the importance of bruno latour for philosophy

Few contemporary thinkers have met with a stranger fate than Bruno Latour. In certain portions of the academic world, he is a recognised superstar. His actor-network theory has inspired hundreds of works by enthusiastic followers in sociology, anthropology, science studies, and even the fine arts. He draws large crowds during visits to the world's most prestigious universities, and remains fully in his prime, producing innovative books and essays with each passing year. Nonetheless, Latour describes himself primarily as a philosopher, even a metaphysician. And here is the great paradox—for his impact among philosophers has so far been minimal. In the 'continental' circles in which I travel, Latour is seldom read indeed, I often find myself in the strange position of introducing his name for the first time to philosophers otherwise widely read in contemporary French thought. The recent shift in momentum from Derrida and Foucault to Deleuze and Badiou has done little to change this situation, since Latour's conceptual arsenal is as foreign to one pair as to the other. Even ambitious young philosophers who hunger for Latour's brand of relational ontology often need repeated encouragement to read his books seriously, having failed to find them on their own. Initially I was in the same position myself, discovering Latour's works only through the chance recommendation of an acquaintance, and disturbingly late in my education.

How can this happen? How can a genuinely famous and perfectly respectable international author, one who justly regards himself as a full-blown philosopher, and who lectures at Harvard, Stanford and the London School of Economics, remain almost invisible to academic philosophy? And on those rare occasions when he is read seriously, how can he be misread so often as a 'social constructionist' despite his explicit denial of a raw reality shaped by

arbitrary social factors? In my view, the answer lies in the stale joint consensus of a philosophical world still divided between analytic and continental schools. The recurrent bridge-building efforts between these schools are perhaps a waste of time, since both are always already bridged by their unspoken allegiance to Kant's so-called Copernican Revolution, the major event of modern philosophy. With his critical turn away from the world toward the conditions of possibility of human access to the world. Kant enslaved philosophy to a mighty central rift between human awareness and whatever may or may not lie outside it. Philosophy is reduced to increasingly sophisticated manoeuvers to address this single gap, even if only to explain it away as meaningless or illusory. A situation has resulted in which language is regarded as a central philosophical problem, but not the relation between tires and concrete. Perception is an accepted topic for philosophers; the private career of viruses and ozone holes is not. This, perhaps, is why Bruno Latour is still ignored by philosophers. With all the freshness of an outsider, and with just as much daring as his heroes William James and Alfred North Whitehead, Latour flatly rejects the single unique correlation between humans and world that abandons non-human objects to the calculating supervision of natural science

To change this situation, it is academic philosophy that will need to make adjustments, not Latour himself, since he has done his work with all requisite precision and imagination. My purpose in this article is to 'cry wolf'—but this time, there really is a wolf, and his lack of sheep's clothing merely proves that contemporary philosophy has forgotten what wolves look like. These pages are an essay on behalf of the wolf. They are written without a shred of sympathy for the shepherds of being (or shepherds of language, texts and power) whose flocks Latour has been raiding with impunity since at least 1984. In that year, he published his landmark study of Pasteur, followed discreetly by an aphoristic treatise of philosophy entitled Irreductions. These works also appeared together in English in 1988 under the joint title The Pasteurization of France.² It is interesting to wonder what might have happened if the golden era of deconstruction in the Anglophone world had been shadowed all the while by a rival school of irreduction, led by Latour himself. Accidents do play a role in intellectual history, and though it is tempting to think that philosophy simply might not have been ready for Latour's refreshing vision until now, I tend to believe that three or four well-placed advocates in the early 1990s might have been enough to establish his permanent reputation among philosophers. Since almost no one has attempted to treat Latour as a metaphysician so far, I will undertake the task myself. In a work presently entitled School X, 3 I will try to show that Latour belongs at the center of an unrecognised third strand in contemporary philosophy. The present article is limited to a reflection on Irreductions, that sparkling halfbook that Latour himself regards as the key to understanding his philosophy. The four central concepts of this work can be summarised as follows:

- 1. Actants. There is no difference between hard kernels of objective reality and wispy fumes of arbitrary social force. Everything that exists must be regarded as an actant. Metaphysically speaking, all entities are on the same footing.
- 2. Irreduction. Nothing is inherently either reducible or irreducible to anything else.
- 3. Translation. Since one entity is never reducible to another, and never entirely contained inside another, actual work is needed to show the ways in which entities partly influence one another while remaining partly shielded from such influence.
- 4. Associations. No entity is inherently strong or weak. Strength arises when an entity manages to assemble as many allies as possible, while weakness emerges when it is isolated or cut off from alliances. Since allies can include forces of nature and ironclad logical deductions no less than armies and banks, it is pointless to explain the world entirely in terms of atomic matter and equally pointless to reduce it to paranoid theories of conspiratorial human language and power. In principle, all forces are equal.

