

We Have Never Been Modern

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CRISIS

1.1 The Proliferation of Hybrids

On page four of my daily newspaper, I learn that the measurements taken above the Antarctic are not good this year: the hole in the ozone layer is growing ominously larger. Reading on, I turn from upper-atmosphere chemists to Chief Executive Officers of Atochem and Monsanto, companies that are modifying their assembly lines in order to replace the innocent chlorofluorocarbons, accused of crimes against the ecosphere. A few paragraphs later, I come across heads of state of major industrialized countries who are getting involved with chemistry, refrigerators, aerosols and inert gases. But at the end of the article, I discover that the meteorologists don't agree with the chemists; they're talking about cyclical fluctuations unrelated to human activity. So now the industrialists don't know what to do. The heads of state are also holding back. Should we wait? Is it already too late? Toward the bottom of the page, Third World countries and ecologists add their grain of salt and talk about international treaties, moratoriums, the rights of future generations, and the right to development.

The same article mixes together chemical reactions and political reactions. A single thread links the most esoteric sciences and the most sordid politics, the most distant sky and some factory in the Lyon suburbs, dangers on a global scale and the impending local elections or the next board meeting. The horizons, the stakes, the time frames, the actors – none of these is commensurable, yet there they are, caught up in the same story.

On page six, I learn that the Paris AIDS virus contaminated the culture medium in Professor Gallo's laboratory; that Mr Chirac and Mr Reagan had, however, solemnly sworn not to go back over the history of that

discovery; that the chemical industry is not moving fast enough to market medications which militant patient organizations are vocally demanding; that the epidemic is spreading in sub-Saharan Africa. Once again, heads of state, chemists, biologists, desperate patients and industrialists find themselves caught up in a single uncertain story mixing biology and society.

On page eight, there is a story about computers and chips controlled by the Japanese; on page nine, about the right to keep frozen embryos; on page ten, about a forest burning, its columns of smoke carrying off rare species that some naturalists would like to protect; on page eleven, there are whales wearing collars fitted with radio tracking devices; also on page eleven, there is a slag heap in northern France, a symbol of the exploitation of workers, that has just been classified as an ecological preserve because of the rare flora it has been fostering! On page twelve, the Pope, French bishops, Monsanto, the Fallopian tubes, and Texas fundamentalists gather in a strange cohort around a single contraceptive. On page fourteen, the number of lines on high-definition television bring together Mr Delors, Thomson, the EEC, commissions on standardization, the Japanese again, and television film producers. Change the screen standard by a few lines, and billions of francs, millions of television sets, thousands of hours of film, hundreds of engineers and dozens of CEOs go down the drain.

Fortunately, the paper includes a few restful pages that deal purely with politics (a meeting of the Radical Party), and there is also the literary supplement in which novelists delight in the adventures of a few narcissistic egos ('I love you . . . you don't'). We would be dizzy without these soothing features. For the others are multiplying, those hybrid articles that sketch out imbroglios of science, politics, economy, law, religion, technology, fiction. If reading the daily paper is modern man's form of prayer, then it is a very strange man indeed who is doing the praying today while reading about these mixed-up affairs. All of culture and all of nature get churned up again every day.

Yet no one seems to find this troubling. Headings like Economy, Politics, Science, Books, Culture, Religion and Local Events remain in place as if there were nothing odd going on. The smallest AIDS virus takes you from sex to the unconscious, then to Africa, tissue cultures, DNA and San Francisco, but the analysts, thinkers, journalists and decision-makers will slice the delicate network traced by the virus for you into tidy compartments where you will find only science, only economy, only social phenomena, only local news, only sentiment, only sex. Press the most innocent aerosol button and you'll be heading for the Antarctic, and from there to the University of California at Irvine, the mountain ranges of Lyon, the chemistry of inert gases, and then maybe to the

United Nations, but this fragile thread will be broken into as many segments as there are pure disciplines. By all means, they seem to say, let us not mix up knowledge, interest, justice and power. Let us not mix up heaven and earth, the global stage and the local scene, the human and the nonhuman. 'But these imbroglios do the mixing,' you'll say, 'they weave our world together!' 'Act as if they didn't exist,' the analysts reply. They have cut the Gordian knot with a well-honed sword. The shaft is broken: on the left, they have put knowledge of things; on the right, power and human politics.

1.2 Retying the Gordian Knot

For twenty years or so, my friends and I have been studying these strange situations that the intellectual culture in which we live does not know how to categorize. For lack of better terms, we call ourselves sociologists, historians, economists, political scientists, philosophers or anthropologists. But to these venerable disciplinary labels we always add a qualifier: 'of science and technology'. 'Science studies', as Anglo-Americans call it, or 'science, technology and society'. Whatever label we use, we are always attempting to retie the Gordian knot by crisscrossing, as often as we have to, the divide that separates exact knowledge and the exercise of power – let us say nature and culture. Hybrids ourselves, installed lopsidedly within scientific institutions, half engineers and half philosophers, '*tiers instruits*' (Serres, 1991) without having sought the role, we have chosen to follow the imbroglios wherever they take us. To shuttle back and forth, we rely on the notion of translation, or network. More supple than the notion of system, more historical than the notion of structure, more empirical than the notion of complexity, the idea of network is the Ariadne's thread of these interwoven stories.

Yet our work remains incomprehensible, because it is segmented into three components corresponding to our critics' habitual categories. They turn it into nature, politics or discourse.

When Donald MacKenzie describes the inertial guidance system of intercontinental missiles (MacKenzie, 1990); when Michel Callon describes fuel cell electrodes (Callon, 1989); when Thomas Hughes describes the filament of Edison's incandescent lamp (Hughes, 1983); when I describe the anthrax bacterium modified by Louis Pasteur (Latour, 1988b) or Roger Guillemin's brain peptides (Latour and Woolgar, [1979] 1986), the critics imagine that we are talking about science and technology. Since these are marginal topics, or at best manifestations of pure instrumental and calculating thought, people who are interested in politics or in souls feel justified in paying no attention.

Yet this research does not deal with nature or knowledge, with things-in-themselves, but with the way all these things are tied to our collectives and to subjects. We are talking not about instrumental thought but about the very substance of our societies. MacKenzie mobilizes the entire American Navy, and even Congress, to talk about his inertial guidance system; Callon mobilizes the French electric utility (EDF) and Renault as well as great chunks of French energy policy to grapple with changes in ions at the tip of an electrode in the depth of a laboratory; Hughes reconstructs all America around the incandescent filament of Edison's lamp; the whole of French society comes into view if one tugs on Pasteur's bacteria; and it becomes impossible to understand brain peptides without hooking them up with a scientific community, instruments, practices – all impedimenta that bear very little resemblance to rules of method, theories and neurons.

'But then surely you're talking about politics? You're simply reducing scientific truth to mere political interests, and technical efficiency to mere *strategical manœuvres*?' Here is the second misunderstanding. If the facts do not occupy the simultaneously marginal and sacred place our worship has reserved for them, then it seems that they are immediately reduced to pure local contingency and sterile machinations. Yet science studies are talking not about the social contexts and the interests of power, but about their involvement with collectives and objects. The Navy's organization is profoundly modified by the way its offices are allied with its bombs; EDF and Renault take on a completely different look depending on whether they invest in fuel cells or the internal combustion engine; America before electricity and America after are two different places; the social context of the nineteenth century is altered according to whether it is made up of wretched souls or poor people infected by microbes; as for the unconscious subjects stretched out on the analyst's couch, we picture them differently depending on whether their dry brain is discharging neurotransmitters or their moist brain is secreting hormones. None of our studies can reutilize what the sociologists, the psychologists or the economists tell us about the social context or about the subject in order to apply them to the hard sciences – and this is why I will use the word 'collective' to describe the association of humans and nonhumans and 'society' to designate one part only of our collectives, the divide invented by the social sciences. The context and the technical content turn out to be redefined every time. Just as epistemologists no longer recognize in the collectivized things we offer them the ideas, concepts or theories of their childhood, so the human sciences cannot be expected to recognize the power games of their militant adolescence in these collectives full of things we are lining up. The delicate networks traced by Ariadne's little hand remain more invisible than spiderwebs.

'But if you are not talking about things-in-themselves or about humans-among-themselves, then you must be talking just about discourse, representation, language, texts, rhetorics.' This is the third misunderstanding. It is true that those who bracket off the external referent – the nature of things – and the speaker – the pragmatic or social context – can talk only about meaning effects and language games. Yet when MacKenzie examines the evolution of inertial guidance systems, he is talking about arrangements that can kill us all; when Callon follows a trail set forth in scientific articles, he is talking about industrial strategy as well as rhetoric (Callon *et al.*, 1986); when Hughes analyzes Edison's notebooks, the internal world of Menlo Park is about to become the external world of all America (Hughes, 1983). When I describe Pasteur's domestication of microbes, I am mobilizing nineteenth-century society, not just the semiotics of a great man's texts; when I describe the invention-discovery of brain peptides, I am really talking about the peptides themselves, not simply their representation in Professor Guillemin's laboratory. Yet rhetoric, textual strategies, writing, staging, semiotics – all these are really at stake, but in a new form that has a simultaneous impact on the nature of things and on the social context, while it is not reducible to the one or the other.

Our intellectual life is out of kilter. Epistemology, the social sciences, the sciences of texts – all have their privileged vantage point, provided that they remain separate. If the creatures we are pursuing cross all three spaces, we are no longer understood. Offer the established disciplines some fine sociotechnological network, some lovely translations, and the first group will extract our concepts and pull out all the roots that might connect them to society or to rhetoric; the second group will erase the social and political dimensions, and purify our network of any object; the third group, finally, will retain our discourse and rhetoric but purge our work of any undue adherence to reality – *horresco referens* – or to power plays. In the eyes of our critics the ozone hole above our heads, the moral law in our hearts, the autonomous text, may each be of interest, but only separately. That a delicate shuttle should have woven together the heavens, industry, texts, souls and moral law – this remains uncanny, unthinkable, unseemly.

1.3 The Crisis of the Critical Stance

The critics have developed three distinct approaches to talking about our world: naturalization, socialization and deconstruction. Let us use E.O. Wilson, Pierre Bourdieu, and Jacques Derrida – a bit unfairly – as emblematic figures of these three tacks. When the first speaks of

naturalized phenomena, then societies, subjects, and all forms of discourse vanish. When the second speaks of fields of power, then science, technology, texts, and the contents of activities disappear. When the third speaks of truth effects, then to believe in the real existence of brain neurons or power plays would betray enormous naiveté. Each of these forms of criticism is powerful in itself but impossible to combine with the other two. Can anyone imagine a study that would treat the ozone hole as simultaneously naturalized, sociologized and deconstructed? A study in which the nature of the phenomena might be firmly established and the strategies of power predictable, but nothing would be at stake but meaning effects that project the pitiful illusions of a nature and a speaker? Such a patchwork would be grotesque. Our intellectual life remains recognizable as long as epistemologists, sociologists and deconstructionists remain at arm's length, the critique of each group feeding on the weaknesses of the other two. We may glorify the sciences, play power games or make fun of the belief in a reality, but we must not mix these three caustic acids.

Now we cannot have it both ways. Either the networks my colleagues in science studies and I have traced do not really exist, and the critics are quite right to marginalize them or segment them into three distinct sets: facts, power and discourse; or the networks are as we have described them, and they do cross the borders of the great fiefdoms of criticism: they are neither objective nor social, nor are they effects of discourse, even though they are real, and collective, and discursive. Either we have to disappear, we bearers of bad news, or criticism itself has to face a crisis because of these networks it cannot swallow. Yes, the scientific facts are indeed constructed, but they cannot be reduced to the social dimension because this dimension is populated by objects mobilized to construct it. Yes, those objects are real but they look so much like social actors that they cannot be reduced to the reality 'out there' invented by the philosophers of science. The agent of this double construction – science with society and society with science – emerges out of a set of practices that the notion of deconstruction grasps as badly as possible. The ozone hole is too social and too narrated to be truly natural; the strategy of industrial firms and heads of state is too full of chemical reactions to be reduced to power and interest; the discourse of the ecosphere is too real and too social to boil down to meaning effects. Is it our fault if the networks are *simultaneously real, like nature, narrated, like discourse, and collective, like society*? Are we to pursue them while abandoning all the resources of criticism, or are we to abandon them while endorsing the common sense of the critical tripartition? The tiny networks we have unfolded are torn apart like the Kurds by the Iranians, the Iraqis and the Turks; once night has fallen, they slip across borders to get married, and

they dream of a common homeland that would be carved out of the three countries which have divided them up.

This would be a hopeless dilemma had anthropology not accustomed us to dealing calmly and straightforwardly with the seamless fabric of what I shall call 'nature-culture', since it is a bit more and a bit less than a culture (see Section 4.5). Once she has been sent into the field, even the most rationalist ethnographer is perfectly capable of bringing together in a single monograph the myths, ethnosciences, genealogies, political forms, techniques, religions, epics and rites of the people she is studying. Send her off to study the Arapesh or the Achuar, the Koreans or the Chinese, and you will get a single narrative that weaves together the way people regard the heavens and their ancestors, the way they build houses and the way they grow yams or manioc or rice, the way they construct their government and their cosmology. In works produced by anthropologists abroad, you will not find a single trait that is not simultaneously real, social and narrated.

If the analyst is subtle, she will retrace networks that look exactly like the sociotechnical imbroglios that we outline when we pursue microbes, missiles or fuel cells in our own Western societies. We too are afraid that the sky is falling. We too associate the tiny gesture of releasing an aerosol spray with taboos pertaining to the heavens. We too have to take laws, power and morality into account in order to understand what our sciences are telling us about the chemistry of the upper atmosphere.

