge, according to Foucault, assumed (true) knowledge to be based on relations of *similitude* between the words and the things they named. Language was not perceived as an arbitrary systems of signs, but as a part of God-created nature, which, in its original form (i.e. before the Babylonian confusion of tongues), contained words which perfectly matched the things they named. Vice versa, nature was perceived as a book to be read, an enigmatic text to be deciphered. True representations therefore did not just 'mirror' the world - they formed a repetition of it. In the end, they were just as enigmatic and opaque as the world itself.[18]

The Classical Age gets most of Foucault's attention. In his exposition, it is the true era of representation, the elements of which he introduces with the help of a detailed reading of the famous painting by Vélasquez (1656), *Las Meninas*, which for Foucault constitutes an exemplary representation of (classical) representation.[19] In its complicated interplay of gazes and perspectives it shows the ordering functions of representation, personified in the 'subjects' of representation, i.e. the spectator, the painter and his models. But it also shows that the activity of representation itself, that which makes the representation possible, cannot be captured in the representation. The Classical view of human knowledge, in Foucault's account, was dominated by a Cartesian methodical approach, which prescribed

a step by step, careful ordering of the world, thus clarifying the order of the world itself. The means of representation, language, is considered to be reliable and transparent. Hence, it would not be right to interpret the Cartesian *cogito ergo sum* as locating the foundation of certainty in the human subject. Such would be an appropriation of Cartesian thought from a modernist perspective. It is only with the transition to Modernity that the human subject came into focus as the constitutive possibility of knowledge. 'Man', so Foucault's famous adage, is a modern invention. His emergence is marked most significantly by the development of the social sciences in the 19th century. He is conceived to be not only the subject, but also the object of his own knowledge: "un étrange doublet empirico-transcendental" (Foucault 1966: 329). Man thus becomes a 'subject' in both senses of the term, sovereign ànd subordinate. Within philosophy or metaphysics, it was for instance Kant who outlined the contours of this subject, at once the source and the limitation of knowledge. This modern *episteme* also underlies the Freudian discovery of the unconscious, which made it clear that the subject was not 'master of his own house', and the Marxist idea that human beings could be alienated from themselves. The modern subject appears to be a split subject. The modern episteme produces both 'man' and the (his) 'unthought', both a 'Self' and an (his) 'Other' (Foucault 1966: 333-339). *Les mots et les choses* culminates into a passionate announcement of the demise of the modern *episteme*, and of the death of 'Man', this mere figure-head of philosophical humanism.

Within his archeological inquiries, under the influence of De Saussure's structuralistic linguistics, Foucault still sees discourse as a relatively autonomous domain. The relationship between 'signifier' and 'signified', between signs and their meanings, is taken to be fundamentally arbitrary. There is no intrinsic relationship between a sign and its referent in a reality 'out there'. The meaning of a sign is determined internally, through its relations with other signs. Consequently, meanings and truths count as such only within the limits of a particular discourse.

But greatly inspired by Nietzsche's project of genealogy, in the early seventies Foucault shifts his focus. He becomes more and more interested in the materiality of discursive formations, and in the inextricable relationship between knowledge and power. He also makes short work of the dominant delusion that the 'true meaning' or 'essence' of a term or a thing, would coincide with its origin, i.e. with how it was at the moment of its birth (Foucault 1977: 143). Rather than digging up underlying principles, regularities and essences, rather than hermeneutically assessing deeper layers of meaning, a genealogy explores the surface of events. It does not, like traditional history, show linear developments, or tell stories of progress. It zooms in on arbitrary details and accidental happenings. The genealogist traces the 'descent' of a particular phenomenon, which will prove to consist of an ensemble of singular and disparate events. What it 'truly' is, cannot be reduced to any underlying 'origin' or 'cause'. "The search for descent is not the erecting of foundations: on the contrary, it disturbs what was previously considered immobile; it fragments what was thought unified; it shows the heterogeneity of what was imagined consistent with itself" (1977: 147). Thus, genealogy shows the fragility and contingency of what appears solid and necessary. Knowledge, as Foucault quotes Nietzsche, "is not made for understanding; it is made for cutting" (154). Knowledge does not reassure, it unsettles. Foucault concludes that true historical sense would unmask any claim to universal truth as propelled forth by a 'malicious' will to knowledge, and would show that "all knowledge rests upon injustice" (162-163).

In his inaugural lecture for the *Collège de France*, delivered in 1970, Foucault sketches the outlines of a research program based on these Nietzschean insights (Foucault 1971). Discourse, so he states, has a dangerous side. When we realize its event-like, or material character, we realize that our utterances are not innocent. For not only are our words loaded with histories of struggle, wounds, domination and serfdom, in using words we violate things.[20] Truth discourses are impregnated with a 'will to truth'.

While *within* the boundaries of a particular discourse, attributions of truth and falsity may be reasonable and unforced, perceived from the *outside*, attributions of truth and falsity are regulated by mechanisms of exclusion, discipline and control.

Foucault's endorsement of a Nietzschean perspectivism retains the sceptical outlook on knowledge from his archeological studies. But there is a growing attentiveness to the role of discourses as practices. With the transition from an 'archeological' to a 'genealogical' approach of knowledge, Foucault develops interest in the material-symbolic *conditions* of (truth) discourse, as well as in its material-symbolic *effects*. Truth discourse, in his view, is constitutive of the everyday lives, experiences and relationships of concrete human individuals. It should be understood in terms of discursive *regimes*: not restricted to the realm of speech and writing, it exerts power through its organizations of place and time, for instance through the architectonic structure of a building, or through the prevalence of a timetable. Discursive regimes materialize within the realm of practices and things.

      Hence, Foucault's constructivist approach of knowledge and truth does not imply that his work would focus solely on the realm of words, vocabularies, language. His analyses of knowledge/power configurations, in showing how 'constructions' of the world, of subjectivity or of the human body have undergone radical changes, do not merely point to changes in outlook, perception, or interpretation. Genealogy is more than a history of mentality. It rather describes how our world, subjectivities and bodies *themselves* went through processes of transformation: how they are historical, rather than timeless entities. In other words: the fact that subjects and their lived bodies are produced through discourse, that they are 'constructed', does not make them less 'real'. Discursive constructs are not 'ideological' in the sense that they dissimulate the real, material conditions under which human subjects live.[21] On the contrary, if we want to understand the scope of Foucault's epistemological outlook, we should realize how his work redefined the notions of 'construction' and 'materiality', such that they are no longer oppositional, but have to be conceived in line with each other.[22]

      Simultaneously, in his accounts of the ubiquity of power/knowledge configurations in modern societies, Foucault also altered the conception of 'power'. In his view, in the course of the 18th century, a crucial shift took place in the way power operates. This new face of power is intricately linked up with the emergence of the human sciences and their urge to assemble knowledge about human subjects. Earlier, 'classical' power pertained to the sovereign: it manifested itself in signs of both grandeur and terror. It worked by inspiring awe. It was oppressive, endowed with the right to kill. Contrarily, modern power operates in a relational mode: it does not pertain to any person or group in particular. It comes 'from below' and makes use of techniques of discipline and normalization in shaping human bodies, and enabling particular forms of life. Power in the modern era is not to be conceived as a property, an institution, or a structure. It cannot be understood according to the model of sovereign or juridicial power, because it does not suppress, but produces ways of living. And it does not display itself as spectacle, but works imperceptibly in the micropractices of everyday life. Although non-subjective, it is intentional, calculating and strategical. Modern power operates in local institutions and practices, which are instigated by, but at the same time exceed the official system of rights. Whereas at the 'official' level of the juridiciary, power concerns the opposition between the legitimate and the illegitimate, at the 'inofficial' level of domination, power has to do with struggle and submission (Foucault 1979: 92-97).

      Although Foucault's main interest lies in the 'microphysics' of power relationships, he does not deny that power may exist at the level of large-scale structures as well. But these global structures are to be considered as the ultimate, reified outcomes of "infinitesimal mechanisms of power" (Rouse 1994: 107). In this respect, Foucault sometimes makes a distinction between 'power' and 'domination'. 'Power' refers to strategical games that can only be played so long as the parties involved have a certain amount

of freedom, in which the relations between them are reversible and unstable, and which presuppose the possibility of resistance. When these relationships, however, become fixed and persistently asymmetrical, then we can speak of relations of 'domination'. But, although power relationships can lead to domination, domination is not the essence of modern power (Foucault 1995).[23]

Foucault's notion of 'power/knowledge' is meant to draw attention to the interconnectedness between knowledge and power in modern societies.[24] This should not be understood in the reductive, and radically relativistic sense that knowledge simply *is* power. Rather, "[t]hey have a correlative, not a causal relationship, which must be determined in its historical specificity" (Dreyfus & Rabinow 1983: 203). Neither does it imply that 'better' knowledge would be less immersed in power relationships. But, as Rouse, by drawing an analogy between Foucault's analytics of power and his perception of knowledge, has suggested, to talk of 'power/knowledge' rejects the identification of "one's own political and epistemic position with the standpoint of sovereignty" (Rouse 1994: 102). According to Rouse, Foucault subscribed to a *dynamic* concept of both power and knowledge. Just as power relationships are constantly shifting, marked as they are by conflicts, points of resistance, and strategical manoeuvres, to make truth claims "is to try to strengthen some epistemic alignments, and to challenge, undermine, or evade others" (1994: 112). Of course, we have to be able and willing to offer reasons for the partial and strategical choices we make. But the appeal to impartial legitimations, or some kind of last foundation is nothing more than just another strategical-tactical move. With our claims to truth we give no more, but also no less, than "a situated response to a particular political and epistemic configuration" (112).