Whatever changes may have occurred in Latour's thinking since 1984, these four principles still lie at the heart of his work. Taken together, they serve as the engine for one of the most original philosophies of our time.

— A. General considerations

The key figure of the tradition known as continental philosophy is Martin Heidegger. While many things can be said about Heidegger's thinking, we should focus here on just one: his distinction between the ontological and the ontic. The ontological is what pertains to being, while the ontic is what relates to specific individual beings. Despite certain variations in his attitude toward these terms and their successors in his later work, it is safe to say that he views the 'ontic' realm largely with contempt. As is well known, Heidegger sees mechanised farming, mass-produced shoes, atomic bombs and Nazi gas chambers as nothing but roughly equivalent surface phenomena, while the historical drama of being unfolds at a vastly deeper layer of the world. More generally, Heidegger conceives of human beings as immersed or thrown amidst a world of specific entities, and holds that knowledge consists in a movement of transcendence beyond these entities, in such a way as to see them 'as' what they are, rather than just blindly dealing with them. To transcend something involves projecting it against a background of nothingness so as to realise its finite and limited character. While this can never happen completely, it remains for Heidegger as an ideal, and he is not shy about judging which humans approach the as-structure more fully than others. Unlike other human activities, philosophy is able to project being 'as' being to a certain degree. Yet there are also certain fundamental moods such as angst, profound boredom, or even love, in which virtually every human is able to experience being on perhaps two or three occasions in a lifetime. But

transcendence barely occurs in the case of handling and manipulating specific objects, and is certainly beyond the reach of subhuman animals, let alone gases and minerals. The later Heidegger quietly modifies this position, allowing the practical activities of peasants and other traditionalists to achieve a 'good' relation to being even if they deal with specific things such as wooden shoes or grapes in a vineyard rather than being itself. He compensates for this newfound generosity by heaping more scorn than ever onto journalists, plastic merchants, computer engineers, nuclear plant technicians, public policy consultants, and other slavering minions of what Heidegger calls the stockpile or standing reserve that reduces things to mere objects of calculation.

Bruno Latour is no Heideggerian. Despite his French citizenship, he cannot even be called a continental philosopher, since he lacks all allegiance to the phenomenological tradition that feeds the continental mainstream. Of all the features of Heidegger's philosophy mentioned above, Latour accepts none of them. He makes no distinction between the breathless pursuit of being and the practical handling of individual beings. Indeed, he makes no distinction even between different ranks and castes of entities, and would study the production of cell phones just as respectfully as ancient tribal handiwork. Unlike Heidegger, Latour draws no distinction between blind practical manipulation and privileged theoretical awareness. For Latour, we have nothing but our dealings with networks of objects; some may be nobler and others more base, but all are on the same ontological footing. Hence, for Latour there is no way to transcend the world, and it is no accident that the concept of nothingness plays no role whatsoever in his thinking. (The very idea of a Latourian treatise on negativity makes me burst into laughter.) Instead of Heidegger's solemn and mournful condemnation of empty modernity and its monstrous products, we find Latour happily studying subway systems, French legal decisions, ecological debates, police surveillance systems, and the price of apricots in Paris. Unlike the cases of Heidegger or Sartre, one cannot imagine becoming depressed after studying one of Latour's books; it would be strange indeed if he were to trigger any suicides in the manner of Roquentin, young Werther, or the anti-heroes of Camus. Instead, our most likely mood when reading Latour is a fascinated curiosity—the very attitude that Heidegger associates most closely with superficiality and worthlessness. Unlike Bruno Latour, I regard Heidegger as the most important philosopher of the twentieth century. But this does not prevent me from siding with Latour against Heidegger on every one of the points cited above. If philosophy is to make any progress in the decades to come, it is vital that we consistently oppose Heidegger and side with Latour: against the ontological/ontic distinction, against the theory/practice distinction, against the blanket contempt for mass-produced objects, against the idea that knowledge means transcendence of the world, against nothingness, and in favor of endless curiosity about all manner of specific beings.