Yes, but we are not savages; no anthropologist studies us that way, and it is impossible to do with our own culture – or should I say nature-culture? – what can be done elsewhere, with others. Why? Because we are modern. Our fabric is no longer seamless. Analytic continuity has become impossible. For traditional anthropologists, there is not – there cannot be, there should not be – an anthropology of the modern world (Latour, 1988a). The ethnosciences can be connected in part to society and to discourse (Conklin, 1983); science cannot. It is even because they remain incapable of studying themselves in this way that ethnographers are so critical, and so distant, when they go off to the tropics to study others. The critical tripartition protects them because it authorizes them to reestablish continuity among the communities of the premoderns. It is only because they separate at home that ethnographers make so bold as to unify abroad.

The formulation of the dilemma is now modified. Either it is impossible to do an anthropological analysis of the modern world – and then there is every reason to ignore those voices claiming to have a homeland to offer the sociotechnological networks; or it is possible to do an anthropological analysis of the modern world – but then the very definition of the modern world has to be altered. We pass from a limited

problem – why do the networks remain elusive? Why are science studies ignored? – to a broader and more classical problem: what does it mean to be modern? When we dig beneath the surface of our elders' surprise at the networks that – as we see it – weave our world, we discover the anthropological roots of that lack of understanding. Fortunately, we are being assisted by some major events that are burying the old critical mole in its own burrows. If the modern world in its turn is becoming susceptible to anthropological treatment, this is because something has happened to it. Ever since Madame de Guermantes's salon, we have known that it took a cataclysm like the Great War for intellectual culture to change its habits slightly and open its doors to the upstarts who had been beyond the pale before.

1.4 1989: The Year of Miracles

All dates are conventional, but 1989 is a little less so than some. For everyone today, the fall of the Berlin Wall symbolizes the fall of socialism. 'The triumph of liberalism, of capitalism, of the Western democracies over the vain hopes of Marxism': such is the victory communiqué issued by those who escaped Leninism by the skin of their teeth. While seeking to abolish man's exploitation of man, socialism had magnified that exploitation immeasurably. It is a strange dialectic that brings the exploiter back to life and buries the gravedigger, having given the world lessons in large-scale civil war. The repressed returns, and with a vengeance: the exploited people, in whose name the avant-garde of the proletariat had reigned, becomes a people once again; the voracious elites that were to have been dispensed with return at full strength to take up their old work of exploitation in banks, businesses and factories. The liberal West can hardly contain itself for joy. It has won the Cold War.

But the triumph is short-lived. In Paris, London and Amsterdam, this same glorious year 1989 witnesses the first conferences on the global state of the planet: for some observers they symbolize the end of capitalism and its vain hopes of unlimited conquest and total dominion over nature. By seeking to reorient man's exploitation of man toward an exploitation of nature by man, capitalism magnified both beyond measure. The repressed returns, and with a vengeance: the multitudes that were supposed to be saved from death fall back into poverty by the hundreds of millions; nature, over which we were supposed to gain absolute mastery, dominates us in an equally global fashion, and threatens us all. It is a strange dialectic that turns the slave into man's owner and master, and that suddenly informs us that we have invented ecocides as well as large-scale famine.

The perfect symmetry between the dismantling of the wall of shame and the end of limitless Nature is invisible only to the rich Western democracies. The various manifestations of socialism destroyed both their peoples and their ecosystems, whereas the powers of the North and the West have been able to save their peoples and some of their countrysides by destroying the rest of the world and reducing its peoples to abject poverty. Hence a double tragedy: the former socialist societies think they can solve both their problems by imitating the West; the West thinks it has escaped both problems and believes it has lessons for others even as it leaves the Earth and its people to die. The West thinks it is the sole possessor of the clever trick that will allow it to keep on winning indefinitely, whereas it has perhaps already lost everything.

After seeing the best of intentions go doubly awry, we moderns from the Western world seem to have lost some of our self-confidence. Should we *not* have tried to put an end to man's exploitation of man? Should we *not* have tried to become nature's masters and owners? Our noblest virtues were enlisted in the service of these twin missions, one in the political arena and the other in the domain of science and technology. Yet we are prepared to look back on our enthusiastic and right-thinking youth as young Germans look to their greying parents and ask: 'What criminal orders did we follow?' 'Will we say that we didn't know?'

This doubt about the well-foundedness of the best of intentions pushes some of us to become reactionaries, in one of two ways. We must no longer try to put an end to man's domination of man, say some; we must no longer try to dominate nature, say others. Let us be resolutely antimodern, they all say.

From a different vantage point, the vague expression of postmodernism aptly sums up the incomplete scepticism of those who reject both reactions. Unable to believe the dual promises of socialism and 'naturalism', the postmoderns are also careful not to reject them totally. They remain suspended between belief and doubt, waiting for the end of the millennium.

Finally, those who reject ecological obscurantism or antisocialist obscurantism, and are unable to settle for the scepticism of the postmoderns, decide to carry on as if nothing had changed: they intend to remain resolutely modern. They continue to believe in the promises of the sciences, or in those of emancipation, or both. Yet their faith in modernization no longer rings quite true in art, or economics, or politics, or science, or technology. In art galleries and concert halls, along the façades of apartment buildings and inside international organizations, you can feel that the heart is gone. The will to be modern seems hesitant, sometimes even outmoded.

Whether we are antimodern, modern or postmodern, we are all called into question by the double debacle of the miraculous year 1989. But we take up the threads of thought if we consider the year precisely to be a double debacle, two lessons whose admirable symmetry allows us to look at our whole past in a new light.

And what if we had never been modern? Comparative anthropology would then be possible. The networks would have a place of their own.

1.5 What Does it Mean To Be a Modern?

Modernity comes in as many versions as there are thinkers or journalists, yet all its definitions point, in one way or another, to the passage of time. The adjective 'modern' designates a new regime, an acceleration, a rupture, a revolution in time. When the word 'modern', 'modernization', or 'modernity' appears, we are defining, by contrast, an archaic and stable past. Furthermore, the word is always being thrown into the middle of a fight, in a quarrel where there are winners and losers, Ancients and Moderns. 'Modern' is thus doubly asymmetrical: it designates a break in the regular passage of time, and it designates a combat in which there are victors and vanquished. If so many of our contemporaries are reluctant to use this adjective today, if we qualify it with prepositions, it is because we feel less confident in our ability to maintain that double asymmetry: we can no longer point to time's irreversible arrow, nor can we award a prize to the winners. In the countless quarrels between Ancients and Moderns, the former come out winners as often as the latter now, and nothing allows us to say whether revolutions finish off the old regimes or bring them to fruition. Hence the scepticism that is oddly called 'post'modern even though it does not know whether or not it is capable of taking over from the Moderns.

To go back a few steps: we have to rethink the definition of modernity, interpret the symptom of postmodernity, and understand why we are no longer committed heart and soul to the double task of domination and emancipation. To make a place for the networks of sciences and technologies, do we really have to move heaven and earth? Yes, exactly, the Heavens and the Earth.

The hypothesis of this essay is that the word 'modern' designates two sets of entirely different practices which must remain distinct if they are to remain effective, but have recently begun to be confused. The first set of practices, by 'translation', creates mixtures between entirely new types of beings, hybrids of nature and culture. The second, by 'purification', creates two entirely distinct ontological zones: that of human beings on

the one hand; that of nonhumans on the other. Without the first set, the practices of purification would be fruitless or pointless. Without the second, the work of translation would be slowed down, limited, or even ruled out. The first set corresponds to what I have called networks; the second to what I shall call the modern critical stance. The first, for example, would link in one continuous chain the chemistry of the upper atmosphere, scientific and industrial strategies, the preoccupations of heads of state, the anxieties of ecologists; the second would establish a partition between a natural world that has always been there, a society with predictable and stable interests and stakes, and a discourse that is independent of both reference and society.

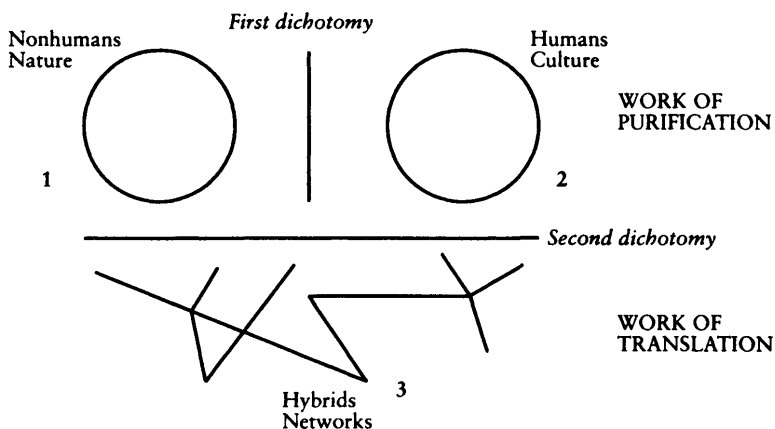


Figure 1.1 Purification and translation

So long as we consider these two practices of translation and purification separately, we are truly modern – that is, we willingly subscribe to the critical project, even though that project is developed only through the proliferation of hybrids down below. As soon as we direct our attention simultaneously to the work of purification and the work of hybridization, we immediately stop being wholly modern, and our future begins to change. At the same time we stop having been modern, because we become retrospectively aware that the two sets of practices have always already been at work in the historical period that is ending. Our past begins to change. Finally, if we have never been modern – at least in the way criticism tells the story – the tortuous relations that we have maintained with the other nature-cultures would also be transformed. Relativism, domination, imperialism, false consciousness, syncretism – all the problems that anthropologists summarize under the loose

expression of 'Great Divide' – would be explained differently, thereby modifying comparative anthropology.

What link is there between the work of translation or mediation and that of purification? This is the question on which I should like to shed light. My hypothesis – which remains too crude – is that the second has made the first possible: the more we forbid ourselves to conceive of hybrids, the more possible their interbreeding becomes – such is the paradox of the moderns, which the exceptional situation in which we find ourselves today allows us finally to grasp. The second question has to do with premoderns, with the other types of culture. My hypothesis – once again too simple – is that by devoting themselves to conceiving of hybrids, the other cultures have excluded their proliferation. It is this disparity that would explain the Great Divide between Them – all the other cultures – and Us – the westerners – and would make it possible finally to solve the insoluble problem of relativism. The third question has to do with the current crisis: if modernity were so effective in its dual task of separation and proliferation, why would it weaken itself today by preventing us from being truly modern? Hence the final question, which is also the most difficult one: if we have stopped being modern, if we can no longer separate the work of proliferation from the work of purification, what are we going to become? Can we aspire to Enlightenment without modernity? My hypothesis – which, like the previous ones, is too coarse – is that we are going to have to slow down, reorient and regulate the proliferation of monsters by representing their existence officially. Will a different democracy become necessary? A democracy extended to things? To answer these questions, I shall have to sort out the premoderns, the moderns, and even the postmoderns in order to distinguish between their durable characteristics and their lethal ones.

Too many questions, as I am well aware, for an essay that has no excuse but its brevity. Nietzsche said that the big problems were like cold baths: you have to get out as fast as you got in.



RELATIVISM

4.1 How to End the Asymmetry

At the beginning of this essay I proposed anthropology as a model for describing our world, since anthropology alone seemed capable of linking up the strange trajectory of quasi-objects as a whole. I quickly recognized, however, that this model was not readily usable, since it did not apply to science and technology. While ethnographers were quite capable of retracing the links that bound the ethnosciences to the social world, they were unable to do so for the exact sciences. In order to understand why it was so difficult to apply the same freedom of tone to the sociotechnological networks of our Western world, I needed to understand what we meant by modern. If we understand modernity in terms of the official Constitution that has to make a total distinction between humans and nonhumans on the one hand and between purification and mediation on the other, then no anthropology of the modern world is possible. But if we link together in one single picture the work of purification and the work of mediation that gives it meaning, we discover, retrospectively, that we have never been truly modern. As a result, the anthropology that has been stumbling over science and technology up to now could once again become the model for description that I have been seeking. Unable to compare premoderns to moderns, it could compare them both to nonmoderns.

Unfortunately, it is not easy to reutilize anthropology as it stands. Shaped by moderns studying people who were said to be premodern, anthropology has internalized, in its practices, concepts and questions, the impossibility I mentioned above. It rules out studying objects of nature, limiting the extent of its inquiries exclusively to cultures. It thus remains asymmetrical. If anthropology is to become comparative, if it is

to be able to go back and forth between moderns and nonmoderns, it must be made symmetrical. To this end, it must become capable of confronting not beliefs that do not touch us directly – we are always critical enough of them – but the true knowledge to which we adhere totally. It must therefore be made capable of studying the sciences by surpassing the limits of the sociology of knowledge and, above all, of epistemology.

The first principle of symmetry upset traditional sociology of knowledge by requiring that error and truth be treated in the same terms (Bloor, [1976] 1991). In the past, the sociology of knowledge, by marshalling a great profusion of social factors, had explained only deviations with respect to the straight and narrow path of reason. Error, beliefs, could be explained socially, but truth remained self-explanatory. It was certainly possible to analyze a belief in flying saucers, but not the knowledge of black holes; we could analyze the illusions of parapsychology, but not the knowledge of psychologists; we could analyze Spencer's errors, but not Darwin's certainties. The same social factors could not be applied equally to both. In this double standard we recognize the split in anthropology between sciences, which were not open to study, and ethnosciences, which were.