At least as focal throughout Foucault's research is the question of the relation between power and subjectivity: how did human beings in the course of Western history become subjects? Particularly in the age of modernity, power operates through a variety of techniques of 'subjection' (*asujettissement*), as for instance illustrated by Foucault's histories of punishment and sexuality (see Foucault 1979; 1976). In the modern prison, 'delinquents' are submitted to permanent visibility, to normalizing sanctions and to scrutinized examinations. Concerning sexuality, the modern individual is asked constantly to submit him/herself to cautious explorations of his/her desires, phantasies and practices, and to go to confession with psychologists and psychiatrists, these modern priests of the soul. Such disciplinary practices produce a double-sided effect. On the one hand, they produce more sane, rational and autonomous subjects. In this respect they are in line with the humanistic aim of emancipation. On the other hand, they submit individuals to procedures of control and documentation, thus reducing them to mere interesting 'cases' of scientific knowledge. The modern individual becomes both a subject and an object of knowledge, as Foucault already observed in *Les mots et les choses*. Thus, disciplinary practices *limit* the range of the kind of subjects individual bodies can become, whereas, at the same time, they *enable* individuals to become subjects of speech and action. Simply put: in their production of human subjectivity, disciplinary practices are both oppressive and empowering.

Given that the connections between power and knowledge on the one hand, and power and the subject on the other, are so close, what are Foucault's thoughts on the epistemological notion of the subject of knowledge? Evidently, from a Foucauldian perspective, it is no longer possible to speak from the standpoint of the universal, transcendental subject. As subjects are always simultaneously produced by and producers of discourse and knowledge, no individual subject of knowledge can pose as "the consciousness/conscience of us all" (Foucault 1980: 126).

From this rejection of the speaking stance of the universal subject, however, two different lines of thought can be discerned within Foucault's work. On the one hand, motivated by his strong *anti-*

humanistic position, Foucault is inclined to reject *any* notion of a subject of knowledge. Discursive practices, for instance, may be regarded as 'constructions', but this does not mean that one can pinpoint a definite originating instance which does the constructing. For that would re-invoke the humanistic notion of the autonomous, transcendental subject of knowledge. Thus, "it is not the activity of the subject of knowledge that produces a corpus of knowledge, useful or resistant to power, but power/knowledge, the processes and struggles that traverse it and of which it is made up, that determines the forms and possible domains of knowledge" (Foucault 1979: 28).[25]

On the other hand, Foucault frequently expressed his views concerning the appropriate *ethos* for a subject of knowledge. Thus, he once stated that intellectuals have no choice but to start from "the precise points where their own conditions of life and work situate them (housing, the hospital, the asylum, the laboratory, the university, family and sexual relations)" (Foucault 1980: 126). Their claims to knowledge will be linked up with partial interests and perspectives, and they will be particularly involved in what Foucault here named the "insurrection of subjugated knowledges" (81). 'Subjugated knowledges', in Foucault's perspective refers to two things. On the one hand, it points to the activity of critical scholarship which highlights histories of struggle that have been glossed over in dominant historiography. On the other hand, it refers to the emergence of 'popular' knowledges, usually disqualified as naive and unscientific. The unexpected connection between the two would procuce 'historical knowledge of struggles', i.e. genealogies, to be used tactically in present-day struggles against power. Foucault emphasized that this association between erudite scholarship and popular knowledges would not consist of the critical intellectual *speaking for* the masses, as Marxism would have it. For "they *know* perfectly well, without illusion; they know far better than he and they are certainly capable of expressing themselves" (Foucault 1977: 207).[26] In any case, in this second line of thought, Foucault clearly uses a notion of a subject of knowledge, i.e. a subject which is embodied, partial, responsive and resisting. This side of Foucault is for instance emphasized by Braidotti when she claims that for Foucault, the knowing subject is a "corporeal entity, the intelligible and intelligent flesh and blood" (Braidotti 1991a: 38).[27]

3. Anthropology: Bruno Latour

With the work of Bruno Latour, a third version of a constructivist approach of knowledge comes into view. Latour's work, like that of his many colleagues in contemporary science studies, draws from many sources. One of its 'forefathers' (at least in spirit) is Karl Mannheim, whose *Ideology and Utopia*[28] marked the beginning of a new subject area, i.e. the sociology of knowledge. Building on Marxist thought, Mannheim took the view that "situational determination is an inherent factor of knowledge" (Mannheim 1960: 274). Whereas he proceeded from this insight to develop a view as to which 'situation' (that is: which social, but also which political position) would produce better, more objective knowledge[29], within more recent social studies of science a much broader range of contextual features is explored. The basic insight, however, remains that scientific knowledge is fundamentally social in character, that one will "consider the objects of knowledge as the outcomes of processes which invariably involve more than one individual, and which normally involve individuals at variance with one another in relevant respects" (Knorr-Cetina 1983: 117).

Another founding work for this constructivist approach of knowledge is Berger & Luckmann's *The Social Construction of Reality*. Their sociology of knowledge is different from Mannheim's project, in so far as they bracket questions of epistemology, and empirically focus on "everything that passes for 'knowledge' in society" (Berger & Luckmann 1966: 15). The question guiding their treatise is: how come

that society can be built up by the subjective meaning-giving activities of human beings, and at the same time acquire a thing-like status of 'objective facticity'? (18) Berger and Luckmann conclude that every day human reality is a socially constructed reality. The sociology of knowledge for them is a 'humanistic discipline', the subject of which is "society as part of a human world, made by men, inhabited by men, and, in turn, making men, in an ongoing historical process" (189).[30]

Contemporary social studies of science take a different route. Their main question is not so much: how do we understand each other, but: how is (scientific) knowledge constituted by social relationships? In other words, these scholars pick up the socio-epistemological problematic put on the agenda by Mannheim, and are less interested in the socio-hermeneutical project instigated by Berger & Luckmann.
       Initially, sociological studies of science focused on the way in which social factors could explain scientific errors.[31] Quite soon, however, this was considered to be too narrow an interpretation of what a sociology of knowledge could accomplish. According to some, it too readily accepted scientists' perception of their own work as the uncontaminated search for truth, it treated true and false beliefs 'asymmetrically'. A sociological approach should abstain from favouring what scientists took to be true above what scientists took to be false. Kuhn's *The Structure of Scientific Revolutions* offered proof to support this critique. In his analysis of developments within the history of the (natural) sciences, Kuhn showed that social aspects were just as relevant for the improvement of knowledge as they had been for scientific mistakes. Moreover, the 'social' for Kuhn was not something outside scientific practice and discourse, it also formed an intrinsic part of scientific deliberation. Scientific facts and theories gained validity not just in interaction with 'nature', but through their acceptance by particular scientific communities (Kuhn 1970). On the basis of these insights, the sociology of scientific knowledge (SSK, as its practitioners often name it) produced a variety of interesting studies of scientific theory and practice, which radically undermined the once almost sacred epistemological distinction between the 'context of discovery' and the 'context of justification', between external-explanatory factors and internal-rational grounds. Within SSK, different schools can be distinguished.[32] What they share is a relativist stand in their methodology: they do not 'know' which scientific beliefs are true or false, they treat truth and falsity 'symmetrically'. However, in the eyes of some, they are not taking the symmetrical outlook far enough. For their scepticism concerning scientific 'truth' and 'falsity' is accompanied by undoubted assumptions concerning for instance the existence of social groups and interests. In other words: their methodological relativism notwithstanding, these sociologists of science are still afflicted with a considerable dose of 'social realism'.
       Some researchers therefore widen the scope of their agnosticism further, and abandon any a priori assumption regarding the existence of both 'natural' ànd 'social' facts. Scientific knowledge gets to be studied at the site of its most immediate production, where it is still 'in the making': the laboratory. These science studies scholars model their research according to the practice of ethnographic fieldwork, entering a laboratory as if it were a strange place populated by an alien tribe, setting out to make sense of the 'exotic culture' found there.[33]

French philosopher and science studies scholar Bruno Latour is one of the most eloquent representatives of science studies, and the very first to do ethnographic fieldwork in a laboratory.[34] Despite Latour's professed commitment to the immersion in the micro-cosmos of actual scientific practices, and his wariness regarding unwarranted universalizations[35], he does not shy away from the larger philosophical gesture. Admittedly, *epistemology*, that branch of philosophy that perceives the human mind as the sole source of knowledge, with the emergence of historical and sociological studies of knowledge has become wholly redundant.[36] However, questions of *ontology*, according to Latour, still have high topical

value. Positions within science and science studies are grounded in 'deep-seated ontological commitments', which in his view need close examination and replacement (Latour and Woolgar 1986: 260).