The opening pages of Irreductions already give us a taste of this non-Heideggerian attitude (not anti-Heideggerian, since Latour could hardly care less about his defects). Latour opposes 'the assumption that force is different in kind to reason; [that] right can never be reduced to might.'4 Lazy readings might (and do) interpret this to mean that Latour reduces everything to power, which would make him a rather familiar and mediocre type of social constructionist. But such readings are completely mistaken, since Latour would be equally critical of the inverse notion that 'might can never be reduced to right'. Properly understood, Latour's universe is as foreign to the human power-monger as it is to the fossilised old-fashioned realist. What he opposes is neither realism nor power plays, but rather the view that either of these can be reduced to the other. Latour's metaphysics is utterly democratic. Atoms and quarks are real actors in the cosmos, but so are Fidel Castro, Houdini, and unicorns. We cannot declare a priori that certain actors are more real than others; all we can say is that some are stronger than others. But this strength is never measured solely in the currency of human struggles for dominance, since animals, stars and brute subatomic matter are engaged in the struggle for reality no less than are Machiavellian cabals. What Latour opposes is simply reduction, no matter whether it is scientists or social scientists who try to do the reducing:

I need ... no *a priori* ideas about what makes a force, for it comes in all shapes and sizes. Some forces are evil and used to be associated with magic and the devil. Others are Aristotelian ... There are Malthusian and Darwinian forces ... There are Newtonian forces ... There are Freudian forces ... There are Nietzschean forces ... And all of these forces together seek hegemony by increasing, reducing, or assimilating one another. This is why the jungle with its tangle of forces grows across [Crusoe and Friday's] island.⁵

For those who dislike the metaphor of force, if it 'appears too mechanical or bellicose, then we can talk of weakness ... We have to touch and crumble, grope, caress, and bend, without knowing when what we touch will yield, strengthen, weaken, or uncoil like a spring. There follows a masterful list of the most diverse human activities, none of them more objective, transcendent, theoretical, or philosophical than another, all of them locked into the same negotiation and duel with the forces of the world. Surgeons, generals, mothers, writers, chefs, biologists, engineers, seducers—each of them has a preferred domain of objects that might bore the others, but each faces the same predicament. 'We argue constantly with one another about the relative importance of these materials, their significance and their order of precedence, but we forget that they are the same size and that nothing is more complex, multiple, real, palpable, or interesting than anything else. This materialism will cause the pretty materialisms of the past to fade.' It is regrettable that a philosophy of

such tact, pluralism, and openness should remain obscure, while philosophies of a more or less sanctimonious reductionism (reducing all to matter, to language, to power) continue to dominate academic discussion. By depicting a world in which everything is contained in itself, not fully reducible to anything else, Latour gives us possibly the first object-oriented philosophy.

— B. Actants

Before all further differentiation, everything that exists can be regarded as an actor or actant. Whether it be 'a storm, a rat, a rock, a lake, a lion, a child, a worker, a gene, a slave, the unconscious, or a virus,' all objects in the cosmos are on the same footing. There is no privilege for a unique human subject, imprisoned in its faulty representations of a world that may or may not exist. Instead, you and I are actants, Immanuel Kant is an actant, and dogs, strawberries, tsunamis, and telegrams are actants. With this single step, a total democracy of objects replaces the long tyranny of human beings in philosophy. In this way Latour continues the work of his forerunner Whitehead, who used the term 'actual entity' for everything from God to humans to fleeting puffs of smoke. We cannot begin by splitting actants into zones of animate and inanimate, human and nonhuman, or subject and object. Every entity is something in its own right, and every entity becomes involved in associations, love affairs, and duels with many others. This holds equally for neutrinos, fungus, blue whales, and Hezbullah militants. The reign of consciousness and language must come to a close, since the philosophy of human access reduces all actors primarily to what humans encounter of them. Yet

if you missed the galloping freedom of the zebras in the savannah this morning, then so much the worse for you; the zebras will not be sorry that you were not there, and in any case you would have tamed, killed, photographed, or studied them. *Things in themselves lack nothing* ...⁹

It has been a long time in philosophy since things in themselves lacked nothing. Latour refers sarcastically to the philosophers of access as 'Crusoe on his island, Adam in his garden ... You are the Zorros, the Tarzans, the Kants, the guardians of the widowed, and the protectors of orphaned things.'¹⁰ Is it really we who one-sidedly exploit trees, or is it not also trees that use the carbon dioxide from our lungs and form the coffins in which we are buried? We can no longer begin to philosophise with arbitrary decisions about which entities are real and which are merely derivative. Kant's Copernican Revolution is over. Whitehead made a lonely and tentative step in this direction, and it is Latour who ratifies it as a *fait accompli* and begins to develop our new philosophical continent.