The presuppositions of the sociology of knowledge would not have intimidated ethnologists for long, if epistemologists – especially in the French tradition – had not erected as a founding principle this same asymmetry between true and false sciences. Only the latter – the 'outdated' sciences – can be related to the social context. As for the 'sanctioned' sciences, they become scientific only because they tear themselves away from all context, from any traces of contamination by history, from any naive perception, and escape even their own past. Here is the difference, for Bachelard and his disciples, between history and the history of sciences (Bachelard, 1967; Canguilhem, [1968] 1988). History may be symmetrical, but that hardly matters, because it never deals with real science; the history of science, on the other hand, must never be symmetrical, because it deals with science and its utmost duty is to make the epistemological break more complete.

A single example will suffice to show to what lengths the rejection of all symmetrical anthropology can be taken when epistemologists have to treat true sciences differently from false beliefs. When Georges Canguilhem distinguishes scientific ideologies from true sciences, he asserts not only that it is impossible to study Darwin – the scientist – and Diderot – the ideologue – in the same terms, but that it must be impossible to lump them together: 'Distinguishing between ideology and science prevents us from seeing continuities where in fact there are only elements of ideology preserved in a science that has supplanted an earlier ideology. Hence such

a distinction prevents us from seeing anticipations of the *Origin of Species* in [Diderot's] *Dream of d'Alembert*' (Canguilhem, [1968] 1988 p. 39). Only what breaks for ever with ideology is scientific. It is difficult indeed to pursue the ins and outs of quasi-objects while following such a principle. Once they have passed into the hands of such epistemologists, they will be pulled out by the roots. Objects alone will remain, excised from the entire network that gave them meaning. But why even mention Diderot or Spencer? Why take an interest in error? Because without it the truth would shine too brightly! 'Recognizing the connections between ideology and science should prevent us from reducing the history of science to a featureless landscape, a map without relief' (p. 39). For such epistemologists, 'Whiggish' history is not a mistake to be overcome but a duty to be carried out with utmost rigour. The history of science should not be confused with history (Bowker and Latour, 1987). The false is what makes the true stand out. What Racine did for the Sun King under the lofty name of historian, Canguilhem does for Darwin under the equally usurped label of historian of science.

The principle of symmetry, on the contrary, reestablished continuity, historicity, and – we may as well say it – elementary justice. David Bloor is Canguilhem's opposite number, just as Serres is Bachelard's. 'The only pure myth is the idea of a science devoid of all myth,' writes the latter as he breaks with epistemology (Serres, 1974). For Serres, as for actual historians of science, Diderot, Darwin, Malthus and Spencer have to be explained according to the same principles and the same causes; if you want to account for the belief in flying saucers, make sure your explanations can be used, symmetrically, for black holes (Lagrange, 1990). If you claim to debunk parapsychology, can you use the same factors for psychology (Collins and Pinch, 1982)? If you analyze Pasteur's successes, do the same terms allow you to account for his failures (Latour, 1988b)?

Above all, the first principle of symmetry proposes a slimming treatment for the explanations of errors offered by social scientists. It had become so easy to account for deviation! Society, beliefs, ideology, symbols, the unconscious, madness – everything was so readily available that explanations were becoming obese. But truths? When we lost our facile recourse to epistemological breaks, we soon realized, we who study the sciences, that most of our explanations were not worth much. Asymmetry organized them all, and simply added insult to injury. Everything changes if the staunch discipline of the principle of symmetry forces us to retain only the causes that could serve both truth and falsehood, belief and knowledge, science and parascience. Those who weighed the winners with one scale and the losers with another, while shouting '*vae victis!*' (woe to the vanquished), like Brennus, made that

discrepancy incomprehensible up to now. When the balance of symmetry is reestablished with precision, the discrepancy that allows us to understand why some win and others lose stands out all the more sharply.

4.2 The Principle of Symmetry Generalized

The first principle of symmetry offers the incomparable advantage of doing away with epistemological breaks, with *a priori* separations between 'sanctioned' and 'outdated' sciences, or artificial divisions between sociologists who study knowledge, those who study belief systems, and those who study the sciences. Formerly, when the anthropologist returned from his remote land to discover sciences that had been tidied up by epistemology at home, he could establish no continuity between ethnoscience and scientific knowledge. Thus with good reason he abstained from studying nature, and settled for analyzing cultures. Now when he returns and discovers studies – becoming more numerous by the day – that focus on his own sciences and technologies at home, the abyss is already narrower. He can move without too much difficulty from Trobriand navigators to those of the United States Navy (Hutchins, 1980); from calculators in West Africa to arithmeticians in California (Rogoff and Lave, 1984); from technicians in the Ivory Coast to a Nobel laureate in La Jolla (Latour and Woolgar, [1979] 1986); from sacrifices to the god Baal to the Challenger explosion (Serres, 1987). He is no longer required to limit himself to cultures, since Nature – or, rather, natures – have become similarly accessible to study (Pickering, 1992).

However, the principle of symmetry defined by Bloor leads rapidly to an impasse. If it requires an iron discipline in its explanation, the principle itself is asymmetrical, as the following diagram will make clear. Epistemologists and sociologists of knowledge explained truth through its congruence with natural reality, and falsehood through the constraint of social categories, epistemes or interests. They were asymmetrical. Bloor's principle seeks to explain truth and falsehood alike through the same categories, the same epistemes and the same interests. But what terms does it choose? Those that the sciences of society offer social scientists – that is, Hobbes and his many successors. Thus it is asymmetrical not because it separates ideology and science, as epistemologists do, but because it brackets off Nature and makes the 'Society' pole carry the full weight of explanation. Constructivist where Nature is concerned, it is realistic about Society (Callon and Latour, 1992; Collins and Yearley, 1992).

But Society, as we now know, is no less constructed than Nature, since it is the dual result of one single stabilization process. For each state of

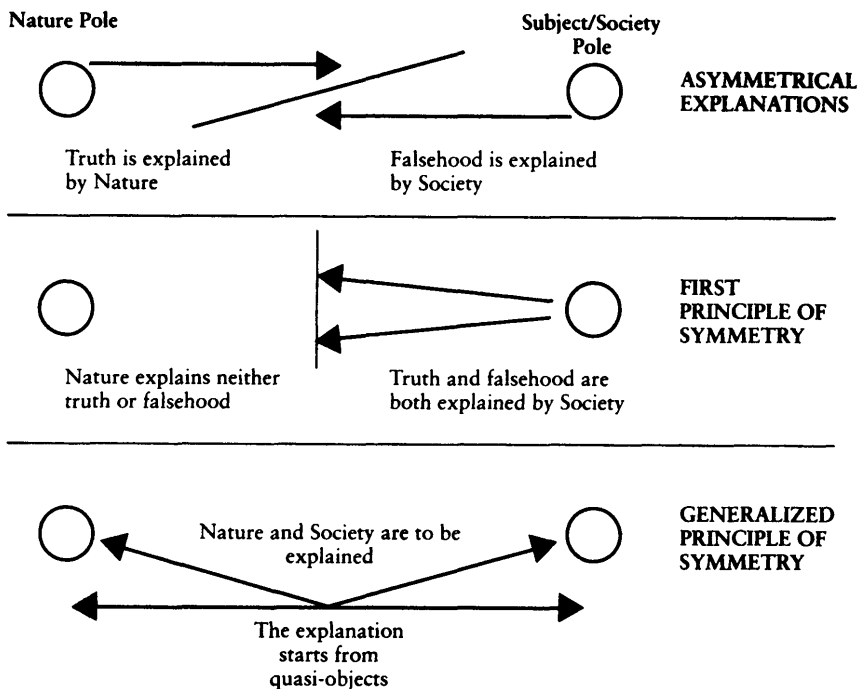


Figure 4.1 The principle of symmetry

Nature there exists a corresponding state of society. If we are to be realist in the one case, we have to be realist in the other; if we are constructivist in one instance, then we have to be constructivist for both. Or rather, as our investigation of the two modern practices has shown, we must be able to understand simultaneously how Nature and Society are immanent – in the work of mediation – and transcendent – after the work of purification. Nature and Society do not offer solid hooks to which we might attach our interpretations (which should be asymmetrical in Canguilhem's sense, or symmetrical in Bloor's), but are what is to be explained. The appearance of explanation that Nature and Society provide comes only in a late phase, when stabilized quasi-objects have become, after cleavage, objects of external reality on the one hand, subjects of Society on the other. Nature and Society are part of the problem, not part of the solution.

If anthropology is to become symmetrical, therefore, it has to do more than take in the first principle of symmetry – which puts a stop to only the most flagrant injustices of epistemology. It has to absorb what Michel

Callon calls the principle of generalized symmetry: the anthropologist has to position himself at the median point where he can follow the attribution of both nonhuman and human properties (Callon, 1986). He is not allowed to use external reality to explain society, or to use power games to account for what shapes external reality. In the same way, he is of course forbidden to alternate natural realism and sociological realism by using 'not only' Nature 'but also' Society, in order to keep the two original asymmetries even while concealing the weaknesses of the one under those of the other (Latour, 1987).

So long as we were modern, it was impossible to occupy this central place from which the symmetry between Nature and Society becomes visible at last, because it did not exist! The only central position recognized by the Constitution, as we have already seen, was the phenomenon, the meeting point where the Nature pole and the Subject pole were applied to one another. Hitherto this point has remained a no-man's-land, a nonplace. Everything changes when, instead of constantly and exclusively alternating between one pole of the modern dimension and the other, we move down along the nonmodern dimension. The unthinkable nonplace becomes the point in the Constitution where the work of mediation emerges. It is far from empty: quasi-objects, quasi-subjects, proliferate in it. No longer unthinkable, it becomes the terrain of all the empirical studies carried out on the networks.

But isn't this place the one that anthropology prepared so painstakingly over the course of a century, the one the ethnologist occupies so effortlessly today when she sets out to study other cultures? Indeed, we can watch her move, without modifying her analytical tools, from meteorology to the kinship system, from the nature of plants to their cultural representation, from political organization to ethnomedicine, from mythic structures to ethnophysics or to hunting techniques. To be sure, the ethnologist draws the courage to deploy this seamless web from her profound conviction that she is dealing merely, and solely, with representations. Nature, for its part, remains unique, external and universal. But if we superpose the two positions – the one that the ethnologist occupies effortlessly in order to study cultures and the one that we have made a great effort to define in order to study our own nature – then comparative anthropology becomes possible, if not easy. It no longer compares cultures, setting aside its own, which through some astonishing privilege possesses a unique access to universal Nature. *It compares natures-cultures*. Are they comparable? Are they similar? Are they the same? We can now, perhaps, solve the insoluble problem of relativism.

4.3 The Import – Export System of the Two Great Divides

‘We Westerners are absolutely different from others!’ – such is the moderns’ victory cry, or protracted lament. The Great Divide between Us – Occidentals – and Them – everyone else, from the China seas to the Yucatan, from the Inuit to the Tasmanian aborigines – has not ceased to obsess us. Whatever they do, Westerners bring history along with them in the hulls of their caravels and their gunboats, in the cylinders of their telescopes and the pistons of their immunizing syringes. They bear this white man’s burden sometimes as an exalting challenge, sometimes as a tragedy, but always as a destiny. They do not claim merely that they differ from others as the Sioux differ from the Algonquins, or the Baoules from the Lapps, but that they differ radically, absolutely, to the extent that Westerners can be lined up on one side and all the cultures on the other, since the latter all have in common the fact that they are precisely cultures among others. In Westerners’ eyes the West, and the West alone, is not a culture, not merely a culture.

Why does the West see itself this way? Why would the West and only the West not be a culture? In order to understand the Great Divide between Us and Them, we have to go back to that other Great Divide between humans and nonhumans that I defined above. In effect, *the first is the exportation of the second*. We Westerners cannot be one culture among others, since we also mobilize Nature. We do not mobilize an image or a symbolic representation of Nature, the way the other societies do, but Nature as it is, or at least as it is known to the sciences – which remain in the background, unstudied, unstudyable, miraculously conflated with Nature itself. Thus at the heart of the question of relativism we find the question of science. If Westerners had been content with trading and conquering, looting and dominating, they would not distinguish themselves radically from other tradespeople and conquerors. But no, they invented science, an activity totally distinct from conquest and trade, politics and morality.

Even those who have tried, in the name of cultural relativism, to defend the continuity of cultures without ordering them in a progressive series, and without isolating them in their separate prisons (Lévi-Strauss, [1952] 1987), think they can do this only by bringing them as close as possible to the sciences.

‘We have had to wait until the middle of this century’, writes Lévi-Strauss in *The Savage Mind*, ‘for the crossing of long separated paths: that which arrives at the physical world by the detour of communication [the savage mind], and that which, as we have recently come to know, arrives at the world of communication by the detour of the physical [modern science]’ (Lévi-Strauss, [1962] 1966, p. 269).

The false antimony between logical and prelogical mentality was surmounted at the same time. The savage mind is as logical in the same sense and the same fashion as ours, though as our own is only when it is applied to knowledge of a universe in which it recognizes physical and semantic properties simultaneously . . . It will be objected that there remains a major difference between the thought of primitives and our own: Information Theory is concerned with genuine messages whereas primitives mistake mere manifestations of physical determinism for messages . . . In treating the sensible properties of the animal and plant kingdoms as if they were the elements of a message, and in discovering 'signatures' – and so signs – in them, men [those with savage minds] have made mistakes of identification: the meaningful element was not always the one they supposed. But, without perfected instruments which would have permitted them to place it where it most often is – namely, at the microscopic level – they already discerned 'as through a glass darkly' principles of interpretation whose heuristic value and accordance with reality have been revealed to us only through very recent inventions: telecommunications, computers and electron microscopes. (Lévi-Strauss, [1962] 1966, p. 268)

Lévi-Strauss, a generous defence lawyer, imagines no mitigating circumstances other than making his clients look as much like scientists as possible! If primitive peoples do not differ from us as much as we think, it is because they anticipate the newest conquests of information theory, molecular biology and physics, but with inadequate instruments and 'errors of identification'. The very sciences that are used for this promotion are now off limits. Conceived in the fashion of epistemology, these sciences remain objective and external, quasi-objects purged of their networks. Give the primitives a microscope, and they will think exactly as we do. Is there a better way to finish off those one wants to save from condemnation? For Lévi-Strauss (as for Canguilhem, Lyotard, Girard, Derrida, and the majority of French intellectuals), this new scientific knowledge lies entirely outside culture. It is the transcendence of science – conflated with Nature – that makes it possible to relativize all cultures, theirs and ours alike – with the one caveat, of course, that it is precisely our culture, not theirs, that is constructed through biology, electronic microscopes and telecommunication networks. . . . The abyss that was to supposed to be narrowing opens up again.