Posing as a cultural anthropologist, Latour watched various sciences in action, i.e. sciences in the course of constructing hard facts. His entry to science, as he phrased it once, is not made through the "grandiose entrance of ready made science", where it shows the old, self-assured side of its Janus-face, but "through the back door", where we plunge in the midst of controversies yet to be settled, where we see its young and uncertain face, the face of science in the making (Latour 1987: 4). In the course of his investigations, Latour developed his actor-network theory, which holds that the difference between 'hard' facts, produced by the natural sciences, and the 'soft' insights from the social sciences or from common sense, is not a matter of quality, but of degree: what makes something into a 'hard' fact is not so much determined by its correspondence to reality, but rather by the length of the networks built to support it. These networks associate all kinds of actors with one another, in order to join as many forces as possible to strengthen the scientific claim in question. In Latour's view, many science studies scholars remain too much preoccupied with the subject-side of knowledge. Surely, science is a process of construction, but Latour objects to what he sees as a narrow humanistic perspective, from which it is only human beings, whether perceived of as 'subjects', 'knowing minds' or 'social animals', which are actively involved in crafting 'facts' or 'reality'. Actually, science is a coproduction of 'quasi-subjects' and 'quasi-objects'. For that reason, the term 'social' does not fit Latour's version of constructivism very well.[37] The label of 'radical constructivism' suits him better.[38]

According to Latour, many different kinds of entities, mostly hybrid mixtures of Nature and Society, are actively involved in this construction work. Science is social through and through, not because it is produced by Society, but because it is a field where all kinds of actors work upon each other. Ultimately, the ensemble of these forces determines what gets to be accepted as a 'hard' fact and what will be rejected as 'superstition' - what counts as 'scientific', and what as 'primitive' knowledge. In other words: according to Latour, even the most technical and abstract aspects of texts and theories can be shown to be social in this broad sense. On the other hand, society is not merely social either. In this respect, Latour argues that social constructivists have not been radical enough in implementing the principle of symmetry. Beside the rule to treat 'true' and 'false' in a symmetrical vein, a constructivist approach should also take a symmetrical outlook on 'Nature' and 'Society'. Next to the acknowledgement that we cannot establish 'Nature' without the social work of building actor-networks, we should realize that 'Society' is not only made up of humans but also of things. In other words: after having pro-blematized 'Nature' as socially constructed, social constructionist scholars of sience should now also see that 'Society' is not an unproblematic starting point, a homogeneous social context 'out there', either.

The 'truth' of a claim, Latour argues, is not so much the *cause*, but rather the *effect* of the recruitment of its allies. It is like 'a cheer after the victory' rather than an account of the victory itself (Latour 1989: 102).[39] Of course, rational arguments may have considerable force, but they only work in lining up with other forces: not only with humans, but also with instruments, microbes, graphics, money, etc. etc. The ensemble of actors building a network appears to be a hybrid mixture of humans and non-humans.

Latour's actor-network approach, with its focus on the relevance of 'force', regularly incites typifications of Latour as the Machiavelli of scientific knowledge practices, according to whom "science is politics by other means" (Latour 1983: 168), or "might makes right" (Amsterdamska 1990: 501).[40] The characterization has some ground, particularly since Latour himself has tried to rewrite *Il Principe* for our socio-technical times, be it that to him this means understanding how power works in order to maintain a more stable democracy (Latour 1988a). Or when we notice the proliferation of metaphors of

war (already resonated in his parody of Clausewitz's motto of 'politics as war by other means') in Latour's descriptions of the worlds of science as politics, which would be crowded with 'allies', 'assaults', 'tactics', 'battlefields', etc.[41] Latour's reply often consists of changing the rules of the (language) game: when we, so he proposes, would not see reason as opposed to, but rather as one particular kind of (i.e. rhetorical) force, then the perception of scientific facts in terms of hard won victories would not sound as a mere *démasqué*. For we would appreciate better the enormous efforts, the great investments, the relentless disciplining of (human and non-human) delegates, the cautious translation of (again: human and non-human) mediators which it takes to build and sustain the strong and lengthy networks of Western science. The *démasqué* of ethnographic studies of science rather concerns the image that scientific 'progress' could be explained by an increase in rationality. Surely, we can speak of the 'growth' of knowledge, but then in the much more mundane and materialist sense that we (i.e. Westerners) in the course of recent history, have simply used more resources, mobilised more actors, and accumulated more (cultural) 'capital', which we then cleverly stored up in our 'centres of calculation', than did so-called 'prescientific', or 'primitive' people. The Great Divide between 'Us' moderns and 'Them' premoderns does not hold: the difference is not a difference in 'mind', but a difference in 'force', not a difference in quality, but in quantity. "Who includes and who is included, who localises and who is localised is not a cognitive or a cultural difference, but the result of a constant fight" (Latour 1987: 229). Latour illustrates this with a reconstruction of the art of cartography, as it was practised during 16th and 17th century exploratory expeditions. The drawing of maps of places just 'discovered', bringing this information back home, to be subsequently used by sailors who had never been there before, so Latour argues, gradually gave the new visitors more knowledge of that piece of earth than the people who had lived there for generations. The difference was that these Europeans travelled, whereas the 'natives' remained in one place. The first were gradually extending their networks, transporting and accumulating information, building centres "dominating at a distance many other places" (1987: 223) whereas the latter's networks were not expanded, because they stayed at home.

Knowledge, from the perspective of actor-network theory, can thus be defined "by considering a whole cycle of accumulation: how to bring things back to a place for someone to see it for the first time so that others might be sent again to bring other things back. How to be familiar with things, people and events, which are *distant*" (1987: 220). In this respect, we could say that Latour, like Foucault, is very aware of the intricate relationship between knowledge and power. Indeed, their conceptions of knowledge and power coincide on many points. Analogous to his demystification of 'truth', and explicitly paying his debts to Foucault, Latour sees 'power' as the effect, and not the cause of collective action. He opposes the diffusion model, which conceives of power as a kind of inner force, possessed by certain orders or artifacts, which would be faithfully transmitted to other entities. He favours the translation model: there is no privileged 'first mover', there are only chains of human and nonhuman actors. Each of them shapes, transforms, 'translates' orders and artifacts according to its own project. Power works through the 'wills' of those who 'obey' it.[42] Therefore, and analogous with his approach to science, Latour opts for a 'performative' instead of an 'ostensive' definition of society, i.e. that we perceive society as constantly 'in the making', as being composed "*now*, before our very eyes" (Latour 1986: 271). What holds society together is not merely 'social' elements, such as 'values', 'classes', 'legitimacy' or 'cultures'. All kinds of forces are mobilized, all kinds of entities are associated with one another, and they "may include atoms, words, lianas or tattoos" (277). Throughout his work, Latour comes up with surprising and funny examples to show how we humans are actually manipulated, disciplined or taken care of by inanimate things such as safety belts, door-closers, cat-flaps, and metal weights to hotel-keys.[43]

In one of his most outspoken speculative texts, Latour presses forward the question what it actually means to be modern (Latour 1993b). Modernity prides itself on the ability to distinguish between what belongs to 'nature', what belongs to the 'social', and what belongs to 'culture', between what is nonhuman, what is human, or what is text. The different genres of critique (i.e. epistemological, sociological and deconstructivist) thrive upon this ability: they point out how phenomena can be explained by either natural forces, fields of power or truth effects. Descriptions which mix these domains would not be critical, because they do not help us to see through ideological smoke screens. Only anthropological accounts can still legitimately fuse these three perspectives, because, so it is assumed, the premodern societies they describe do not make our critical distinctions: 'primitive' people still mix up the worlds of gods, humans, plants, stories and stars. However, if this is the case, Latour wonders, how come that the anthropological approach of science and technology, these products of modernity *par excellence*, has been so successful? His answer, simply put, is that "we have never been modern". Or, to be more specific: next to the official story of modernity, there is also an inofficial version to be told.

According to the official account, since the 17th century, the West is governed by the Modern Constitution, which sharply divides the powers of nature from the powers of politics. The institution of this modern separation, according to Latour, got firmly settled with the controversy between two contemporaries of 17th century England, Boyle and Hobbes.[44] The disputes between these two men lay the ground for the demarcation between the realm of science and the realm of politics we are now so familiar with. Boyle defended the autonomy of the domain of science, i.e. the laboratory, where 'nature' gets ample room to speak for itself, and where scientists can carry out their experiments, undisturbed by the political quandaries and fights going on in the outside world. Hobbes, on the other hand, put all his energy into arguing for the predominance of the domain of politics, i.e. society (the *Leviathan*), where the installment of a social contract guarantees the peaceful association of all individual citizens in one Body, unified under one Sovereign. Their disagreement concerned the question of how to end civil war, or, more in general, how to end disagreements: whereas Boyle opted for the experimental-empirical strategy by which trustworthy witnesses would agree that they observed the same facts, Hobbes believed that only rational calculation would make people agree about the necessity of their collective subjection to one authority. For Hobbes, Boyles' experiments threatened peace, because they cast doubt on previously agreed upon insights, whereas, for Boyle, Hobbes' appeal to the unificating force of reason threatened the unprejudiced search for truth. Still, they have something in common, which actually makes them, according to Latour, the first drafters of the official version of the Modern Constitution. For both agree upon the complete separation of the representation of things from the representation of humans, of the realm of science from the realm of politics.