Yet there is something ambiguous about actants. On the one hand, each of them is an autonomous agent irreducible to anything else. But on the other, it is only the *interactions* between actants that carve up reality into all its individual districts. 'How many actants are there? This cannot be determined until they have been measured against each other.' And again: 'We do not know where an actant is to be found. The definition of its location is a primordial struggle, during which many get lost.' And most importantly of all, 'if something resists, it creates the optical illusion among those who test it that there is an object that can be seen and described causing this resistance. But the object is an effect, not a cause. In this respect, Latour's philosophy of objects is not one of rock-hard solid balls that retain solidity amidst shifting, fleeting surface interactions. In each instant, every actant's life is at stake: if the reality of an actant is not currently exerted in some way, then it has no reality. Objects are not lonely integers hovering in an otherworldly Platonic space, but condense from amidst the entire network of duels, negotiations, compromises, and tender caresses that makes up the world.

Even so, Latour does not wish to claim that an actant consists entirely in its current set of networks. For 'none of the actants mobilized to secure an alliance stops acting on its own behalf ... They each carry on fomenting their own plots, forming their own groups, and serving other masters, wills, and functions.' HWhat prevents actants from melting entirely into a colossal world-network is that each has a secret, rebellious inner core never fully mastered by the other actants that run across it. Like every genuine philosophy, Latour's philosophy is fuelled by an internal paradox whose discordant elements he will always need to balance. In one way, actants do not pre-exist their dealings with one another, but merely settle from these interactions like precipitates at the bottom of a test tube. But in another way, they have a rebellious inner life of their own, remaining unmasterable by their neighbours.

— C. Irreduction

Stated simply, the two faces of reality are the autonomous nature of actants and their ability to influence one another. The sun is hot, but has not yet burnt us to a crisp; the gravity of a black hole affects the entire universe, but has not yet sucked the cosmos into a singular point of compression; the tsunami of 2004 destroyed beach resorts and killed thousands, but did not annihilate the world; al-Qaeda and the supposed American hyperpower are both fragile. Objects hide behind firewalls, but not entirely. They remain porous and vulnerable to one another: 'Leibniz was right to say that monads have neither doors nor windows, for they never come out of themselves. However, they are sieves, for they endlessly negotiate about their frontiers, about who the negotiators will be, and about what they ought to do.'15 This perpetual need to balance substance and relation, actor and network, is the central

dilemma of every philosophy that has ever existed or ever will exist. Latour's way of facing it is the principle of irreduction, as stated clearly in the first aphorism of his treatise: 'Nothing is, by itself, either reducible or irreducible to anything else.' Our world is filled with knots of concreteness, with sanctuaries comprising individual things. But none of them lie outside the great game of relations, as in the second aphorism: 'There are only trials of strength, of weakness. Or more simply, there are only trials.' Things do not start out unified, but they may become so, as in the third aphorism: 'Everything may be made to be the measure of everything else.' Finally, in the fourth aphorism, these thoughts are combined in a general theory of resistance: 'Whatever resists trials is real. The verb "resist" is not a privileged word ... We could equally well say "curdle," "fold," "obscure," "sharpen," "slide." There are dozens of alternatives.' ¹⁹

Although an actant resists all reduction, it *can* be reduced—as long as the proper work is done. For Latour there is no such thing as an actant entirely withdrawn from the way of the world. Nor does human knowledge magically transcend the world, as was still even Heidegger's hope: 'No force can, as it is often put, "know reality," other than through the difference it creates in resisting others ... *Nothing is known—only realized*'.²⁰ [Italics added.] Just as so-called human knowledge remains bound to the world and cannot leap beyond or above it, the same is true of actants in general. This is true to such an extent that Latour allows no object to retain an inner crystalline identity from which mere 'accidents' could be subtracted. He is not giving us a theory of substance, or of an enduring substratum beneath a film of transient relations. In fact, even as it resists, an object includes all its supposed accidents and relations:

everything happens only once, and at one place. If there are identities between actants [or between different temporal moments of the same actant—G.H.], this is because they have been constructed at great expense. If there are equivalences, this is because they have been built out of bits and pieces with much toil and sweat, and because they are maintained by force. If there are exchanges, these are always unequal and cost a fortune both to establish and to maintain. I call this the 'principle of relativity.' Just as it is not possible for one observer to communicate with another more quickly than the speed of light, the best that can be done between actants is to translate the one into the other.²¹