Somewhere in our societies, and in ours alone, an unheard-of transcendence has manifested itself: Nature as it is, ahuman, sometimes inhuman, always extrahuman. Since this event occurred – whether one situates it in Greek mathematics, Italian physics, German chemistry, American nuclear engineering or Belgian thermodynamics – there has been a total asymmetry between the cultures that took Nature into account and those that took into account only their own culture or the

distorted versions that they might have of matter. Those who invent sciences and discover physical determinisms never deal exclusively with human beings, except by accident. The others have only representations of Nature that are more or less disturbed or coded by the cultural preoccupations of the humans that occupy them fully and fall only by chance – ‘as through a glass darkly’ – on things as they are.

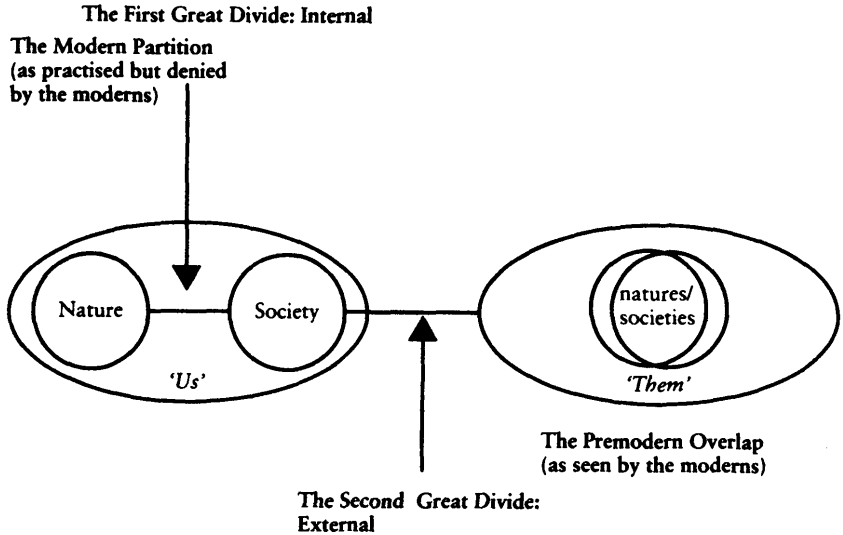


Figure 4.2 The two Great Divides

So the Internal Great Divide accounts for the External Great Divide: we are the only ones who differentiate absolutely between Nature and Culture, between Science and Society, whereas in our eyes all the others – whether they are Chinese or Amerindian, Azande or Barouya – cannot really separate what is knowledge from what is Society, what is sign from what is thing, what comes from Nature as it is from what their cultures require. Whatever they do, however adapted, regulated and functional they may be, they will always remain blinded by this confusion; they are prisoners of the social and of language alike. Whatever we do, however criminal, however imperialistic we may be, we escape from the prison of the social or of language to gain access to things themselves through a providential exit gate, that of scientific knowledge. The internal partition between humans and nonhumans defines a second partition – an external one this time – through which the moderns have set themselves apart from the premoderns. For Them, Nature and Society, signs and things,

are virtually coextensive. For Us they should never be. Even though we might still recognize in our own societies some fuzzy areas in madness, children, animals, popular culture and women's bodies (Haraway, 1989), we believe our duty is to extirpate ourselves from those horrible mixtures as forcibly as possible by no longer confusing what pertains to mere social preoccupations and what pertains to the real nature of things.

4.4 Anthropology Comes Home from the Tropics

When anthropology comes home from the tropics in order to rejoin the anthropology of the modern world that is ready and waiting, it does so at first with caution, not to say with pusillanimity. At first, it thinks it can apply its methods only when Westerners mix up signs and things the way savage thought does. It will therefore look for what most resembles its traditional terrains as defined by the External Great Divide. To be sure, it has to sacrifice exoticism, but not at great cost, since anthropology maintains its critical distance by studying only the margins and fractures of rationality, or the realms beyond rationality. Popular medicine, witchcraft in the Bocage (Favret-Saada, 1980), peasant life in the shadow of nuclear power plants (Zonabend, 1989), the representations ordinary people have of technical risks (Douglas, 1983) – all these can be excellent field study topics, because the question of Nature – that is, of science – is not yet raised.

However, the great repatriation cannot stop there. In fact, by sacrificing exoticism, the ethnologist loses what constituted the very originality of her research as opposed to the scattered studies of sociologists, economists, psychologists or historians. In the tropics, the anthropologist did not settle for studying the margins of other cultures (Geertz, 1971). If she remained marginal by vocation and method, and out of necessity, she nevertheless claimed to be reconstituting the centre of those cultures: their belief system, their technologies, their ethno-sciences, their power plays, their economies – in short, the totality of their existence (Mauss, [1923] 1967). If she comes back home but limits herself to studying the marginal aspects of her own culture, she loses all the hard-won advantages of anthropology. For example Marc Augé when he resided among the lagoon-dwellers of the Ivory Coast, sought to understand the entire social phenomenon revealed by sorcery (Augé, 1975). His marginality did not hinder him from grasping the full social fabric of Alladian culture. But back at home he has limited himself to studying the most superficial aspects of the metro (Augé, 1986), interpreting some graffiti on the walls of subway corridors, intimidated this time by the evidence of his own marginality in the face of Western

economics, technologies and science. A symmetrical Marc Augé would have studied the sociotechnological network of the metro itself: its engineers as well as its drivers, its directors and its clients, the employer-State, the whole shebang – simply doing at home what he had always done elsewhere. Western ethnologists cannot limit themselves to the periphery; otherwise, still asymmetrical, they would show boldness toward others, timidity toward themselves. Back home anthropology need not become the marginal discipline of the margins, picking up the crumbs that fall from the other disciplines' banquet table.

In order to achieve such freedom of movement and tone, however, one has to be able to view the two Great Divides in the same way, and consider them both as one particular definition of our world and its relationships with the others. Now these Divides do not define us any better than they define others; they are no more an instrument of knowledge than is the Constitution alone, or modern temporality alone (see Section 3.7). To become symmetrical, anthropology needs a complete overhaul and intellectual retooling so that it can get around both Divides at once by believing neither in the radical distinction between humans and nonhumans at home, nor in the total overlap of knowledge and society elsewhere.

Let us imagine an ethnologist who goes out to the tropics and takes along with her the Internal Great Divide. In her eyes, the people she studies continually confuse knowledge of the world – which the investigator, as a good scientific Westerner, possesses as her birthright – and the requirements of social functioning. The tribe that greets her thus has only one vision of the world, only one representation of Nature. To go back to the expression Marcel Mauss and Emile Durkheim made famous, this tribe projects its own social categories on to Nature (Durkheim and Mauss, [1903] 1967; Haudricourt, 1962). When our ethnologist explains to her informers that they must be more careful to separate the world as it is from the social representation they provide for it, they are scandalized or nonplussed. The ethnologist sees in their rage and their misunderstanding the very proof of their premodern obsession. The dualism in which she lives – humans on one side, nonhumans on the other, signs over here, things over there – is intolerable to them. For social reasons, our ethnologist concludes, this culture requires a monist attitude. 'We traffic in ideas; [the savage mind] hoards them up' (Lévi-Strauss, [1962] 1966, p. 267).

But let us suppose now that our ethnologist returns to her homeland and tries to dissolve the Internal Great Divide. And let us suppose that through a series of happy accidents she sets out to analyze one tribe among others – for example, scientific researchers or engineers (Knorr-Cetina, 1992). The situation turns out to be reversed, because now she

applies the lessons of monism she thinks she has learned from her earlier experience. Her tribe of scientists claims that in the end they are completely separating their knowledge of the world from the necessities of politics and morality (Traweek, 1988). In the observer's eyes, however, this separation is never very visible, or is itself only the by-product of a much more mixed activity, some tinkering in and out of the laboratory. Her informers claim that they have access to Nature, but the ethnographer sees perfectly well that they have access only to a vision, a representation of Nature that she herself cannot distinguish neatly from politics and social interests (Pickering, 1980). This tribe, like the earlier one, projects its own social categories on to Nature; what is new is that it pretends it has not done so. When the ethnologist explains to her informers that they cannot separate Nature from the social representation they have formed of it, they are scandalized or nonplussed. Our ethnologist sees in their rage and incomprehension the very proof of their modern obsession. The monism in which she now lives – humans are always mixed up with nonhumans – is intolerable to them. For social reasons, our ethnologist concludes, Western scientists require a dualist attitude.

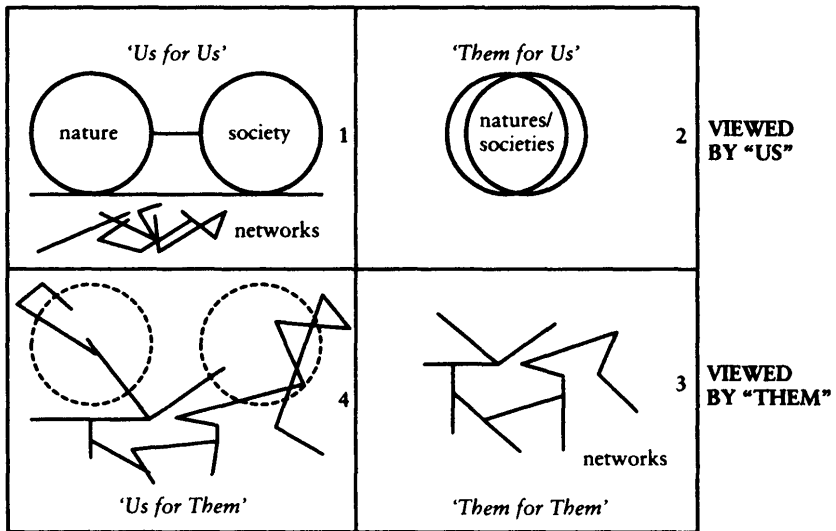


Figure 4.3 Them and Us

However, her double conclusion is incorrect, for she has not really heard what her informers were saying. The goal of anthropology is not to scandalize twice over, or to provoke incomprehension twice in a row: the

first time by exporting the Internal Great Divide and imposing dualism on cultures that reject it; the second time by cancelling the External Great Divide and imposing monism on a culture, our own – that rejects it absolutely. Symmetrical anthropology must realize that the two Great Divides do not describe reality – our own as well as that of others – but define the particular way Westerners had of establishing their relations with others as long as they felt modern. ‘We’, however, do not distinguish between Nature and Society more than ‘They’ make them overlap. If we take into account the networks that we allow to proliferate beneath the official part of our Constitution they look a lot like the networks in which ‘They’ say they live. Premoderns are said never to distinguish between signs and things, but neither do ‘We’ (Figure 4.3.3 and the bottom of 4.3.1 look very much alike). If, through an acrobatic thought experiment, we could go further and ask ‘Them’ to try to map on to their own networks our strange obsession with dichotomies and to try to imagine, in their own terms, what it could mean to have a pure Nature and a pure Society they would draw, with extreme difficulty, a provisional map in which Nature and Society would barely escape from the networks (Figure 4.3.4). But what does this picture represent, this picture in which Nature and Culture appear to be redistributed among the networks and to escape from them only fuzzily as if in dotted lines? It is exactly our world as we now see it through nonmodern eyes! It is exactly the picture I have tried to offer from the beginning, in which the upper and lower halves of the Constitution gradually merge. Premoderns are like us. Once they are considered symmetrically, they might offer a better analysis of the Westerners than the modernist anthropology offered of the premoderns! Or, more exactly, we can now drop entirely the ‘Us’ and ‘Them’ dichotomy, and even the distinction between moderns and premoderns. We have both always built communities of natures and societies. There is only one, symmetrical, anthropology.

4.5 There Are No Cultures

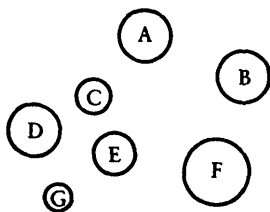
Let us suppose that anthropology, having come home from the tropics, sets out to retool itself by occupying a triply symmetrical position. It uses the same terms to explain truths and errors (this is the first principle of symmetry); it studies the production of humans and nonhumans simultaneously (this is the principle of generalized symmetry); finally, it refrains from making any *a priori* declarations as to what might distinguish Westerners from Others. To be sure, it loses exoticism, but it gains new fields of study that allow it to analyze the central mechanism of all collectives, including the ones to which Westerners belong. It loses its

exclusive attachment to cultures alone – or to cultural dimensions alone – but it gains a priceless acquisition, natures. The two positions I have been staking out since the beginning of this essay – the one the ethnologist is now occupying effortlessly, and the one the analyst of the sciences was striving toward with great difficulty – can now be superimposed. Network analysis extends a hand to anthropology, and offers it the job that has been ready and waiting.