From our contemporary perspective, so Latour, it is nevertheless interesting to see how Hobbes had to smuggle away the role of material things in his account of society, whereas Boyle ignored the social aspects which made his experimental practice possible. In other words: the official reading of the Modern Constitution is accompanied by inofficial, not acknowledged practices. Even more so, the official reading, which preached the *purification* of the spheres of the scientific and the political, the separation of nature and culture, the nonhuman and the human, precisely enabled the proliferation of unofficial practices of *hybridization*, i.e. of the ever growing production of mixtures of nature and culture. It is the development of this 'Middle Kingdom', as Latour puts it, this world populated with hybrid mixtures of quasi-objects and quasi-subjects, which has made 'us moderns' so powerful. The difference is that 'we' managed to construct networks of humans and things which are longer and more stable than theirs, and that we did so by pretending that we were able to neatly separate humans and things.

However, according to Latour, 'we moderns' can no longer deceive ourselves: our world has

become so overcrowded with hybrid little 'monsters', both facilitating and manipulating our lives, that we cannot let their wild proliferation go on any longer. Some control, some kind of regulation is becoming necessary. To be able to do that, we have to acknowledge our actual situation of 'nonmodernity'. Which implies that we have to acknowledge that the division between political and scientific representation is a fraud. Latour therefore envisions a fusion of both kinds of representation, to be accomplished by the institution of a 'Parliament of Things'. In such a parliament, different representatives of different entities involved in the problematic at hand could take the floor. In this new form of democracy, what and who ever interested would be represented. When it for instance comes to the regulation of the seal hunt, governments, seals, hunters, the fur industry, children, the Society for Preservation of the Waddenzee, and many more would have a voice in this parliament.

Latour's diagnosis of our contemporary condition as one of nonmodernity implies that our Western conception of *ontology* needs drastic revision. First, as may be clear, the ontological distinction between Nature and Culture, between things and humans, can no longer be held. What 'exists' are hybrid entities, mixes of things and humans, quasi-subjects and quasi-objects, networks of science and politics. In Latour's words, with *We Have Never Been Modern* he argues for "the anthropologization of the world picture".[45]

Secondly, present-day ontology misses what it means to say that something 'exists'. The crucial point of realism, in Latour's view, is that what is 'real' is what resists a certain trial (1984: 177). The thumping of a table, for instance, meant to prove the undeniable existence of the simple material things surrounding us, is essentialy no different from the complex equipment of instruments and tests in a laboratory installed to prove the existence of micro-organisms.[46] An entity or a 'thing' acquires its reality only in relation to something else, to some or other 'force'. Existence is a relative matter. It is relative to whom or what the entity concerned bumps into, so to speak, as a consequence of which it cannot be denied, and must be acknowledged. Moreover, there can be different trials, hence different relations, hence different realities. In this sense, Latour is a confirmed relativist. Does this indeed imply, that, for him, something does not exist before it has been acknowledged? Latour's reply to this frequently posed question is not easily summarized. On the one hand, there is his cynical assurance that the things-in-themselves are doing 'very well thank you' without our 'enlightenment' of them: who are we anyway to think that the world would be nothing without us, that we would be the guardians of being? (Latour 1984) In other words: of course do things exist before we lay our eyes upon them. Here, Latour speaks as a passionate critic of the arrogance of philosophical Humanism, which takes humans to be the centre around which everything else revolves.[47] But, in his alternative to prevailing realist ontologies, Latour emphasizes that things, like humans, have histories - part of which could be their discovery by humans. This means that the being of things, of 'nature', cannot be reduced to a fixed essence. Rather, to map the relative existence of a particular entity, we would have to define it as "a gradient that registers variations in [its] stability [..] from event to essence" (Latour 1993b: 85). The result would be a two-dimensional picture, with a horizontal axis running from the pole of ('pure') Nature to the pole of ('pure') Socie-ty/Subject, and a vertical axis on which the relative status of the 'thing' as either more event-like, or more essence-like, can be depicted. The 'essence' of the thing concerned, so Latour, is not any one of the nodes in the field, but is the trajectory that links them all together. In other words: the essence of an object is the history of its construction (see Latour 1993b: 85-88).[48]

Thus, Latour links up his radical constructivist approach with a historicist ontology, resulting in an inimitable combination of realism and relativism which may leave many a reader flabbergasted. Some of his critics are outraged because of what they see as Latour's contradictory, if not evidently absurd

assertions, and they wonder how he manages to get away with it. Indeed, it is hard to pigeon-hole Latour, to pin him down on one clear-cut epistemological position: he seems to embrace both relativism and anti-relativism, to pose as a convinced realist and an avowed anti-realist at once. Thus, he talks as a relativist, insofar as he puts reason and truth between brackets in order to approach scientific accounts symmetrically, and insofar as he claims that reality does not exist independently of the trials of resistance by which they are defined. But he distances himself from 'social' relativists, who would assume that the main sources of resistance are human, as well as from realists who take it that the main sources of resistance are nonhuman. In his expositions with (imagined, but drawn from real-life) realist opponents, Latour comes out as the better realist, because his would be a truly 'irreductionist' perception of reality. His commitment to realism also shows in his rhetoric, with which he frequently suggests that 'reality' itself forces descriptions upon him: "It is not I who mixes up the Empress, God, the Academy, swan-neck flasks and bacteria in order to prove that spontaneous generation does not exist. It is Pasteur himself" (1989: 114). Or even, that constructivists are more sincere; "Who are more honest [...] Who is more blatantly trying to impress? Where is the violence? Where is the show of forces?" (113) Here the attentive reader becomes suspicious. Because is not the 'I' of this remark the same as the one who, just a couple of pages earlier, stated that scholars of science studies, of course, do not claim a privileged access to truth either, and realize that "[o]ur claims too gain in robustness if we tie our fate to other more solid claims.." (104). So, what are we to make of Latour's forceful realist rhetoric, knowing that he perceives 'reality' as the result of the recruitment of allies? Does not his own actor-network account of what gets to count as knowledge, reason, truth, undermine that very same account? Or, put otherwise, how can we as readers make sense of his conviction that "nothing can be reduced to anything else", and that every representation involves the work of representatives who translate, hence betray, hence reduce, and still take seriously his (rhetorically extremely forceful!) representations of what 'actually' goes on in science in action, or of our 'actual' condition of nonmodernity?

The problem of self-referentiality or self-reflexivity introduced here, is a much discussed issue within science and technology studies (Woolgar 1988; Ashmore 1989). Already in *Laboratory Life*, Latour and Woolgar explicitly pose the question: given our contention that scientific activity comprises the construction of fictional accounts, to be sometimes transformed in stabilized objects, what is the status of our own account? (Latour and Woolgar 1986: 235) Their answer is straighforward: the status of our knowledge is no different. The ethnographic observer in the laboratory in principle is doing exactly the same as the scientists he observes: he tries to create order out of chaos by accumulating data, operating strategically in agonistic fields, gradually assembling a variety of allies to support his construction of 'laboratory life'. Later, Latour addresses the question whether such acknowledgement does not saw the branch upon which one sits (Latour 1988b). His reply to such accusations of self-contradiction: well, rationality really is not the only pillar of our work, so there is no need to worry about being contradictory. Moreover, science studies scholars do not even aspire after constructing strong networks, as scientists do, because they would not want to replicate their "lust for power and recognition" (1988b: 164). On the contrary, they would prefer to make up weaker, rather than stronger explanations. Neverthe-less "we would still like these weak accounts to defeat the strong ones..." (165).

      This comes down to the complicated task of writing texts that are neither believed *too much*, nor believed *not enough* by their readers. This, for sure, requires a self-reflexive way of writing. But Latour is not at all charmed by the recent load of experiments in which the author also figures as one of the characters in the text. This kind of 'meta-reflexivity' starts from the unjustified assumption, so he thinks, that readers are naive believers, who ought to be reminded of the fictional, constructed character of the account concerned. According to Latour, these authors overestimate their own authority, and

underestimate their readers. Meta-reflexivity often is counter-productive: it makes accounts less interesting and less convincing. He opts for another strategy, called 'infra-reflexivity': instead of piling layer upon layer of self-referentiality, it would entail 'just' telling your story, "just offer the lived world and write" (170). Rather than the meta-reflexive text which, all of its professed modesty notwithstanding, secretly cherishes the hope to offer a better account than all others, an infra-reflexive account does not claim any privilege: "[M]y own text", so its author suggests, "is in your hands and lives or dies through what you will do to it. In my efforts to forestall certain outcomes and encourage others, I too muster all available allies, all linguistic possibilities" (171). Instead of relying on methodology, as the practitioners of meta-reflexivity do, he or she will make use of stylistic devices to write 'good' stories. Instead of putting the knower center-stage, the focus will be on the known: "Down with Kant! Down with the Critique!" And yes, this is "going back to realism", for: "A little relativism takes one away from realism; a lot brings one back" (173).