For the same reason, we can never say that one layer of reality is already contained in a deeper one or merely derivative of it. The total concreteness of all that exists, in fusing together the traditional opposition between substance on the one hand and accident/relation on the other, ensures that every stratum of reality is just as real as the endless chain of grandfathers from which it descends and the countless heirs it engenders. A battle is just as real as atoms,

and the waltzes of Johann Strauss just as real as his DNA. This has at least two consequences. First, all attempt to explain things by their origins is a fool's errand: 'all research on origins and foundations is superficial, since it hopes to identify some [actants] which potentially contain the others. This is impossible. If we wish to be profound, we have to follow forces in their conspiracies and translations.'²² Second, there is the related principle that we never reach a final stage of prime material from which all else is built. Latour's universe does not allow for any brand of philosophical atom whatsoever. Continuing with his atonal remix of Leibniz, he writes that 'no matter how far we go, there are always forms; within each fish there are ponds full of fish. Some believe themselves to be the moulds while others are the raw material, but this is a form of elitism.'²³ In this respect, Latour's philosophy can be read as a monadology without indestructible monads. An endless *vinculum* or chain of sieves rises up and down throughout the whole of the world.

— D. Translation

One actant confronts another only by way of translation or negotiation. Do not be fooled by the anthropomorphic language: it is not simply a matter of rendering Kafka into Spanish, producing a Buddhist staging of Wagner's *Ring*, haggling over foreign exchange rates, or even a matter of extracting heavy water molecules from a mass of the normal kind. Translation is not a special feature of humans, but the very stuff of relations in general, even in the inanimate sphere:

What [is said] of texts can be said of all weaknesses. For a long time it has been agreed that the relationship between one text and another is always a matter for interpretation. Why not accept that this is also true between so-called texts and so-called objects, and even between so-called objects themselves?²⁴

This point is always worth repeating, given the utter neglect of inanimate relations in present-day philosophy. The biased Copernicanism of our time still basically reduces all metaphysics to a theory of human knowledge, even when it is jazzed up with a chic postmodern twist.

Translation always creates an asymmetry between before and after, since nothing can ever fully be restored to its previous shape:

Act as you wish, so long as this cannot easily be undone. As a result of the actants' work, certain things do not return to their original state. A shape is set, like a crease ... a trap, a ratchet, an irreversibility ... The exact word does not matter so long as it designates an asymmetry ... There are winners and losers, there are directions, and some are made stronger than others.²⁵

No entity is perfectly conserved as it is shipped from one site in reality to another: 'Everything is translated ... We may be understood, that is surrounded, diverted, betrayed, displaced, transmitted, but we are never understood well. If a message is transported, then it is transformed.' Since an actant only ever exists in one place and at one time, to translate an object really means that we turn it into a new one. There is merely a loose relationship not only between the Greek and the Latin versions of Plato, but also between Plato himself at age ten and age fifty, and even Plato at dawn and noon of the same day. For Latour as for Whitehead, the utter concreteness of each entity forbids us to speak of an unchanging substantial core in the thing. At best, there are analogous entities that one can feasibly regard as belonging to the same general 'trajectory'. In Whitehead's terms, an entity is not an unchanging persona that undergoes adventures in space and time. Instead, it is fixed, frozen, rooted in a single milieu that is always gone in a flash. The law of the cosmos is perpetual perishing.

Since there is no monastic interior of things, withheld in chastity from the corruptions of the world, we also cannot say that a thing has any cryptic power or potential. Though an actant is never entirely overcome by the force of its neighbors, it is still entirely worldly, fully expressed in some way in the here-and-now. We cannot say that an oak tree is contained potentially in the acorn, since this would spare us the labor of following the series of risky transformations by which the acorn and each of its analogous successors seek their respective fortunes. As Latour puts it, only half in jest: 'we might as well say that the propositions of Spinoza's Ethics are "all in" the first proposition, or that the dessert is contained in the entrée.'27 Thus, 'potentiality' turns out to be a cheap recourse for those who like to say that they knew it all along, knew that things would come to this point, without having to negotiate each of the transformations from start to finish in the way that good storytellers do. Potentiality is to philosophy what 'Whig history' is to history. Appealing to a magical potency is no less absurd than if Gibbon had ended his massive work on Roman decline with the phrase: 'Remus and Romulus should have known that it would come to this'. A good historian, no less than a good philosopher, geometer, weapons designer, chef, dog-breeder, or lover, must be aware of the perilous uncertainty of every intermediate stage.