The question of relativism is already becoming less difficult. If science as conceived along the epistemologists' lines made the problem insoluble, it suffices, as is often the case, to change the conception of scientific practices in order to dispel the artificial difficulties. What reason complicates, networks explicate. It is the peculiar trait of Westerners that they have imposed, by their official Constitution, the total separation of humans and nonhumans – the Internal Great Divide – and have thereby artificially created the scandal of the others. 'How can one be a Persian?' How can one not establish a radical difference between universal Nature and relative culture? But *the very notion of culture is an artifact created by bracketing Nature off*. Cultures – different or universal – do not exist, any more than Nature does. There are only natures-cultures, and these offer the only possible basis for comparison. As soon as we take practices of mediation as well as practices of purification into account, we discover that the moderns do not separate humans from nonhumans any more than the 'others' totally superimpose signs and things.

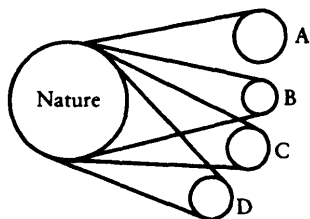
I can now compare the forms of relativism according to whether they do or do not take into account the construction of natures as well. Absolute relativism presupposes cultures that are separate and incommensurable and cannot be ordered in any hierarchy; there is no use talking about it, since it brackets off Nature. As for cultural relativism, which is more subtle, Nature comes into play, but in order to exist it does not presuppose any scientific work, any society, any construction, any mobilization, any network. It is Nature revisited and corrected by epistemology, for which scientific practice still remains off camera, *hors champ*. Within this tradition, the cultures are thus distributed as so many more or less accurate viewpoints on that unique Nature. Certain societies see it 'as through a glass darkly', others see it through thick fog, still others under clear skies. Rationalists will insist on the common aspects of all these viewpoints; relativists will insist on the irresistible distortion that social structures impose on all perception. The former will be undone if it can be shown that cultures do not superimpose their categories; the latter will lose ground if it can be proved that the categories are superimposed (Hollis and Lukes, 1982; Wilson, 1970).

In practice, however, as soon as Nature comes into play without being attached to a particular culture, a third model is always secretly used : a



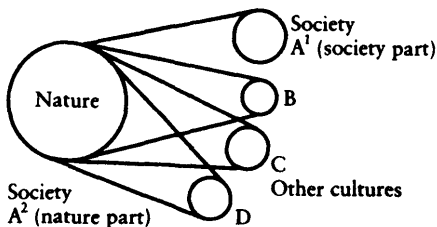
ABSOLUTE RELATIVISM

Culture without hierarchy and without contacts, all incommensurable; Nature is bracketed



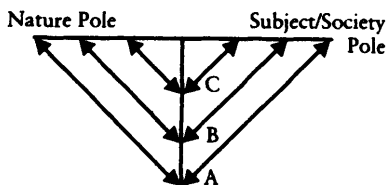
CULTURAL RELATIVISM

Nature is present but outside cultures; cultures all have a more or less precise point of view toward Nature



PARTICULAR UNIVERSALISM

One of the cultures (A) has a privileged access to Nature which sets it apart from the others



SYMMETRICAL ANTHROPOLOGY

All the collectives similarly constitute natures and cultures; only the scale of the mobilization varies

Figure 4.4 Relativism and universalism

type of universalism that I would call 'particular'. One society – and it is always the Western one – defines the general framework of Nature with respect to which the others are situated. This is Lévi-Strauss's solution: he distinguishes Western society, which has a specific interpretation of Nature, from that Nature itself, miraculously known to our society. The first half of the argument allows for modest relativism (we are just one interpretation among others), but the second permits the surreptitious return of arrogant universalism – we remain absolutely different. In Lévi-Strauss's eyes, however, there is no contradiction between the two halves, precisely because our Constitution, and it alone, allows us to distinguish society A^1 , made up of humans, from society A^2 , composed of nonhumans but forever removed from the first one! The

contradiction stands out today only in the eyes of symmetrical anthropology. This latter model is the common stock of the other two, whatever the relativists (who never relativize anything but cultures) may say.

The relativists have never been convincing on the subject of the equality of cultures, since they limit their consideration precisely to cultures. And Nature? According to them, it is the same for all, since universal science defines it. In order to get out of this contradiction, they then either have to limit all peoples to a representation of the world by locking them up for ever in the prison of their own societies or, conversely, they have to reduce all scientific results to products of local and contingent social constructions in order to deny science any universality. But to imagine billions of people imprisoned in distorted views of the world since the beginning of time is as difficult as it is to imagine neutrinos and quasars, DNA and universal gravitation, as Texan, British or Burgundian social productions. The two responses are equally absurd, and that is why the great debates over relativism never lead anywhere. *It is as impossible to universalize nature as it is to reduce it to the narrow framework of cultural relativism alone.*

The solution appears along with the dissolution of the artifact of cultures. All natures-cultures are similar in that they simultaneously construct humans, divinities and nonhumans. None of them inhabits a world of signs or symbols arbitrarily imposed on an external Nature known to us alone. None of them – and especially not our own – lives in a world of things. All of them sort out what will bear signs and what will not. If there is one thing we all do, it is surely that we construct both our human collectives and the nonhumans that surround them. In constituting their collectives, some mobilize ancestors, lions, fixed stars, and the coagulated blood of sacrifice; in constructing ours, we mobilize genetics, zoology, cosmology and hæmatology. ‘But those are sciences!’ the moderns will exclaim, horrified at this confusion. ‘They have to escape the representations of society to the greatest possible extent!’ Yet the presence of the sciences does not suffice to break the symmetry; such is the discovery of comparative anthropology. From cultural relativism we move on to ‘natural’ relativism. The first led to absurdities; the second will allow us to fall back on common sense.

4.6 Sizeable Differences

Still, the problem of relativism has not been solved. Only the confusion resulting from the bracketing off of Nature has been provisionally eliminated. We now find ourselves confronting productions of natures-

cultures that I am calling collectives – as different, it should be recalled, from the society construed by sociologists – men-among-themselves – as they are from the Nature imagined by epistemologists – things-in-themselves. In the view of comparative anthropology these collectives are all alike, as I have said, in that they distribute both what will later, after stabilization, become elements of Nature and elements of the social world. No one has ever heard of a collective that did not mobilize heaven and earth in its composition, along with bodies and souls, property and law, gods and ancestors, powers and beliefs, beasts and fictional beings. . . . Such is the ancient anthropological matrix, the one we have never abandoned.

But this common matrix defines only the point of departure of comparative anthropology. All collectives are different from one another in the way they divide up beings, in the properties they attribute to them, in the mobilization they consider acceptable. These differences constitute countless small divides, and there is no longer a Great Divide to take one apart from all the others. Among these small divides, there is one that we are now capable of recognizing as such, one that has distinguished the official version of certain segments of certain collectives for three centuries. This is our Constitution, which attributes the role of nonhumans to one set of entities, the role of citizens to another, the function of an arbitrary and powerless God to a third and cuts off the work of mediation from that of purification. In itself this Constitution does not separate us significantly from others, since it is added to the long list of differential traits that define us in the eyes of comparative anthropology. Those traits could be transcribed as a set of entries in the huge data base of anthropology departments – which would then simply have to be rechristened ‘Human and Nonhuman Relations Area Files’!

In our distribution of variable-geometry entities, we are as different from the Achuar as they are from the Tapirapè or the Arapesh. No more so, and no less. Such a comparison, however, respects only the conjoined production of one nature-culture, which is only one aspect of collectives. It may satisfy our sense of justice, but in various ways it encounters the same difficulty as absolute relativism, since it immediately abolishes differences by rendering them all equally different. It does not allow us to account for that other aspect of what I have been pursuing since the beginning of this essay – the scope of the mobilization, a scope that issimultaneously the consequence of modernism and the cause of its demise.

This is because the principle of symmetry aims not only at establishing equality – which is only the way to set the scale at zero – but at registering differences – that is, in the final analysis, asymmetries – and at understanding the practical means that allow some collectives to

dominate others. Even though they might be similar in the principle of their co-production, collectives may differ in size. At the beginning of the weighing-in process, a nuclear power plant, or a hole in the ozone layer, or a map of the human genome, or a rubber-tyred metro train, or a satellite network, or a cluster of galaxies, weighs no more than a wood fire, or the sky that may fall on our heads, or a genealogy, or a cart, or spirits visible in the heavens, or a cosmogony. As I said above, this is not yet enough to break the symmetry. In each case these quasi-objects trace, with their hesitant trajectories, both forms of nature and forms of society. When, however, the weighing is complete, the first lot outlines an entirely different collective from the second. These new differences, measurable only because the scales have first been calibrated by the principle of symmetry, have to be recognized as well.

In other words, the differences are sizeable, but they are only of size. They are important (and the error of cultural relativism is that it ignores them), but they are not disproportionate (and the error of universalism is that it sets them up as a Great Divide). The collectives are all similar, except for their size, like the successive helixes of a single spiral. The fact that one of the collective needs ancestors and fixed stars while another one, more eccentric, needs genes and quasars, is explained by the dimensions of the collective to be held together. A much larger number of objects requires a much larger number of subjects. A much greater degree of subjectivity requires a much greater degree of objectivity. If you want Hobbes and his descendants, you have to take Boyle and his as well. If you want the Leviathan, you have to have the air pump too. This is the stance that makes it possible to respect the differences (the dimensions of the helixes do vary) while at the same time respecting the similarities (all collectives mix human and nonhuman entities together in the same way). Relativists, who strive to put all cultures on an equal footing by viewing all of them as equally arbitrary codings of a natural world whose production is unexplained, do not succeed in respecting the efforts collectives make to dominate one another. And universalists on the other hand, are incapable of understanding the deep fraternity of collectives, since they are obliged to offer access to Nature to Westerners alone, and to imprison all others in social categories from which they will escape only by becoming scientific, modern and Westernized.

Sciences and technologies are remarkable not because they are true or efficient – they gain these properties in addition, and for reasons entirely different from those the epistemologists provide (Latour, 1987) – but because they multiply the nonhumans enrolled in the manufacturing of collectives and because they make the community that we form with these beings a more intimate one. The extension of the spiral, the scope of the enlistments it will bring about, the ever-increasing lengths to which it

goes to recruit these beings, are what characterize the modern sciences, not some epistemological break that would cut them off for ever from their prescientific past. Modern knowledge and power are different not in that they would escape at last the tyranny of the social, but in that *they add many more hybrids in order to recompose the social link and extend its scale*. Not only the air pump but also microbes, electricity, atoms, stars, second-degree equations, automatons and robots, mills and pistons, the unconscious and neurotransmitters. At each turn in the spiral, a new translation of quasi-objects gives new impetus to the redefinition of the social body, of subjects and objects alike. Sciences and technologies, for 'Us', do not reflect society any more than Nature reflects social structures for 'Them'. No one is fiddling with mirrors. It is a matter of constructing collectives themselves on scales that grow larger and larger. There are indeed differences, but they are differences in size. There are no differences in nature – still less in culture.

4.7 Archimedes' coup d'état

What explains this new asymmetry which the principle of symmetry, generalized, allows us to detect? The relative size of collectives will be profoundly modified by the enlistment of a particular type of non-humans. To help us understand this variation in size, there is no more striking emblem than an impossible experiment recounted by Plutarch – Michel Authier has called it 'the canon of the savant' (Authier, 1989), and it is as striking as Boyle's air pump:

Archimedes, who was a kinsman and friend of King Hiero, wrote to him that with any given force it was possible to move any given weight; and emboldened, as we are told, by the strength of his demonstration, he declared that if there were another Earth, and he could go to it, he could move this one. Hiero was astonished and begged him to put his proposition into execution, and show him some great weight moved by a slight force. Archimedes therefore fixed upon a three-masted merchantman of the royal fleet, which had been dragged ashore by the great labours of many men, and after putting on board many passengers and the customary freight, he seated himself at a distance from her, and without any great effort, but quietly setting in motion with his hand a system of compound pulleys, drew her towards him smoothly and evenly, as though she were gliding through the water. Amazed at this, then, and comprehending the power of his art, the King persuaded Archimedes to prepare for him offensive and defensive engines to be used in every kind of siege warfare. (Plutarch, *Marcellus' Life*, xiv, 7–9, transl. Bernadotte Perrin)

Not only did Archimedes overturn power relations through the intermediary of the compound pulley, he also reversed political relations by offering the king a real mechanism for making one man physically stronger than a multitude. Up to that time, the Sovereign represented the masses whose spokesperson he was, but he had no greater strength as a result. Archimedes procured a different principle of composition for the Leviathan by transforming the relation of political representation into a relation of mechanical proportion. Without geometry and statics, the Sovereign had to reckon with social forces that infinitely overpowered him. But if you add the lever of technology to the play of political representation alone, then you can become stronger than the multitude; you can attack and defend yourself. It is not surprising that Hiero was 'amazed' at the power of technology (*sunnoésas tès tecnès tén dunamin*). It had not occurred to him, until then, to bring political power into relation with the compound pulley.

But Plutarch's lesson goes still further. This first moment through which Archimedes makes (physical) force commensurable with (political) force owing to the relation of proportion between large and small, between the reduced model and the life-size application, is coupled with a second, even more decisive moment:

And yet, Archimedes [after equipping Syracuse with war machines] possessed such a lofty spirit, so profound a soul, and such a wealth of scientific theory, that although his inventions had won for him a name and fame for superhuman sagacity, he would not consent to leave behind him any treatise on this subject, but regarding the work of an engineer and every art that ministers to the needs of life as ignoble and vulgar, he devoted his earnest efforts only to those studies the subtlety and charm of which are not affected by the claims of necessity. (Plutarch, xvii, 4-5)

Mathematical demonstrations remain incommensurable with lowly manual trades, vulgar politics, mere applications. Archimedes is divine, the power of mathematics is supernatural. All vestiges of composition, connection, alliance, liaison between the two moments are now effaced. Even treatises have to disappear without trace. The first moment produced an unknown hybrid thanks to which the weaker became the stronger through the alliance he established between political forms and the laws of proportion. The second moment purifies politics and science, the empire of men and the empyrean of mathematics, and renders them incomparable (Serres, 1989). The Archimedean point is to be sought not in the first moment, but in the conjunction of the two: how are we to undertake politics with new means rendered suddenly commensurable,

while rejecting any link between absolutely incommensurable activities? The balance sheet is doubly positive: Hiero defends Syracuse with the machines whose dimensions we know how to calculate through proportions, and the collective also grows proportionally; but the origin of this variation in scale, of this commensurability, disappears for ever, leaving the empyrean of mathematics as a resource of fresh forces, always available, never visible. Yes, science is indeed politics pursued by other means, means that are powerful only because they remain radically other (Latour, 1990b).