So, what about Latour as a radical constructivist? To sum up his peculiar version of constructivism: the only adequate approach of the ambivalence of all our knowledge practices is the recognition that we cannot escape the 'double talk' of both claiming that we do not make up the objects of nature, and that these objects are our own socio-technological constructions. We are constantly building things and facts, which then exert forces of their own. Hence: "Constructivists? Realists? Neither. Delegated.[...] Once abandoned the anti-fetichist reflex of critical theorists, the double-talk of scientists is no more bizarre than calculating waves and particles out of the same equation. The extraordinary thing is not to have a *hopje*[49] and to eat it too, but how come we were asked for so long to choose between having it or eating it" (Latour 1995: 33).

4. The problem of relativism

In spite of considerable differences, in their theorizing about knowledge Rorty, Foucault and Latour clearly share a set of assumptions concerning questions of epistemology.

First, to speak of knowledge in terms of representation for these three thinkers is superseded. It would wrongly suggest that what counts as knowledge are propositions that adequately reflect the world as it is, independently of these propositions. For one thing, *it makes no sense* to speak of the world independently of our knowledge of it. *Why* this is the case is not really made clear by either. Actually, a to and fro between two kinds of argumentation takes place. The first line, emphasized more by Rorty, repeats the Kantian view that we cannot know 'things-in-themselves'. The second line of argumentation, more prominent with Foucault and Latour, proposes that we revise, i.e. historicize and de-essentialize our ontology, in order to extend the realm of what 'exists'. Moreover, to understand knowledge as a set of true propositions, according to these constructivist thinkers, shows *a mistaken view of language*, as if it were a transparant medium, a neutral means of representation. But our languages are not so innocent. To bridge the epistemological gap between subject and object, it is necessary to take better account of the actual complicity between language and the world, of the performativity of language. That is why Rorty prefers to speak of *vocabularies* which are constitutive of the particular world we live in, which form the conditions for propositions to count as 'true', 'false' - or neither. That is why Foucault speaks of *discourse* as material-symbolic events, which cover a wide range of practices, from regulations of sexuality to the use of time tables, and from the construction of buildings to technologies of the self. And that is why, finally, Latour perceives processes of knowledge production as processes of *semiosis*.[50] They consist of the building of meanings in the non-textual sense: they make order out of chaos by building networks of

hormones, machines, bodies, graphics, moneymakers, networks of humans and non-humans. In Latour's work, the (ontological) difference between the realm of things and the realm of signs is dispensed with most radically.[51]

From the perspectives of Rorty, Foucault and Latour, therefore, knowledge does not build bridges between the 'inner world' of the human subject and the 'outer world' of objects; it rather consists of constructions of subjects and objects as inner and outer worlds. Rather than strengthening the image of knowledge as providing us with 'objective' representations, they emphasize the *performativity* of knowledge practices. Rather than depict reality, the activity of knowing impinges upon what is known. Henceforth, the predominance of a radical scepticism regarding truth: the referent of a 'true' claim is neither its cause nor simply its product - but their fates are closely linked up with each other. As a consequence, a constructivist approach leads to the relativization of distinctions between discursive genres based upon the fault-line between truth and untruth, such as the scientific and the literary, the factional and the fictional genre, or between scientific and pre-scientific discourse.

A second point of agreement is their rejection of the assumption of a transcendental subject. According to Rorty, as subjects of knowledge we are bound by the limits of our own life world. Even our deepest felt principles and convictions do not rest on neutral and solid foundations; they are merely tools that help us cope with our lives and environment in the best way possible. For Foucault, we become subjects of knowledge through our immersion in practices of discipline and normalization, by which we have learned to relate to ourselves and to the world surrounding us in terms of truth. In Latour's view, finally, as subjects of knowledge we are just one of the many (f)actors in extended networks of 'quasi-subjects' and 'quasi-objects'. Hence, not the autonomous, but the heteronomous aspects of subjectivity are emphasized: it is an illusion that, as subjects of knowledge, we would be able to rise above our local and historical circumstances. We are embedded in and determined by vocabularies, discourses, networks. However, this is only one side of the constructivist account of the subject. For, on the other hand, neither of the proposals for alternative theories and practices of knowledge dispenses with the notion of the subject overall. That is to say: the figures of the edifyer, the genealogist and the anthropologist are three alternative models according to which future subjects of knowledge could shape their intellectual work. And these envisioned subjects of knowledge do have a certain amount of autonomy. Thus, the edifyer frees us of old problematics and invents new vocabularies, new stories to live by, the genealogist strategically subverts dominant configurations of power/knowledge, whereas the anthropologist exposes the 'growth' of scientific knowledges and technologies as consisting of the (hitherto concealed) proliferation of hybrid mixtures of humans and things. We could say that, each in their own way, Rorty, Foucault and Latour replace the notion of a transcendental subject with a 'situated' subject, a subject immersed in, but also responding to his particular local and historical situation.

The crucial difference with the foregoing notion of the transcendental subject is, that a constructivist knower can no longer pride himself to be standing on the side of Truth, or Reason. This does not mean, however, that in their own work they would side with just any party. On the contrary, they clearly do take sides. Thus, Rorty places himself squarely within the tradition of Western liberalism: his starting point is an, in the last instance unfounded, but no less fundamental commitment to the values of modern Western societies. For the postmodern intellectual needs the protection of individual freedom, the modern recognition of the autonomy of the private sphere, in order to relativize prevailing accounts, and invent and experiment with new ones. Foucault likewise focuses on the vicissitudes of Western culture, but his angle seems to be diametrically opposed, in so far as he sides with those subjects which are produced by modern power as both excluded from and sites of resistance to power: the mad, the delinquent, the homosexual, the hermaphrodite. Latour, finally, also takes issue with the official legacy

of the West. He does so by successively siding with two parties. The first are the denigrated 'others' of modern science and technology, the so-called primitives, or premoderns. He undoes this Western manoeuvre of othering, by showing that 'we moderns' likewise are magical thinkers - that we likewise mix up culture and nature, humans and things. The assumed qualitative difference between 'Us' and 'Them' is thus reduced to a difference in degree. The second party Latour comes to side with are the hybrid actors produced ànd denied by the Western sciences. In his plea for the recognition of this vastly growing Middle Kingdom of 'quasi-subjects' and 'quasi-objects' Latour asks from the West to relinquish its claimed prerogative to purity and rationality, that is, its claim to modernity.

       Motivating their particular partiality seems to be a radical belief in epistemic equality: the idea of the philosopher or scientist knowing no better than 'ordinary' people, is a recurring theme within the work of all three thinkers. Thus, Rorty's edifyer puts his redescriptions on a par with the stories told by the people involved - he does not pretend to convey them the truth, he wishes to elicit dialogue. And while Foucault talks of the importance of associations between genealogy and popular knowledge for the emergence of 'subjugated knowledges', Latour puts emphasis on the epistemic equality between both the social scientist and his/her subjects of investigation, and between the ethnographer of science and the scientists whose work s/he is describing.

In the above expositions, I addressed the issue of allegations of relativism against constructivism. They boil down to the claim that constructivism would not offer a firm foundation on which all (valid) knowledge would rest, no criterion with which knowledge claims could be evaluated. Indeed, Rorty, Foucault and Latour are equally wary to set norms, to formulate universally valid standards which all knowledge practices should meet. As a consequence, neither of them is very taken with the genre of critique. It is this refusal to hand out criteria with the help of which existing knowledge practices can be judged, combined with the glaring absence of any reflection on the epistemic relevance of sexual difference, which make these constructivist accounts hard to swallow for many a (critical) feminist scholar.

Notes

1. However, taking account of Kant's own formulation of his 'Copernican Revolution' in metaphysics, it is clear that constructivists are claiming a bit too much of the revolutionary credit. For Kant himself already turned the relationship between world and knowledge upside down: rather than assume, so he says, that our knowledge has to conform to its objects, we had better assume that objects conform to the condition of our faculty of perception: "Man versuch es daher einmal, ob wir nicht in den Aufgaben der Metaphysik damit besser fortkommen, dass wir annehmen, die Gegenstände müssen sich nach unserem Erkenntnis richten, welches so schon besser mit der verlangten Möglichkeit einer Erkenntnis derselben apriori zusammenstimmt, die über Gegenstände, ehe sie uns gegeben werden, etwas feststehen soll." (Kant 1990 [or.1787], pp.19-20) Hence, putting forward the *Critique of Pure Reason* as an example of straightforward 'representationalism' will not do.