Perhaps more controversially, Latour extends the same observation to the field of logic. Even in this long-sanctified realm, he holds that the stages of a deduction must be seen as a series of possibly risky displacements from axiom to conclusion. 'There has never been such a thing as deduction. One sentence follows another, and then a third affirms that the second was implicitly or potentially already in the first.'²⁸ And on the same note, 'when many different sentences have been made equivalent, they are all folded back into the first, of which it is said that this "implies them all".'²⁹ Latour pushes this point somewhat hilariously, and with almost deliberate provocation:

This is why 'logic' is a branch of public works. We can no more drive a car on the subway than we can doubt the laws of Newton. The reasons are the same in each case: distant points have been linked by paths that were narrow at first and then were broadened and properly paved.³⁰

On this basis it is entirely clear why Latour adds that he believes neither in 'theories' nor 'systems'. A theory is just another assemblage that has been carefully pieced together from an army of actants, each of them resisting the theory to some extent at first. It took work for Maxwell to show that electricity and magnetism belong together, but also took work to bring Slovenia into the Euro, Islamic philosophy into medieval France, your best friend into your life, and toothpaste out of a tube. The same holds for 'systems'. It's easy for us now to say that the stages of Hegel's *Science of Logic* follow 'logically' from one another. But imagine all the years expended by poor, isolated Hegel to discover everything that was 'implicitly contained' in his first sentence—all the coffee, the bad moods, the encouragement from colleagues, the ink and paper needed to translate the indeterminate immediacy of being into a 700-page rogue's gallery of sparkling concepts.

— E. Associations

No actant is inherently strong or weak. It only becomes strong through assembling numerous allies, and grows weak when it becomes isolated. An expensive Airbus jet is brought down by a tiny meteor or a seagull in the engine, and the proverbial butterfly of chaos theorists can destroy New Orleans. Empires, homeless people, and grains of sand all play by the same rules. 'No entity is so weak that it cannot enlist another. Then the two join together and become one for a third actant, which they can therefore move more easily. An eddy is formed, and it grows by becoming many others.'31 The strength of the strong does not come from casting off surface encrustations and exerting an innermost essence in all its purity. As Latour observes, the Spaniards do not conquer Mexico with purified religion, capitalism, mapmaking or technology, but only with a mutually reinforcing hybrid of all these forces. Modern science is not a distilled truth-procedure that strips away all naive fetishes and groundless superstitions, but simply a stronger, more massive network of animate and inanimate supporters than self-styled druids and wizards can amass. We can call this 'the social construction of science' if we want, but only if our society includes atoms, blood cells, sunlight, gravity, and lab equipment no less than Victorian notaries and other power-hungry imperialists of academic nightmare.

The strategy of all actants is to use their harder allies in order to shape their softer ones. If string theory still lacks any shred of experimental evidence ('softness'), it still garners enthusiasm and foundation funds through its masterly unification of relativity and quantum theory ('hardness'). Those who are seduced by the unification may be more patient in awaiting the eventual experiments. Tiny Iceland, should anyone attack, will have the whole of NATO to defend it, while Lebanon's allies feel too weak to step in directly. Iceland in its discrete internal essence is surely no stronger than Lebanon; only its allies make it so. The same holds for all objects of every size: 'A force establishes a pathway by making other forces passive. It can then move to places that do not belong to it and treat them as if they were its own ... [Actants] wishing to be stronger than others can be said to create lines of force. They keep others in line.'³² This is one of Latour's best-known leitmotifs: namely, it is pointless to speak of the pure and overwhelming force of genius or truth, since these virtues waste away to irrelevance if they manage to persuade no one. In sheer philosophical terms, it is a theory of the irrelevance of isolated substance, of the 'vacuous actuality' denounced by Whitehead, or of the possible failed Pasteur who haunts the pages of Latour's book.

The only thing that convinces and shapes other actants is force. By now it should be clear that by 'force', Latour means a lot more than 'power' in the dull sense adopted by paranoid and people-centered constructionist doctrines. 'By believing [that might and right are different], we allow certain lines of force and certain arguments to rule above the networks to which they properly belong.' We need only remember that 'might' belongs to volcanoes and the moon no less than to Machiavelli and Kissinger, since any of these human or inhuman forces can be made to belong to the same network—as long as the needed work is done. 'Nothing escapes from a network ... When people say that knowledge is 'universally true', we must understand that it is like railroads, which are found everywhere in the world but only to a limited extent.' Hence there is no 'knowledge', but only what Latour calls *infraphysics*.