By learning of Archimedes' coup (or rather, Plutarch's) we identify the entry point of a new type of nonhumans into the very fabric of the collective. It is not a matter of trying to find out how geometry 'reflects' Hiero's interests, or how Syracusan society 'is constrained' by the laws of geometry. A new collective is constituted by enlisting geometry and denying that it has done so. Society cannot explain geometry, since it is a new geometry-based society that begins to defend the walls of Syracuse against Marcellus. Politics-based society is an artifact obtained by the elimination of walls and levers, pulleys and swords, just as the social context of seventeenth-century England could be obtained only by the preliminary exclusion of the air pump and the nascent science of physics. It is only when we remove the nonhumans churned up by the collective that the residue, which we call society, becomes incomprehensible, because its size, its durability and its solidity no longer have a cause. One might as well sustain the Leviathan with naked citizens and the social contract alone, without air pumps, sword, blade, invoices, computers, files and palaces (Callon and Latour, 1981; Latour, 1988c; Strum and Latour, 1987). The social link does not hold without the objects that the other branch of the Constitution permits us both to mobilize and to render forever incommensurable with the social world.

4.8 Absolute Relativism and Relativist Relativism

The question of relativism is not closed, however, even if we take into account simultaneously the profound likeness of natures-cultures – the old anthropological matrix – and the difference in size, the scope of the mobilization of these collectives. In fact, as I have indicated several times, size is related to the modern Constitution. It is precisely because the Constitution guarantees that quasi-objects will be absolutely and irreversibly transformed, either into objects of external nature or into subjects of society, that the mobilization of these quasi-objects can take on an unprecedented amplitude. Symmetrical anthropology thus has to

do justice to this peculiarity, without adding to it any epistemological break, any Great Metaphysical Divide, any difference between prelogical and logical societies, 'hot' ones and 'cold' ones, between an Archimedes who meddles in politics and a divine Archimedes with his head in the celestial Heavens of Ideas. The whole challenge of the exercise is to generate a maximum of differences by a minimum of means (Goody, 1977; Latour, 1990a).

Moderns do differ from premoderns by this single trait: they refuse to conceptualize quasi-objects as such. In their eyes, hybrids present the horror that must be avoided at all costs by a ceaseless, even maniacal purification. By itself, this difference in constitutional representation would not matter very much, since it would not suffice to set moderns apart from others. There are as many purification processes as there are collectives. But the machine for creating differences is triggered by the refusal to conceptualize quasi-objects, because this very refusal leads to the uncontrollable proliferation of a certain type of being: *the object, constructor of the social, expelled from the social world, attributed to a transcendent world that is, however, not divine – a world that produces, in contrast, a floating subject, bearer of law and morality*. Boyle's air pump, Pasteur's microbes, Archimedes' pulleys, are such objects. These new nonhumans possess miraculous properties because they are at one and the same time both social and asocial, producers of natures and constructors of subjects. They are the tricksters of comparative anthropology. Through this opening, sciences and technologies will emerge in society in such a mysterious way that this miracle will force Westerners to see themselves as completely different from others. The first miracle gives rise to a second (why don't the others do the same?), then a third (why are we so exceptional?). This feature generates a cascade of small differences that will be collected, summarized and amplified by the Great Divide, the great narrative of the West, set radically apart from all cultures.

Once this feature has been pinpointed, and thereby neutralized, relativism offers no more significant difficulties. Nothing keeps us from reopening the question of how to establish relationships among collectives by defining two relativisms that have hitherto been conflated. The first is absolute; the second is relative. The first locked cultures away in exoticism and strangeness, because it accepted the universalists' viewpoint while refusing to rally round it: if no common, unique and transcendental measuring instrument exists, then all languages are untranslatable, all intimate emotions incommunicable, all rites equally respectable, all paradigms incommensurable. There is no arguing about tastes or colours. Whereas universalists declare that this common

yardstick does exist, absolute relativists are delighted that there is no such thing. Their attitudes may differ, but both groups agree in asserting that the reference to some absolute yardstick is essential to their dispute.

This amounts to not taking the practice of relativism, or even the word relativism, very seriously. To establish relations; to render them commensurable; to regulate measuring instruments; to institute metrological chains; to draw up dictionaries of correspondences; to discuss the compatibility of norms and standards; to extend calibrated networks; to set up and negotiate valorimeters – these are some of the meanings of the word ‘relativism’ (Latour, 1988d). Absolute relativism, like its enemy brother rationalism, forgets that measuring instruments have to be set up. By ignoring the work of instrumentation, by conflating science with nature, one can no longer understand anything about the notion of commensurability itself. They neglect even more thoroughly the enormous efforts Westerners have made to ‘take the measure’ of other peoples, to ‘size them up’ by rendering them commensurable and by creating measuring standards that did not exist before – via military and scientific expeditions.

But if we are to understand this task of measuring, we need to reinforce the noun with the adjective ‘relativist’, which compensates for the noun’s apparent foolishness. Relativist relativism restores the compatibility that was assumed to have been lost. To be sure, relativist relativism has to abandon what constituted the common argument of the universalists as well as the earliest cultural relativists – that is, the word ‘absolute’. Instead of stopping midway, it continues to the end and rediscovers, in the form of work and montage, practice and controversy, conquest and domination, the process of establishing relations. A little relativism distances us from the universal; a lot brings us back, but it is a universal in networks that has no more mysterious properties.

The universalists defined a single hierarchy. The absolute relativists made all hierarchies equal. The relativist relativists, more modest but more empirical, point out what instruments and what chains serve to create asymmetries and equalities, hierarchies and differences (Callon, 1992). Worlds appear commensurable or incommensurable only to those who cling to measured measures. Yet all measures, in hard and soft science alike, are also measuring measures, and they construct a commensurability that did not exist before their own calibration. Nothing is, by itself, either reducible or irreducible to anything else. Never by itself, but always through the mediation of another. How can one claim that worlds are untranslatable, when translation is the very soul of the process of relating? How can one say that worlds are dispersed, when there are hundreds of institutions that never stop totalizing them? Anthropology itself – one discipline among many

others, one institution among many others – participates in the work of relating, of constructing catalogues and museums, of sending missions, expeditions and investigators, maps, questionnaires, and filing systems (Copans and Jamin, 1978; Fabian, 1983; Stocking, 1983, 1986). Ethnology is one of those measuring measures that resolves the question of relativism in practical terms by constructing a certain commensurability. If the question of relativism is insoluble, relativist relativism – or, to put it more elegantly, relationism – presents no difficulty in principle. If we cease to be completely modern, relationism will become one of the essential resources for relating the collectives that will no longer be targets for modernization. Relationism will serve as an organon for planetary negotiations over the relative universals that we are groping to construct.

4.9 Small Mistakes Concerning the Disenchantment of the World

We are indeed different from others, but we must not situate the differences where the now-closed question of relativism had located them. As collectives, we are all brothers. Except in the matter of dimension, which is itself caused by small differences in the distribution of entities, we can recognize a continuous gradient between premoderns and nonmoderns. Unfortunately, the difficulty of relativism does not arise only from the bracketing off of Nature. It stems also from the related belief that the modern world is truly disenchanting. It is not only out of arrogance that Westerners think they are radically different from others, it is also out of despair, and by way of self-punishment. They like to frighten themselves with their own destiny. Their voices quaver when they contrast Barbarians to Greeks, or the Centre to the Periphery, or when they celebrate the Death of God, or the Death of Man, the European *Krisis*, imperialism, anomie, or the end of the civilizations that we now know are mortal. Why do we get so much pleasure out of being so different not only from others but from our own past? What psychologist will be subtle enough to explain our morose delight in being in perpetual crisis and in putting an end to history? Why do we like to transform small differences in scale among collectives into huge dramas?

In order to bypass completely the modern pathos that prevents us from recognizing the fraternity of collectives, and thus to sort them more freely, comparative anthropology has to measure these effects of size with precision. Now the modern Constitution requires that the scaling effects of our collectives be confused with their causes, which the Constitution cannot indicate without ceasing to be operative. Rightly

astounded by the size of the effects, the moderns believe that they require prodigious causes. And as the only causes recognized by the Constitution appear miraculous because they are reversed, the moderns clearly have to imagine themselves as different from ordinary humanity. In their hands, the uprooted, acculturated, Americanized, scientized, technologized Westerner becomes a Spock-like mutant. Haven't we shed enough tears over the disenchantment of the world? Haven't we frightened ourselves enough with the poor European who is thrust into a cold soulless cosmos, wandering on an inert planet in a world devoid of meaning? Haven't we shivered enough before the spectacle of the mechanized proletariat who is subject to the absolute domination of a mechanized capitalism and a Kafkaesque bureaucracy, abandoned smack in the middle of language games, lost in cement and formica? Haven't we felt sorry enough for the consumer who leaves the driver's seat of his car only to move to the sofa in the TV room where he is manipulated by the powers of the media and the postindustrialized society?! How we do love to wear the hair shirt of the absurd, and what even greater pleasure we take in postmodern nonsense!

However, we have never abandoned the old anthropological matrix. We have never stopped building our collectives with raw materials made of poor humans and humble nonhumans. How could we be capable of disenchanting the world, when every day our laboratories and our factories populate the world with hundreds of hybrids stranger than those of the day before? Is Boyle's air pump any less strange than the Arapesh spirit houses (Tuzin, 1980)? Does it contribute any less to constructing seventeenth-century England? How could we be victims of reductionism, when each scientist multiplies new entities by the thousands in order to be reductionist for a few of them? How could we be rationalists, when we still don't see beyond the tip of our own noses? How could we be materialists, when every matter we invent possesses new properties that no single matter allows us to unify (Dagognet, 1989)? How could we be victims of a total technological system, when machines are made of subjects and never succeed in settling into more or less stable systems (Kidder, 1981; Latour, 1992a)? How could we be chilled by the cold breath of the sciences, when the sciences are hot and fragile, human and controversial, full of thinking reeds and of subjects who are themselves inhabited by things (Pickering, 1992)?

The error the moderns make about themselves is easy enough to understand, once symmetry has been reestablished and once both the work of purification and the work of translation have been taken into account. The moderns confused products with processes. They believed that the production of bureaucratic rationalization presupposed rational bureaucrats; that the production of universal science depended on

universalist scientists; that the production of effective technologies led to the effectiveness of engineers; that the production of abstraction was itself abstract; that the production of formalism was itself formal. We might just as well say that a refinery produces oil in a refined manner, or that a dairy produces butter in a butterly way! The words 'science', 'technology', 'organization', 'economy', 'abstraction', 'formalism', and 'universality' designate many real effects that we must indeed respect and for which we have to account. But in no case do they designate the causes of these same effects. These words are good nouns, but they make lousy adjectives and terrible adverbs. Science does not produce itself scientifically any more than technology produces itself technologically or economy economically. Scientists in the lab, Boyle's descendants, know this perfectly well, but as soon as they set out to reflect on what they do, they pronounce the words that sociologists and epistemologists, Hobbes's descendants, put in their mouths.

The paradox of the moderns (and the antimoderns) is that from the outset they have accepted massive cognitive or psychological explanations in order to explain equally massive effects, whereas in all other scientific domains they seek small causes for large effects. Reductionism has never been applied to the modern world, whereas it was supposed to have been applied to everything! Our own mythology consists in imagining ourselves as radically different, even before searching out small differences and small divides. However, as soon as the double Great Divide disappears, this mythology unravels as well. As soon as the work of mediation is taken into account simultaneously with the work of purification, ordinary humanity and ordinary inhumanity must come back in. To our great surprise, we then discover that we know very little about what causes sciences, technologies, organizations and economies. Open books on social science and epistemology, and you will see how they use the adjectives and adverbs 'abstract', 'rational', 'systematic', 'universal', 'scientific', 'organized', 'total', 'complex'. Look for the ones that try to explain the nouns 'abstraction', 'rationality', 'system', 'universal', 'science', 'organization', 'totality', 'complexity', without ever using the corresponding adjectives, or the equivalent adverbs, and you will be lucky to find a dozen. Paradoxically, we know more about the Achuar, the Arapesh or the Alladians than we know about ourselves. As long as small local causes lead to local differences, we are able to follow them. Why would we no longer be capable of following the thousand paths, with their strange topology, that lead from the local to the global and return to the local? Is anthropology forever condemned to be reduced to territories, unable to follow networks?

4.10 Even a Longer Network Remains Local at All Points

To take the precise measure of our differences without reducing them as relativism used to do, and without exaggerating them as modernizers tend to do, let us say that the moderns have simply invented longer networks by enlisting a certain type of nonhumans. The network-lengthening process had been interrupted in earlier periods, because it would have threatened the maintenance of territories (Deleuze and Guattari, [1972] 1983). But by multiplying the hybrids, half object and half subject, that we call machines and facts, collectives have changed their topography. Since this enlistment of new beings had enormous scaling effects by causing relations to vary from local to global, but we continue to think about them in terms of the old opposite categories of universal and contingent, we tend to transform the lengthened networks of Westerners into systematic and global totalities. To dispel this mystery, it suffices to follow the unaccustomed paths that allow this variation in scale, and to look at networks of facts and laws rather as one looks at gas lines or sewage pipes.