2. "Et remarquant que cette vérité: *je pense, donc je suis*, était si ferme et si assurée, que toutes les plus extravagantes suppositions des sceptiques n'étaient pas capables de l'ébranler, je jugeai que je pouvais la recevoir, sans scrupule, pour le premier principe de la philosophie que je cherchais [...] je connus de là que j'étais une substance dont toute l'essence ou la nature n'est que de penser, et qui, pour être, n'a besoin d'aucun lieu, ne ne dépend d'aucune chose matérielle" (Descartes 1966 [1636]: 60).

3. In the introduction of one of his later collections, Rorty mentions Wilfrid Sellars, W.V.O. Quine and Donald Davidson, whose works are at the heart of contemporary Anglo-American philosophy, as at least as influential as the much appraised threesome of Dewey, Heidegger and Wittgenstein in *Philosophy and the Mirror of Nature* (Rorty 1991a: 1). Rorty's constant recognition of his tributariness to other authors is wholly in line with his circumscription of the 'new' philosopher as a 'name-dropper' - as someone who does not see himself as ursuing eternal truths, but who simply links up with other philosophers in a chain of 'commentators on commentators', thus showing an historicist awareness of his own writings (see for instance Rorty 1982: 92-93).

4. "'Analytic' philosophy is one more variant of Kantian philosophy, a variant marked principally by thinking of representation as linguistic rather than mental [..] This emphasis on language [...] does not essentially change the Cartesian-Kantian problematic [..] For analytic philosophy is still committed to the construction of a permanent, neutral framework for inquiry, and thus for all of culture" (Rorty 1980: 8).

5. "Derrida is trying to do for our highbrow culture what secularist intellectuals in the nineteenth century tried to do for theirs. *He is suggesting how things might look if we did not have Kantian philosophy built into the fabric of our intellectaul life, as his predecessors suggested how things might look if we did not have religion built into the fabric of our moral life"* (Rorty 1982: 98 [emphasis Rorty]).

6. Nagel's views in many respects answer precisely to the image of the realist philosopher as sketched by Rorty. In his elaborate argument for the possibility and necessity of developing a 'view from nowhere', Nagel for instance claims that "[r]ealism is most compelling when we are forced to recognize the existence of something which we cannot describe or know fully, because it lies beyond the reach of language, proof, evidence, or empirical understanding. *Something* must be true with respect to the 7s in the expansion of pi, even if we can't establish it; there must be something it is like to be a bat, even if we can never conceive it adequately" (Nagel 1986: 108). Nagel's book focuses on the need for self-transcendence and objectivity, not only regarding knowledge, but also in issues of morality. It attempts to steer a middle course between recognizing our contingency and our striving for transcendence, between idealism (as too subjectivistic) and scientism (as too objectivistic). Without explicitly referring to Rorty's work, Nagel's attacks sometimes seem directly aimed at it: "We are in a sense trying to climb outside of our own minds, an effort that some would regard as insane and that I regard as philosophically fundamental. Historicist interpretation doesn't make philosophical problems go away [..] In the name of liberation, these movements have offered us intellectual repression" (1986: 11). His reasoning ends with some sharp *ad hominem* allegations, such as: "why have some philosophers felt themselves cured of their metaphysical problems by these forms of therapy? My counterdiagnosis is that a lot of philosophers are sick of the subject and glad to be rid of its problems [...] it includes a rebellion against the philosophical impulse itself, which is felt as humiliating and unrealistic [..] It is like the hatred of childhood and results in a vain effort to grow up too early, before one has gone through the essential formative confusions and exaggerated hopes that have to be experienced on the way to understanding anything" (11-12).

7. Rorty consistently presents the figure of the ironist philosopher as female. As the reader is not taught about the reasons for this unexpected manifestation of affirmative action, to this (sceptical-feminist) reader it comes across as arbitrary and non-coincidental at the same time: why should all other, self-assured, metaphysical, 'real' philosophers be self-evidently male, and the ever doubting, private and poetic 'so-called' philosopher suddenly be a woman? Does Rorty here perhaps allude to Derrida's reading of Nietzsche, and his proclamation of the becoming-woman of philosophy? Nietzsche uses 'woman' as the appropriate metaphor for 'Truth', which for him was equal to the non-truth of truth: as 'woman' knows that 'Truth' is an illusion, she loves to play with it, to simulate, delude and deceive (see Derrida 1978). Braidotti critically dissects Derrida's celebration of the feminine. First, she notes that there is no reflection on what the association of the feminine with 'untruth' might mean for 'real' women, and rhetorically

wonders "[h]ow does the feminine as the 'dark side' of Western theoretical discourse relate to the speech, the intelligence and the discursivity of real-life women?" (Braidotti 1991a: 106) Secondly, she observes that feminism gets played off against this much appraised femininity by Derrida, as the new type of phallic and normative discourse (1991a: 100-107). As I share Braidotti's distrust about such postmodern celebrations of 'woman' and femininity, I will not follow Rorty in his feminization of the ironist philosopher.

8. Other examples of 'ironist liberals' are John Dewey, John Rawls, and Michael Oakeshott - "people who wanted to retain Enlightenment liberalism while dropping Enlightenment rationalism" (Rorty 1989: 57). Of his contemporaries, Rorty typifies Jürgen Habermas as a liberal who is unwilling to be an ironist, while Michel Foucault would be an ironist unwilling to be a liberal (61). For more detailed expositions on Habermas and Foucault as failed liberal ironists, see Rorty 1982: 203-208; 1989: 62-69; 1991b: 164-176 and 193-198.

9. Rorty relies here on Judith Shklar's exposition of liberal morality as a morality which puts (physical and moral) cruelty first on the list of 'ordinary vices' (see Shklar 1984).

10. According to Nancy Fraser, throughout his work, Rorty wrestles with the relation between two contrasting impulses: the Romantic impulse of the individual 'genius' to create himself irrespective of conventions and social expectations, and the Pragmatic impulse of civic-mindedness, of problem solving and making oneself useful for society. At first, so Fraser, Rorty took them to be natural partners, in second instance he realized that they were antithetical whereas, finally, he constructed a compromise between the two. Fraser rejects this compromise as both unconvincing and unstable (see Fraser 1989: 93-110).

11. Or, as Fraser rhetorically wonders when she doubts the possibility of drawing a sharp line between the public and the private: "Is it really possible to distinguish redescriptions that affect actions with consequences for others from those that either do not affect actions at all or that affect only actions with no consequences for others?" (Fraser 1989: 101-102).

12. These thoughts on exemplary rather than prescriptive accounts, on self-knowledge as self-creation, and the notion of accepting one's contingency as a human being, resonate some of the insights of existentialism. Although the existentialist preference for the term 'authenticity' may call up the idea of a 'true self', Sartre actually was convinced that any appeal to an essential self would involve a denial of one's freedom, and of the moral imperative to realize one's freedom. In Sartre's view, the representationalist idea that there is one right way to describe reality, would relieve one of the responsibility to choose one's own words, ideas, vocabularies: "the urge to find such necessities is the urge to be rid of one's freedom to erect yet another alternative theory or vocabulary" (Rorty 1980: 376). While Rorty is quite mild about 'the rest of us' who lack the creative powers and souvereignty to become a strong poet, from a Sartrean perspective the flight for one's contingency, or the unproblematic adoption of a conventional vocabulary to account for one's own life, would be down-right immoral, a case of bad faith [*mauvaise foi*] - this imperative mode of course proving that Sartre was far from being an ironist. In her interesting study, Karen Vintges shows how Simone de Beauvoir's autobiography may likewise be read as an exemplary account of the ways in which Beauvoir tried to shape her life and identity as an intellectual woman in a man's world. Vintges uses the Foucauldian concept of an 'aesthethic of existence' to understand the 'public' dimensions of Beauvoir's 'private' project. In Rorty's terms, it could also be typified as a redescription of a woman's life, meant to exemplify and edify, rather than reveal the 'truth' and lay down norms (see Vintges 1996).

13. A certain 'Maurice Florence' wrote an entry on Foucault for the *Dictionnaire des Philosophes* (edited by Dennis Huisman, Presses Universitaires de France, in 1984), in which Foucault's undertaking is characterised as a 'A Critical History of Thought'. It is assumed that 'Maurice Florence' is a pseudonym, and that Foucault himself is actually the

author of the article. It was translated and reprinted in Gutting 1994: 314-319.

14. For the relationship between Bachelard's 'historical epistemology' and Foucault's approach to knowledge, see: Privitera 1995. Mol & Van Lieshout give a good discussion of what Canguilhem and Foucault have in common, and where their views diverge (see Mol & Van Lieshout 1989: 66-78). Of course, Canguilhem's famous defense of Foucault's *Les Mots et les Choses* also sheds interesting light on their points of agreement and disagreement (see Canguilhem 1994).

15. Foucault's position in this respect resembles Rorty's, when the latter states that he is interested more in *why* we pose certain questions *as if* they concerned indisputable intuitions or eternal problems, than in trying to answer such questions.