Returning once more to his edgy, off-Broadway rendition of the Leibnizian philosophy, Latour revives Leibniz's notion that time and space are simply the result of relations between entities. 'Time does not pass. Times are what are at stake between forces ... No instant can crown, cripple, justify, replace, or limit any other.'35 And further, 'space and time do not frame [actants]. They only become frameworks of description for those actants that have submitted, locally and provisionally, to the hegemony of another.'36 This leads us to another Latourian leitmotif: namely, the impossibility of calling any moment of time 'more modern' than another by way of the arrogant assumption that one moment purifies itself more fully than others from the noise of naive tradition or distorting 'social factors'. Latour evokes the classic recent example of the Iranian Revolution, asking: 'Who, then, is the most modern?

The Shah? Khomeini, the Muslim from another age? Or Bani-Sadr, the President, who has sought refuge in Paris? No one knows, and this is why they struggle so much to make their time'.³⁷ Just as space and time are defined by the duel between entities rather than shaping this duel, Latour goes so far as to argue that *truth itself* is a retroactive effect. 'A sentence does not hold together because it is true, but because it holds together we say that it is "true".'³⁸ An actant is nothing without networks; with networks, it is all.

— F. A NEW OCCASIONALISM

Another of the strangest aspects of Latour's strange fate is that he is often misunderstood in the same way by both allies and critics—both celebrated and condemned for 'reducing objective reality to social factors'. But this short phrase contains a triple misunderstanding: for in fact Latour abandons all reduction, gives a deeper account of reality than traditional realists, and widens society so far that Machiavellian human viceroys lose their privilege amidst a far broader parade of vegetable and inorganic actors. For this reason, defending him against the charge of being a social constructionist quickly becomes tiresome. It is perhaps better simply to move on, trusting the mills of time to wear away the *Zeitgeist* of trench warfare between 'naive realism' and equally naive textuality and constructionism. When someday this process is finally completed, Latour's philosophy will still be standing—he strikes me as incomparably more original than the noisy French Heideggerians who still pass for the continental avant garde. Ignoring the temporary injustice to Latour's reputation, we should close this discussion with a review of the major achievements of *Irreductions*, all of them developed more fully in his later philosophical work.

First, his concept of actants nullifies Kant's Copernican Revolution by simply ignoring it. As soon as all real, ideal, animate, and inanimate objects are placed on the same footing, each of them occupying some concrete site in reality and both resisting and giving way to the influences surrounding it, the basic assumption of modern philosophy disappears. This assumption is that the relational gap between humans and world (whether we mourn it, revel in it, deconstruct it, or sublate it into some deeper absolute) is the sole gap with which philosophers have permission to be concerned. Latour outflanks this tiresome, oppressive, and often invisible dogma by reminding us that the relation between Immanuel Kant and the objects in the world is no different in kind from those between police and criminals, Lucky and Godot, reindeer and forests, acid and metal, or fire and cotton. Every actant has equal rights in a democratic ontology, and relations are a problem for all of them—not just for so-called rational beings.

Second, his concept of irreduction forces us to acknowledge a universe of autonomous but interlocking layers, none of them the sole genuine item in the cosmos. We can no

more fully explain moods in terms of brain chemistry than we can hold that Tony Blair controls each British citizen by telepathy, or that all Italian recipes were decreed by Marco Polo. The local is not contained 'implicitly' in the global, but neither are larger structures merely pieced together out of privileged real micro-units. Every layer of the world is its own law, and to shatter this law requires genuine labor by the layers above or below it. Among other things, this puts an end both to Leibniz's distinction between monads and mere aggregates, and to Heidegger's two-faced world of being and beings. For Latour there is *nothing but beings*, and they are far more interesting than the supposed empty figments of calculation that move Heidegger to tears of rage.