The secular explanation of the effects of size proper to the West is easy to grasp in technological networks (Bijker and others, 1987). If relativism had been applied there first, it would have had no trouble understanding this relative universal that is its greatest claim to glory. Is a railroad local or global? Neither. It is local at all points, since you always find sleepers and railroad workers, and you have stations and automatic ticket machines scattered along the way. Yet it is global, since it takes you from Madrid to Berlin or from Brest to Vladivostok. However, it is not universal enough to be able to take you just anywhere. It is impossible to reach the little Auvergnat village of Malpy by train, or the little Staffordshire village of Market Drayton. There are continuous paths that lead from the local to the global, from the circumstantial to the universal, from the contingent to the necessary, only so long as the branch lines are paid for.

The railroad model can be extended to all the technological networks that we encounter daily. It may be that the telephone has spread everywhere, but we still know that we can die right next to a phone line if we aren't plugged into an outlet and a receiver. The sewer system may be comprehensive, but nothing guarantees that the tissue I drop on my bedroom floor will end up there. Electromagnetic waves may be everywhere, but I still have to have an antenna, a subscription and a decoder if I am to get CNN (Cable News Network). Thus, in the case of technological networks, we have no difficulty reconciling their local aspect and their global dimension. They are composed of particular places, aligned by a series of branchings that cross other places and

require other branchings in order to spread. Between the lines of the network there is, strictly speaking, nothing at all: no train, no telephone, no intake pipe, no television set. Technological networks, as the name indicates, are nets thrown over spaces, and they retain only a few scattered elements of those spaces. They are connected lines, not surfaces. They are by no means comprehensive, global or systematic, even though they embrace surfaces without covering them, and extend a very long way. The work of relative universalization remains an easy-to-grasp category that relationism can follow in a thoroughgoing way. Every branching, every alignment, every connection can be documented, since it generates tracers, and every one of them has a cost. It can be extended almost everywhere; it can be spread out in time as well as in space, yet without filling time and space (Stengers, 1983).

For ideas, knowledge, laws, and skills, however, the model of the technological network seems inadequate to those who are highly impressed by the effects of diffusion, those who believe what epistemology says about the sciences. The tracers become more difficult to follow, their cost is no longer so well documented, and one risks losing sight of the bumpy path that leads from the local to the global. So the ancient philosophical category of the universal radically different from the contingent circumstances is applied to them.

It seems, then, that ideas and knowledge can spread everywhere without cost. Certain ideas appear to be local, others global. Universal gravitation appears to be active and present everywhere; we are convinced of it. Boyle's laws, Mariotte's laws, Planck's constants legislate everywhere and are constant everywhere. As for Pythagoras' theorem and transfinite numbers, they seem so universal that they may even escape this world here below to rejoin the works of the divine Archimedes. It is here that the old relativism and its enemy brother rationalism begin to show their faces, since it is in relation to these universals, and only these, that the humble Achuar or the poor Arapesh or the unfortunate Burgundians appear desperately contingent and arbitrary, forever imprisoned within the narrow confines of their regional peculiarities and their local knowledge (Geertz, 1971). If we had had only the world-economies of the Venetian, Genoan or American merchants, if we had had only telephones and television, railroads and sewers, Western domination would never have appeared as anything but the provisional and fragile extension of some frail and tenuous networks. But there is science, which always renews and totalizes and fills the gaping holes left by the networks in order to turn them into sleek, unified surfaces that are absolutely universal. Only the idea that we have had of science up to now rendered absolute a dominion that might have remained relative. All the subtle pathways leading continuously from

circumstances to universals have been broken off by the epistemologists, and we have found ourselves with pitiful contingencies on one side and necessary Laws on the other – without, of course, being able to conceptualize their relations.

Now, as concepts, 'local' and 'global' work well for surfaces and geometry, but very badly for networks and topology. The belief in rationalization is a simple category mistake. One branch of mathematics has been confused with another! The itinerary of ideas, knowledge or facts would have been understood with no trouble if we had treated them like technological networks (Schaffer, 1988, 1991; Shapin and Schaffer, 1985; Warwick, 1992). Fortunately, the assimilation is made easier not only by the end of epistemology but also by the end of the Constitution, and by the technological transformations that it authorizes without including them. The itinerary of facts becomes as easy to follow as that of railways or telephones, thanks to the materialization of the spirit that thinking machines and computers allow. When information is measured in bytes and bauds, when one subscribes to a data bank, when one can plug into (or unplug from) a network of distributed intelligence, it is harder to go on picturing universal thought as a spirit hovering over the waters (Lévy, 1990). Reason today has more in common with a cable television network than with Platonic ideas. It thus becomes much less difficult than it was in the past to see our laws and our constants, our demonstrations and our theorems, as stabilized objects that circulate widely, to be sure, but remain within well-laid-out metrological networks from which they are incapable of exiting – except through branchings, subscriptions and decodings.

To speak in popular terms about a subject that has been dealt with largely in learned discourse, we might compare scientific facts to frozen fish: the cold chain that keeps them fresh must not be interrupted, however briefly. The universal in networks produces the same effects as the absolute universal, but it no longer has the same fantastic causes. It is possible to verify gravitation 'everywhere', but at the price of the relative extension of the networks for measuring and interpreting. The air's spring can be verified everywhere, provided that one hooks up to an air pump that spreads little by little throughout Europe owing to the multiple transformations of the experimenters (Shapin and Schaffer, 1985). Try to verify the tiniest fact, the most trivial law, the humblest constant, without subscribing to the multiple metrological networks, to laboratories and instruments. The Pythagorean theorem and Planck's constant spread into schools and rockets, machines and instruments, but they do not exit from their worlds any more than the Achuar leave their villages. The former constitute lengthened networks, the latter territories or loops: the difference is important and must be respected, but let us not

use it to justify transforming the former into universals and the latter into localities. To be sure, the West may believe that universal gravitation is universal even in the absence of any instrument, any calculation, any decoding, any laboratory, just as the Bimin-Kuskumin of New Guinea may believe that they comprise all of humanity, but these are respectable beliefs that comparative anthropology is no longer obliged to share.

4.11 The Leviathan is a Skein of Networks

Just as the moderns have been unable to keep from exaggerating the universality of their sciences (by pulling away the subtle network of practices, instruments and institutions that paved the way from contingencies to necessities), symmetrically, they have been unable to do anything but exaggerate the size and solidity of their own societies. They thought themselves revolutionary because they invented the universality of sciences that were torn out of local peculiarities for all time, and because they invented gigantic rationalized organizations that broke with all the local loyalties of the past. In so doing, they missed the originality of their own inventions twice over: a new topology that makes it possible to go almost everywhere, yet without occupying anything except narrow lines of force and a continuous hybridization between socialized objects and societies rendered more durable through the proliferation of nonhumans. The moderns got excited about virtues they are incapable of possessing (rationalization), but they likewise flagellated themselves for sins they are quite incapable of committing (rationalization again)! In both cases, they mistook length or connection for differences in level. They thought there really were such things as people, ideas, situations that were local and organizations, laws, rules that were global. They believed that there were contexts and other situations that enjoyed the mysterious property of being 'decontextualized' or 'delocalized'. And indeed, if the intermediary network of quasi-objects is not reconstituted, it becomes just as difficult to grasp society as scientific truth, and for the same reasons. The mediators that have been effaced had contained everything, while the extremes, once isolated, are no longer anything at all.

Without the countless objects that ensured their durability as well as their solidity, the traditional objects of social theory – empire, classes, professions, organizations, States – become so many mysteries (Law, 1986, 1992; Law and Fyfe, 1988). What, for example, is the size of IBM, or the Red Army, or the French Ministry of Education, or the world market? To be sure, these are all actors of great size, since they mobilize hundreds of thousands or even millions of agents. Their amplitude must

therefore stem from causes that absolutely surpass the small collectives of the past. However, if we wander about inside IBM, if we follow the chains of command of the Red Army, if we inquire in the corridors of the Ministry of Education, if we study the process of selling and buying a bar of soap, we never leave the local level. We are always in interaction with four or five people; the building superintendent always has his territory well staked out; the directors' conversations sound just like those of the employees; as for the salespeople, they go on and on giving change and filling out their invoices. Could the macro-actors be made up of micro-actors (Garfinkel, 1967)? Could IBM be made up of a series of local interactions? The Red Army of an aggregate of conversations in the mess hall? The Ministry of Education of a mountain of pieces of paper? The world market of a host of local exchanges and arrangements?

We rediscover the same problem as that of trains, telephones, or universal constants. How can one be connected without being either local or global? Modern sociologists and economists have a hard time posing the problem. Either they remain at the 'micro' level, that of interpersonal contacts, or they move abruptly to the 'macro' level and no longer deal with anything, they believe, but decontextualized and depersonalized rationalities. The myth of the soulless, agentless bureaucracy, like that of the pure and perfect marketplace, offers the mirror-image of the myth of universal scientific laws. Instead of the continual progression of an inquiry, the moderns have imposed an ontological difference as radical as the sixteenth-century differentiation between the supralunar worlds that knew neither change nor uncertainty. (The same physicists had a good laugh with Galileo at that ontological distinction – but then they rushed to reestablish it in order to protect the laws of physics from social corruption!)

Yet there is an Ariadne's thread that would allow us to pass with continuity from the local to the global, from the human to the nonhuman. It is the thread of networks of practices and instruments, of documents and translations. An organization, a market, an institution, are not supralunar objects made of a different matter from our poor local sublunar relations (Cambrosio *et al.* 1990). The only difference stems from the fact that they are made up of hybrids and have to mobilize a great number of objects for their description. The capitalism of Karl Marx or Fernand Braudel is not the total capitalism of the Marxists (Braudel, 1985). It is a skein of somewhat longer networks that rather inadequately embrace a world on the basis of points that become centres of profit and calculation. In following it step by step, one never crosses the mysterious *limes* that should divide the local from the global. The organization of American big business described by Alfred Chandler (Chandler, 1977, 1990) is not the Organization described by Kafka. It is

a braid of networks materialized in order slips and flow charts, local procedures and special arrangements, which permit it to spread to an entire continent so long as it does not cover that continent. One can follow the growth of an organization in its entirety without ever changing levels and without ever discovering 'decontextualized' rationality. The very size of a totalitarian State is obtained only by the construction of a network of statistics and calculations, of offices and inquiries, which in no way corresponds to the fantastic topography of the total State (Desrosières, 1990). The scientifico-technological empire of Lord Kelvin described by Norton Wise (Smith and Wise, 1989), or the electricity market as described by Tom Hughes (Hughes, 1983), never require us to leave the particularities of the laboratory, the meeting room or the control centre. Yet these 'networks of power' and these 'lines of force' do extend across the entire world. The markets described by the Economy of conventions are indeed regulated and global, even though none of the causes of that regulation and that aggregation is itself either global or total. The aggregates are not made from some substance different from what they are aggregating (Thévenot, 1989, 1990). No visible or invisible hand suddenly descends to bring order to dispersed and chaotic individual atoms. The two extremes, local and global, are much less interesting than the intermediary arrangements that we are calling networks.

4.12 A Perverse Taste for the Margins

Just as the adjectives 'natural' and 'social' designate representations of collectives that are neither natural nor social in themselves, so the words 'local' and 'global' offer points of view on networks that are by nature neither local nor global, but are more or less long and more or less connected. What I have called modern exoticism consists in taking these two pairs of oppositions as what defines our world and what would set us apart from all others. So four different regions are thus created. The natural and the social are not composed of the same ingredients; the global and the local are intrinsically distinct. Yet we know nothing about the social that is not defined by what we think we know about the natural, and vice versa. Similarly, we define the local only by contrast with what we think we have to attribute to the global, and vice versa. So the strength of the error that the modern world makes about itself is now understandable, when the two couples of opposition are paired: in the middle there is nothing thinkable – no collective, no network, no mediation; all conceptual resources are accumulated at the four extremes. We poor subject-objects, we humble societies-natures, we

modest locals-globals, are literally quartered among ontological regions that define each other mutually but no longer resemble our practices.

This quartering makes it possible to unfurl the tragedy of modern man considering himself as absolutely and irremediably different from all other humanities and all other naturalities. But such a tragedy is not inevitable, if we recall that these four terms are representations without any direct relation to the collectives and the networks that give them meaning. In the middle, where nothing is supposed to be happening, there is almost everything. And at the extremes – which according to the moderns house the origin of all forces, Nature and Society, Universality and Locality – there is nothing except purified agencies that serve as constitutional guarantees for the whole.

The tragedy becomes more painful still when the antimoderns, taking what the moderns say about themselves at face value, want to save something from what looks to them like a shipwreck. The antimoderns firmly believe that the West has rationalized and disenchanted the world, that it has truly peopled the social with cold and rational monsters which saturate all of space, that it has definitively transformed the premodern cosmos into a mechanical interaction of pure matters. But instead of seeing these processes as the modernizers do – as glorious, albeit painful, conquests – the antimoderns see the situation as an unparalleled catastrophe. Except for the plus or minus sign, moderns and antimoderns share all the same convictions. The postmoderns, always perverse, accept the idea that the situation is indeed catastrophic, but they maintain that it is to be acclaimed rather than bemoaned! They claim weakness as their ultimate virtue, as one of them affirms in his own inimitable style: ‘The *Verminderung* of metaphysics is exercised as *Verminderung* of the *Ge-Stell*’ (Vatimo, 1987, p. 184).