16. "Mais ce qu'il faut saisir et essayer de restituer, se sont les modifications qui ont altéré le savoir lui-même, à ce niveau archaïque qui rend possible les connaissances et le mode d'être de ce qui est à savoir" (Foucault 1966: 68).

17. These at least were the denominators of these disciplines since the 19th century (Foucault 1966: 232). For the earlier periods, the labels of 'grammar', 'natural history' and 'analysis of wealth' are more fitting (249).

18. "Et la représentation - qu'elle fût fête ou savoir - se donnait comme répétition: théâtre de la vie ou miroir du monde, c'était là le titre de tout langage, sa manière de s'annoncer et de formuler son droit à parler" (Foucault 1966: 32).

19. One of the crucial points of Foucault's reading of *Las Meninas* (The Lady's-maids) is that though the most central and most visible group of characters in this painting consists of the young princess, her lady's maids, and other figures from the royal houshold, the real 'subjects' and 'objects' of representation are the Sovereigns, who are only indirectly visible through their reflection in a mirror on the wall.

20. "[..] ne pas s'imaginer que le monde tourne vers nous un visage lisible que nous n'aurions plus qu'a déchiffrer; il n'est pas complice de notre connaissance; il n'y a pas de providence prédiscursive qui le dispose en notre faveur. Il faut concevoir le discours comme une violence que nous faisons aux choses, en tout cas comme une pratique que nous leur imposons [..]" (Foucault 1971: 55).

21. Although Foucault can be noted to use the concept of 'construction' also in a more common sensical way, in opposition to 'description'. When he is confronted with the remark, for instance, that, apparently, "truth is not a construction?", his reply is: "It depends. There are truth games in which truth is a construction and others in which it is not. [..] someone who describes a society in an anthropological way, is not making a construction, but a description" (Foucault 1995: 102-103 [my translation, bp]).

22. Thus Braidotti argues that Foucault changed the notion of materialism to include the lived embodiment and historicity of the human subject (Braidotti 1991: 39). See also Judith Butler's elaborate attempt to rewrite the materiality of bodies in a (de)constructivist vein (Butler 1993).

23. In his 'Afterword' to Dreyfus & Rabinow 1983, however, the distinction between 'power' and 'domination' is more one of degree, such that "domination is in fact a general structure of power" (226), generally accompanied by strategies of struggle and resistance. And in an earlier lecture, Foucault uses 'domination' in yet another sense, i.e. in opposition to classical power. Here he distinguishes 'domination' from 'sovereignty', and describes the former as instigated through juridical forms of power ('the domain of the law'), manifesting itself in 'multiple techniques of

subjugation' and pertaining to relationships among subjects, whereas the latter is a 'uniform edifice' that requires obedience from all subjects to their one King (Foucault 1977: 95-97).

24. Rouse grasps the meaning of 'knowledge/power' as follows: "These practices of surveillance, elicitation, and documentation constrain behavior precisely by making it more thoroughly knowable or known. But these new forms of knowledge also presuppose new kinds of constraint, which make people's actions visible and constrain them to speak" (Rouse 1994: 96).

25. See also 'What is an author?', where Foucault talks about the 'author-function', and the disappearing role of the author's name in scientific texts, and its prominence in literary discourse (Foucault 1977: 126), although he also refers to recent literary texts, as well as literary analysis (Derrida/structuralism) in which the authorial self, his individual characteristics, have disappeared completely. The author is a 'projection', a 'construction' by readers, while at the same time the text itself contains signs that refer to the author: personal pronouns, adverbs of time, etc.. The author-function arises out of the distance between the (biographical) writer and the (fictional) narrator: a 'plurality of egos' that characterizes all 'authorial', or 'authorized' discourse. *L'ordre du discours* likwise presents 'le sujet fondateur' (1971: 49) as a function which inscribes into a text a kind of identity, an amount of homogeneity, whereas Foucault opts for an approach of discourse as a series of discontinuous speech-events: "il s'agit de césures qui brisent l'instant et dispersent le sujet en une pluralité de positions et de fonctions possible" (60).

26. In the conversation with Gilles Deleuze from which this quote derives, Foucault's organization of information groups of prisoners serves as an example of the re-emergence of such suppressed knowledges. Foucault here speaks of the "counter-discourse of prisoners" as a discourse against power: "[W]hen the prisoners began to speak, they possessed an individual theory of prisons, the penal system, and justice" (Foucault 1977: 209). Other subjects of emerging suppressed knowledges mentioned here are the proletariat, women, conscripted soldiers, hospital patients, homosexuals. Especially Deleuze is very explicit about the need for intellectuals to step back from their position as ventriloquists for others: "A theorising intellectual, for us, is no longer a subject, a representing or representative consciousness. Those who act and struggle are no longer represented, either by a group or a union that appropriates the right to stand as their conscience. Who speaks and acts? It is always a multiplicity, even within the person who speaks and acts. All of us are 'groupuscules'" (206). Noteworthy: Deleuze compares the position of prisoners to that of children, but also vice versa: "Not only are prisoners treated like children, but children are treated like prisoners. Children are submitted to an infantilization that is alien to them" (210). Although children are not one of the groups which are speaking up now, "[i]f the protests of children were heard in kindergarten, if their questions were intended to," so Deleuze, " it would be enough to explode the entire educational system" (209).

27. Braidotti links Foucault's thought with three strands of contemporary French philosophy: phenomenology (Sartre, Merleau-Ponty), materialist epistemology (Canguilhem, Bachelard) and Marxism (Althusser). It is Foucault's focus on the body and the resurrection of subjugated knowledges which in Braidotti's view makes his work so important for feminist theorizing and for the construction of female subjects of knowledge. Other feminist philosophers take up precisely Foucault's other line, the line of the disappearance of the subject, as most promising for female, black and other 'queer' subjects (see for instance Butler 1990; 1993).

28. Mannheim's *Ideology and Utopia* was originally published in German in 1929, and translated in English in 1936.

29. For Mannheim, a 'valid synthesis' would have to be based on a politically mediated interpretation of one's socio-economic position. As I will argue in Chapter 3, this is where feminist theorists of knowledge hook on to insights from the sociology of knowledge, insofar as they claim that better knowledge starts from a (politically informed) 'standpoint'. But Mannheim developed his insights in quite a different direction: he argued that the epistemologically

privileged group consists of the intellectuals, "a relatively classless stratum which is not too firmly situated in the social order.." (Mannheim 1960: 136)

30. This line of social constructivism has particularly been elaborated further by social psychologists such as John Shotter and Kenneth Gergen. Their focus is on the constitutive role of social and linguistic conventions in the making of knowledge. Knowledge is perceived as an expression of relationships between social actors. Shotter, for instance, elaborates a 'rhetorical-responsive' version of social constructionism which takes human conversation and interaction as the 'stuff' of which knowledges are made. He thus intends to make "a shift from a focus upon how we understand objects to how we understand each other - a shift from an interest in epistemology to one in practical hermeneutics" (Shotter 1993: 6). By emphasizing its rhetorical rather than its argumentative dimension, Shotter wishes to draw attention to the 'doing' rather than the 'stating' aspect of language. He thus emphasizes the performative dimension of language, and claims the fundamental impossibility to "stand outside our conversational forms of communication" (181). Hence, knowledge is always of the 'third kind', it is knowledge 'from within' a certain shared lifeform. Such knowledge, according to Shotter, can be developed best from a marginal stance vis-à-vis such a life form, from a 'sensibility' of what is involved in crossing the boundaries between particular life forms.

31. The work of American sociologist Robert Merton is exemplary of this approach.

32. For instance Harry Collins' Empirical Relativist Programme, which concentrates on the rhetorical means by which scientific controversies find closure, and the Strong Programme of the Edinburgh School (represented by authors such as Barry Barnes, David Bloor, Steven Shapin), which explains the content of scientific knowledge by outlining the substantive role played by social interests and political commitments.

33. For this very short, and of course much too schematic overview of the field of science studies, I made use of Potter's excellent discussion of the different branches of social studies of science (Potter 1996). Other useful overviews are given in Fuller 1993, and Hagendijk 1996. For an especially exhaustive list of reviews (which renders it into an ironical review of the phenomenon of reviewing...) see Ashmore 1989: 11-14.

34. The fieldwork was performed between 1975 and 1977 in a laboratory of the Salk Institute in California, in which research focused on issues of neuroendocrinology. *Laboratory Life* was first published in 1979, with Steve Woolgar as its co-author. In the postcript to the 2nd edition of the book in 1986, Latour relates how the idea of doing anthropology among Western scientists came up. The story is crucial for a good understanding of the purpose and purport of Latour's project as a whole. As he indicates, the plan arose when, in the early seventies, he worked in Ivory Coast as a sociological researcher, who was asked to find out why African executives had so much trouble adapting to modern industrial life. The assumption was that it would have something to do with the African 'mind'. Latour, so he says, quite quickly got the impression that social factors were far better candidates for explaining the supposed intellectual incapacities of the students: if you, for instance, have never seen an engine in your life, and then have to learn about its workings solely on the basis of technical, two-dimensional drawings, is it a wonder you don't manage to 'get the picture'? Rather than blame it on the African students' 'prescientific' reasoning, Latour started to ask what would happen to this 'Great Divide' of scientific versus prescientific, of 'primitive' versus 'modern', if one would turn relations upside down, and describe the practices of Western scientists with the alienated look of the anthropologist (Latour & Woolgar 1986).

35. See for instance the philosophical essay *Irréductions*, following his historical-empirical study of 'the pasteurization of France', *Les Microbes*, where Latour states that "Celui qui cherche à posséder ce qu'il ne possède pas [..], à être là où il n'est pas, à réduire ce qui ne se réduit pas, est malheureux car il ne possède la puissance qu'en puissance seulement et la théorie qu'en théorie seulement" (1984: 211).

36. As Latour phrases it in his typically concise and slogan-like style: "*Savoir* scientifiquement, c'est savoir *scientifiquement*. L'épistemologie a peu d'autres fondements que l'affirmation inlassable de cette tautologie" (1984: 243).

37. It made Latour and Woolgar decide to delete the term 'social' in the subtitle of the second edition of *Laboratory Life* in 1986.

38. The term should not be confused with another intellectual strand which also adorns itself with the name of 'Radical Constructivism', invented by the psychologist Ernst von Glaserfeldt. This 'Radical Constructivism' likewise believes in the constructed nature of human knowledge, but derives this insight not so much from the workings of scientific practice, as Latour cs, but from cognitive and developmental psychology (particularly Silvio Ceccato and Jean Piaget) - hence, from scientific findings about the workings of the human mind. Basic insight is that human knowers can never reach a certain knowledge of the world as it is, independently of our experience of it, and that therefore what counts as 'true' knowledge could better be perceived of as those accounts which are pragmatically useful at that moment. Knowledge does not 'match' the world as it is, but it proves itself valuable because of a 'functional fit' (Steier 1991: 16-17). 'Radical Constructivism' has furthermore been inspired by insights from cybernetics, the study of communication and control in complex 'intelligent' systems, such as living organisms and sophisticated machines, particularly from so-called 'second order' cybernetics, which tries to take into account the process of observing complex systems of communication and control as part of a complex system of communication and control itself. The ensuing requirement of *selfreflexivity* brings 'Radical Constructivism', as the remainder of this chapter will show, remarkably close to 'social' constructivist studies of science.

39. Relativistic remarks such as these are very similar to Rorty's, for instance in the latter's characterization of 'truth' as an empty compliment.

40. Dutch philosopher Tsjalling Swierstra tries to unravel the awkward matter of Latourian ethics in an article with the telling title: 'Latour de force'. Swierstra concludes that, alas, Latour really appears to be a cynicist, but that this 'evil' can be undone within the Latourian framework. The problem, according to Swierstra, is how to combine Latour's principles of immanence with the 'inherent' nature of norms. He proposes a solution with the help of the views of anti-foundationalist (moral) philosophers, such as Richard Rorty, Bernard Williams and Martha Nussbaum, who perceive moral actors as situated within a contingent reality - within, to use a Latourian terminology, a 'field of forces' (Swierstra 1992).

41. The choice for the subtitle of *Les Microbes*: *Guerre et Paix* in this respect is of particular interest. Latour here explicitly associates with Tolstoï. Thus he opens with an analogy between his own account of Pasteur's 'conquest' of France and Tolstoï's epos about Napoleon's attempt to occupy Russia: like Tolstoï before him, Latour wants to show that great victories, no matter the well-known heroic tales about the 'lonely genius', are never gained without the support of multitudes of allies (see Latour 1984: 19-22).

42. In an earlier text, Latour makes a difference between *force* and *puissance* (between force and potency) where the latter comes into being when a certain entity claims (a say over) another entity, and manages to add that entity's force to its own. With *puissance*, according to Latour, injustice starts. To him, however, it always has a certain ethereal kind of being, it exists only potentially, *en puissance* - which could just as well be reduced to nothing. Something or someone therefore only possesses power [*pouvoir*], in so far as others sustain and enforce it: "Nul ne *possède* jamais le pouvoir. Ou bien il l'a 'en puissance' et il n'*a* rien; ou bien il l'exerce en acte, et ce sont ses alliés qui passent à l'action" (Latour 1984: 195).

43. In the disguise of American sociologist Jim Johnson, Latour for instance explains the social work of door-closers, how they are part of the huge army of nonhuman 'delegated characters' that deserve our (i.e. the sociologists'!) consideration (Latour 1988c). In another article, he relates about the clever way European hotel managers ally with pieces of metal weight, in order to get their clients to leave the key of their hotel room at the front desk when they leave (Latour 1991). And with the help of a cartoon featuring the notorious French lazy-bones *Gaston*, Latour shows how technology can be defined as mediating, for better and for worse, the relations between humans (Gaston and his chef Prunelle), but also between these humans, things (an office door, a saw and a catflap) and animals (a cat and a sea-gull) (Latour 1993a).

44. For this part of his account, Latour makes good use of the study of the Hobbes-Boyle controversy by Shapin and Schaffer, *Leviathan and the Air-Pump* (1985), although he does amend their account with his own, more radically symmetrical outlook.

45. Latour uses this phrase "in obvious reference and hommage to, and in contradistinction with Dijksterhuis' *The Mechanization of the World Picture*" (1995: 36).

46. See for a very funny and devious refutation of the realists' arguments of 'Death and Furniture': Edwards, Ashmore & Potter 1995.

47. "Les choses en soi ne manquent de rien, pas plus que l'Afrique ne manquait des Blancs avant qu'ils y viennent. [..] Les choses, réduites à rien, supplient alors qu'on prenne conscience d'elles et demandent qu'on les colonise. Leur vie ne tient plus qu'à un cheveu, celui de votre regard autour duquel se met à tourner le spectacle des choses. Mais qui le met en scène ce spectacle? Vous, Robinson sur son île, Adam dans son jardin. Heureusement que vous êtes là, vous les saveurs du monde, les donneurs de noms, vous sans qui 'le monde', comme vous dites, serait reduit à rien. Vous êtes les Zorros, les Tarzans, les Kants, protecteurs des choses veuves et orphelines" (Latour 1984: 215-216).

48. In some respects, Latour's view here is reminiscent of Foucault's notions of the 'archeology' and 'genealogy' of knowledge, even in his use of metaphors: "Like the geophysicians, we too have to go down and approach the places where the mixtures are made that will become - but only much later - aspects of Nature or of the Social" (1993b: 87). In a more recent article, in order to avoid reductionist fall-backs to either society, language or nature, Latour turns to the metaphysics of Alfred N. Whitehead and his historical realism. In Whitehead's "realism without substance", there is room to see that every particular configuration of (human and nonhuman) actors is endowed with an event-like character, which means that it "must in part be *causa sui*" (Latour 1996: 88). Using the case of Louis Pasteur's and lactic-acid yeast, Latour attempts to redescribe this event while avoiding either the suggestion that Pasteur 'discovered' or that he 'fashioned' lactic yeast. Whitehead, so he claims, allows us to understand how "[l]actic-acid yeast changes its history upon contact with Pasteur and his laboratory. It is quite real, but its historical reality puts it on equal footing with the researcher and the laboratory in which it is involved. Lactic yeast has also changed. The yeast has taken the little push that Pasteur has given it as a historic opportunity to manifest itself by altering its entire trajectory. The yeast proposes, Pasteur disposes. Pasteur proposes, the yeast disposes. Pasteur has not imposed his views on an infinitely plastic form, nor tentatively discovered the resistance of an infinitely robust form; he has given a phenomenon its chance" (1996: 87).

49. The word *hopje* is the name for a Dutch candy. It figured prominently as 'the real thing' itself in a funny story by Dutch feminist theorist Mieke Aerts, told in response to *We Have Never Been Modern* (Aerts 1995).

50. Thus, Latour takes up the (self-imposed) challenge to show the semiotic structure of a popular text by Einstein on his theory of relativity. With the help of a set of semiotical concepts, he manages to sketch a picture of Einstein as a

self-conscious constructivist, who explains the theory of relativity in terms of the narrative operations of 'framing' events, which take place by a narrator's 'shifting out' and 'shifting in' of delegated actors, i.e. of the characters in a story - in the case of Einstein's account, the well-known 'man on the embankment' and 'man on the train'. In Latour's interpretation, Einstein's theory of relativity becomes a meta-semiotic theory: "Instead of describing laws of nature, [Einstein] sets out to describe how any description is possible. He does not tell a story inside some framework to which he has taken us, his readers, but he tells the story of how you *frame* any event, how you build any frame of reference" (Latour 1988d: 9).

51. Reason for Rob Hagendijk to characterize Latour's approach as 'pansemiotic': "A pansemiotic approach perceives the natural and the social world as a semiotic domain" (Hagendijk 1996: 99).