What do the antimoderns do, then, when they are confronted with this shipwreck? They take on the courageous task of saving what can be saved: souls, minds, emotions, interpersonal relations, the symbolic dimension, human warmth, local specificities, hermeneutics, the margins and the peripheries. An admirable mission, but one that would be more admirable still if all those sacred vessels were actually threatened. Now where does the threat come from? Surely not from collectives incapable of abandoning their fragile and narrow networks populated with souls and objects. Surely not from sciences whose relative universality has to be purchased, day after day, by branchings and calibrations, instruments and alignments. Surely not from societies whose size varies only so long as material entities characterized by variable ontology proliferate. Where does it come from, then? Well, in part from the antimoderns themselves, and from their accomplices the moderns, who frighten each other and add gigantic causes to the effects of size. ‘You are disenchanting the

world; I shall maintain the rights of the spirit!’ ‘You want to maintain the spirit? Then we shall materialize it!’ ‘Reductionists!’ ‘Spiritualists!’ The more the antireductionists, the romantics, the spiritualists seek to save subjects, the more the reductionists, the scientificists, the materialists imagine that they possess objects. The more the latter boast, the more they frighten the former; the wilder the former become, the more the latter believe that they themselves are indeed terrifying. Are not most ethicists busy with those two opposite but symmetrical tasks: defending the purity of science and rationality from the polluting influence of passions and interests; defending the unique values and rights of human subjects against the domination of scientific and technical objectivity?

The defence of marginality presupposes the existence of a totalitarian centre. But if the centre and its totality are illusions, acclaim for the margins is somewhat ridiculous. It is fine to want to defend the claims of the suffering body and human warmth against the cold universality of scientific laws. But if universality stems from a series of places in which warm flesh-and-blood bodies are suffering everywhere, is not this defence grotesque? Protecting human beings from the domination of machines and technocrats is a laudable enterprise, but if the machines are full of human beings who find their salvation there, such a protection is merely absurd (Ellul, 1967). It is admirable to demonstrate that the strength of the spirit transcends the laws of mechanical nature, but this programme is idiotic if matter is not at all material and machines are not at all mechanical. It is admirable to seek to save Being, with a cry of desperation, at the very moment when technological *Ge-Stell* seems to dominate everything, because ‘where danger is, grows the saving power also’. But it is rather perverse to seek to profit brazenly from a crisis that has not yet commenced!

Look for the origins of the modern myths, and you will almost always find them among those who claim to be countering modernism with the impenetrable barrier of the spirit, of emotion, the subject, or the margins. In the effort to offer a supplement of soul to the modern world, the one it has is taken away – the one it had, the one it was quite incapable of losing. That subtraction and that addition are the two operations that allow the moderns and the antimoderns to frighten each other by agreeing on the essential point: we are absolutely different from the others, and we have broken radically with our own past. Now sciences and technologies, organizations and bureaucracies are the only proofs always offered by moderns and antimoderns of that unparalleled catastrophe, and it is precisely through them that science studies can demonstrate the permanence of the old anthropological matrix best and most directly. To be sure, the innovation of lengthened networks is important, but it is hardly a reason to make such a great fuss.

4.13 Avoid Adding New Crimes to Old

It is quite difficult, however, to soothe the modern sense of dereliction, because its starting point is a sentiment that is respectable in itself: the awareness of having committed irreparable crimes against the rest of the natural and cultural worlds, as well as crimes against the self whose scope and intentions seem indeed without precedent. How can moderns be restored to ordinary humanity and inhumanity without being too hastily absolved of the crimes that they are right to seek to expiate? How can we claim – correctly – that our crimes are frightful, but that they remain ordinary; that our virtues are great, but that they too are quite ordinary?

Our misdeeds can be compared to our access to Nature: we must not exaggerate their causes even as we measure their effects, for that exaggeration itself would be the cause of greater crimes. Every totalization, even if it is critical, helps totalitarianism. We need not add total domination to real domination. Let us not add power to force. We need not grant total imperialism to real imperialism. We need not add absolute deterritorialization to capitalism, which is also quite real enough (Deleuze and Guattari, [1972] 1983). Similarly, we do not need to credit scientific truth and technological efficacy with transcendence, also total, and rationality, also absolute. With misdeeds as with domination, with capitalisms as with sciences, what we need to understand is the ordinary dimension: the small causes and their large effects (Arendt, 1963; Mayer, 1988).

Demonizing may be more satisfying for us because we still remain exceptional even in evil; we remain cut off from all others and from our own past, modern at least for the worst after thinking we were modern for the best. But totalization participates, in devious ways, in what it claims to abolish. It renders its practitioners powerless in the face of the enemy, whom it endows with fantastic properties. A system that is total and sleek does not get divided up. A transcendental and homogeneous nature does not get recombined. A totally systematic technological system cannot be reshuffled by anyone. A Kafkaesque society cannot be renegotiated. A ‘deterritorializing’ and absolutely schizophrenic capitalism will never be redistributed by anyone. A West radically cut off from other cultures-natures is not open to discussion. Cultures imprisoned for ever in arbitrary, complete and consistent representations cannot be evaluated. A world that has totally forgotten Being will be saved by no one. A past from which we are forever separated by radical epistemological breaks cannot be sorted out again by anyone at all.

All these supplements of totality are attributed by their critics to actors who did not ask for them. Take some small business-owner hesitatingly

going after a few market shares, some conqueror trembling with fever, some poor scientist tinkering in his lab, a lowly engineer piecing together a few more or less favourable relationships of force, some stuttering and fearful politician; turn the critics loose on them, and what do you get? Capitalism, imperialism, science, technology, domination – all equally absolute, systematic, totalitarian. In the first scenario, the actors were trembling; in the second, they are not. The actors in the first scenario could be defeated; in the second, they no longer can. In the first scenario, the actors were still quite close to the modest work of fragile and modifiable mediations; now they are purified, and they are all equally formidable.

What is to be done, then, with such sleek, filled-in surfaces, with such absolute totalities? Turn them inside out all at once, of course; subvert them, revolutionize them – such was the strategy of those modernists *par excellence*, the Marxists. Oh, what a lovely paradox! By means of the critical spirit, the moderns have invented at one and the same time the total system, the total revolution to put an end to the system, and the equally total failure to carry out that revolution – a failure that leaves them in total postmodern despair! Isn't this the cause of many of the crimes with which we reproach ourselves? By considering the Constitution instead of the work of translation, the critics have imagined that we were incapable of tinkering, reshuffling, crossbreeding and sorting. On the basis of the fragile heterogeneous networks that collectives have always formed, the critics have elaborated homogeneous totalities that could not be touched unless they were totally revolutionized. And because this subversion was impossible, but they tried it anyway, they have gone from one crime to another. How could the totalizers' '*Noli me tangere*' still be passed off as a proof of morality? Might the belief in a radical and total modernity then lead to immorality?

Perhaps it would be less unjust to speak of a generational effect. We were born after the war, with the black camps and then the red camps behind us, with famines below us, the nuclear apocalypse over our heads, and the global destruction of the planet ahead of us. It is indeed difficult for us to deny the effects of scale, but it is still more difficult to believe unhesitatingly in the incomparable virtues of the political, medical, scientific or economic revolutions. Yet we were born amid sciences, we have known only peace and prosperity, and we love – should we admit it? – the technologies and consumer objects that the philosophers and moralists of earlier generations advise us to abhor. For us, technologies are not new, they are not modern in the banal sense of the word, since they have always constituted our world. More than earlier generations, ours has digested, integrated, and perhaps socialized them. Because we

are the first who believe neither in the virtues nor in the dangers of science and technology, but share their vices and virtues without seeing either heaven or hell in them, it is perhaps easier for us to look for their causes without appealing to the white man's burden, or the fatality of capitalism, or the destiny of Europe, or the history of Being, or universal rationality. Perhaps it is easier today to give up the belief in our own strangeness. We are not exotic but ordinary. As a result, the others are not exotic either. They are like us, they have never stopped being our brethren. Let us not add to the crime that of believing that we are radically different to all the others.

4.14 Transcendences Abound

If we are no longer entirely modern, and if we are not premodern either, then on what basis are we going to establish the comparison of collectives? As we now know, we have to add the unofficial work of mediation to the official Constitution. When we compared the Constitution to the cultures described by the asymmetrical anthropology of the past, we ended up only with relativism and an impossible modernization. If on the contrary, we compare the translation work of collectives, we make symmetrical anthropology possible, and we dispel the false problems of absolute relativism. But we also deprive ourselves of the resources developed by the moderns: the Social, Nature, Discourse – not to mention the crossed-out God. This is the ultimate difficulty of relativism: now that comparison has become possible, in what common space do all collectives, producers of natures and societies, find themselves equally immersed?

Are they in nature? Certainly not, since sleek, transcendent, external nature is the relative and belated consequence of collective production. Are they in society? Not there either, since society is only the symmetrical artifact of nature, what is left when all objects are removed, and the mysterious transcendence of the Leviathan is produced. Are they in language, then? Impossible, since discourse is another artifact that has meaning only when the external reality of the referent and the social context are both bracketed off. Are they in God? That is not very probable, for the metaphysical entity that bears this name merely occupies the place of a remote referee so as to maintain as much distance as possible between two symmetrical entities, Nature and Society. Are they in Being? That is even less likely since, through an astonishing paradox, the thought of Being has become precisely a residue, what is left over after every science, every technology, every society, every history,

every language, every theology, has been abandoned to the pure expansionism of beings. Naturalization, socialization, discursivization, divinization, ontologization – all these ‘-izations’ are equally implausible. None of them forms a common basis on which collectives, thus rendered comparable, might repose. No, we do not fall from Nature into the Social, from the Social into Discourse, from Discourse into God, from God into Being. Those agencies had a constitutional role to play only so long as they remained distinct. No one of them can cover, fill, subsume the others; no one of them can serve to describe the work of mediation and translation.

Where are we, then? Where do we land? As long as we keep asking that question, we are unmistakably in the modern world, obsessed with the construction of one immanence [*immanere*: to reside in] or the deconstruction of another. We still remain – to use the old word – within metaphysics. Now by traversing these networks, we do not come to rest in anything particularly homogeneous. We remain, rather, within an infra-physics. Are we immanent, then, one force among others, texts among other texts, one society among other societies, being among beings?

Not that either, for if, instead of attaching poor phenomena to the solid hooks of Nature and Society, we let mediators produce natures and societies, we reverse the direction of the modernizing transcendences. Natures and societies become the relative products of history. However, we do not fall into immanence alone, since networks are immersed in nothing. We do not need a mysterious ether for them to propagate themselves. We do not need to fill in blanks. It is the conception of the terms ‘transcendence’ and ‘immanence’ that ends up being modified by the moderns’ return to nonmodernity. Who told us that transcendence had to have a contrary? We have never abandoned transcendence – that is, the maintenance in presence by the mediation of a pass.

Moderns were always struck by the diffuse aspect of active or spiritual forces in other so-called premodern cultures. Nowhere were pure matters, pure mechanical forces, put into play. Spirits and agents, gods and ancestors, were blended in at every point. In contrast, from the moderns’ viewpoint the modern world appeared disenchanting, drained of its mysteries, dominated by the sleek forces of pure immanence on which we humans alone imposed some symbolic dimension and beyond which there existed, perhaps, the transcendence of the crossed-out God. Now if there is no immanence, if there are only networks, agents, actants, we cannot be disenchanting. Humans are not the ones who arbitrarily add the ‘symbolic dimension’ to pure material forces. These forces are as transcendent, active, agitated, spiritual, as we are. Nature is no more immediately accessible than society or the crossed-out God. Instead of

the subtle play of the moderns among three entities each of which was at once transcendent and immanent, we get a single proliferation of transcendences. A polemical term invented to counter the supposed invasion of immanence, the word has to change meaning if there is no longer an opposite term.

I call this transcendence that lacks a contrary 'delegation'. The utterance, or the delegation, or the sending of a message or a messenger, makes it possible to remain in presence – that is, to exist. When we abandon the modern world, we do not fall upon someone or something, we do not land on an essence, but on a process, on a movement, a passage – literally a pass, in the sense of this term as used in ball games. We start from a continuous and hazardous existence – continuous because it is hazardous – and not from an essence; we start from a presenting, and not from permanence. We start from the *vinculum* itself, from passages and relations, not accepting as a starting point any being that does not emerge from this relation that is at once collective, real and discursive. We do not start from human beings, those latecomers, nor from language, a more recent arrival still. The world of meaning and the world of being are one and the same world, that of translation, substitution, delegation, passing. We shall say that any other definition of essence is 'devoid of meaning'; in fact, it is devoid of the means to remain in presence, to last. All durability, all solidity, all permanence will have to be paid for by its mediators. It is this exploration of a transcendence without a contrary that makes our world so very unmodern, with all those nuncios, mediators, delegates, fetishes, machines, figurines, instruments, representatives, angels, lieutenants, spokespersons and cherubim. What sort of world is it that obliges us to take into account, at the same time and in the same breath, the nature of things, technologies, sciences, fictional beings, religions large and small, politics, jurisdictions, economies and unconsciousnesses? Our own, of course. That world ceased to be modern when we replaced all essences with the mediators, delegates and translators that gave them meaning. That is why we do not yet recognize it. It has taken on an ancient aspect, with all those delegates, angels and lieutenants. Yet it does not resemble the cultures studied by ethnologists, either, for Western ethnologists had never undertaken the symmetrical work of bringing delegates, mediators and translators back home, into their own community. Anthropology had been built on the basis of science, or on the basis of society, or on the basis of language; it always alternated between universalism and cultural relativism, and in the end it may have taught us as little about 'Them' as about 'Us'.