Third, his concept of translation sweeps aside all previous theories of truth. To 'know' something simply means to test its strengths and weaknesses in such a way as to project it into feasibly accessible form. It does not mean to construct a copy of the thing in the manner of 'correspondence' theories of truth, since copies are impossible—everything exists in only one place and one time. It also does not mean that everything must hold together in a system in the manner of 'coherence' theories of truth, since such coherence is constantly being ruptured by recalcitrant pieces that surprise, fascinate, or disappoint us—Latour appreciates falsifiability and breakdown much more than the champions of coherence do. Finally, to know something does not mean that truth is gradually unveiled for a historically rooted human Dasein, since this model remains in thrall to the idea that truth copies the world, with the sole proviso that the copies are always partly doubled by shadow—and Latour is no lover of shadow. Even more importantly, all of these models regard truth as a special burden of humans, or at least of sentient creatures. By contrast, Latour holds that the translation of primitive rites into valid anthropological shop talk, or the translation of a buzzing, blooming, confusing world into the relentless system of Hegel, is no different in kind from the translation of steam power into kinetic energy, hydrogen into helium in nuclear fusion, lead into gold in an alchemist's lab (assuming it succeeds), the sermons of Jesus from Aramaic into Greek, the Golden Horde from the Steppe into Samarkand and Kiev, or a Metro passenger from Château d'Eau to Place Monge. In all of these cases, we have to follow the steps of translation as carefully as the situation demands.

Fourth, his idea of association turns all substances into swarming aggregates. There is not some unique internal essence of a thing, encrusted with dismal peripheral accidents to be wiped away by the theorist like window-grease. A thing becomes more real by amassing more allies and persuading more objects to let it pass through the world freely, whether by seduction, proof or brute force. We cannot discover the nature of a thing by looking into its heart, but must follow the blood that circulates from that thing through all its arteries and far-flung capillaries.

This unique set of insights is as foreign to Heidegger, Derrida and the phenomenological tradition as it is to all of Anglophone analytic thought. It marks a return of inanimate objects to philosophy after more than two centuries of oblivion.

It shatters traditional realism by granting reality even to the 'ideal', and by forbidding all reduction of complicated armies and machines to an underlying root element that explains all the others. It destroys pop relativism by demanding that we look the forces of the world in the eye, and submit each of our unique diverse cultures to hardball negotiations with the pitiless warlike cultures of fire, water, ozone holes, childbirth, disease and mathematical theorems

Although I will leave full discussion of the idea to my forthcoming book, I believe that Latour's philosophy is best interpreted in terms of the classical notion of occasionalism. This doctrine is generally remembered as a charmingly naive theology in which God intervenes in every instant to make all causal relations occur (not just the relation between mind and body), given that substances are regarded as too weak to act by themselves. Malebranche is the most prominent European name in this tradition, but its origins lie much earlier in medieval Iraq, where the school of al-Ash'ari gave it a major role in Islamic theology, and where it reached its peak in the famous work The Incoherence of the Philosophers by al-Ghazali. However, the micromanaging causal God of these theologians is merely one possible solution to an underlying philosophical problem. Namely, we only see things in the world as contiguous or side by side; their direct influence upon one another must always be inferred rather than seen. Hence David Hume (a great admirer of Malebranche) merely continues the occasionalist tradition, however vehement his atheism. For this reason, the ongoing Kantian Ice Age in philosophy is in fact cornered by an occasionalist tradition that it mocks as faroff and quaintly pious. As stated earlier in this essay, I hold that the central problem of philosophy is to balance the internal reality of individual objects with the need to explain how they can penetrate one another's shells and achieve genuine mutual influence. I hold further that Bruno Latour takes this bull by the horns while other, more influential presentday thinkers content themselves with Kant's watery half-solution to the problem.

To assess Latour's achievement in philosophy, we must consider the following dilemma. The occasionalists and the skeptics surely have a point when they close each individual thing off in itself, doubting that its forces bleed in any way into other things. To make things merely side-by-side at least grants them a bit of privacy, autonomy and inviolate domestic life. And this is one of the two things that philosophy has to do. But the other thing that philosophy must do is to enact the contrary gesture, and show a way in which things do manage to unleash their power against one another. Without this, we would be left with a theory of countless micro-universes, each pushed up against the others without communicating in

any way. Such a theory would obviously be so fruitless as an account of the world that no one has ever attempted it. Perhaps Spinoza came the closest with his infinite parallel attributes divorced from all mutual contact, but since these attributes all belong to God, even Spinoza pulls up short of the greatest possible occasionalism. The same inevitable compromise is found in all the occasionalists: each of them must allow a special moment of hypocrisy, establishing a unique place where all things do make contact in some way. For the theological occasionalists, this is obviously God, who can intervene in the events of the world even though nothing else can do so. For the skeptics, it is the human mind that enjoys this hypocritical power: no matter how much Hume doubts that we can know any relation between the cotton and the fire, both are at least unified in the human mind through customary conjunction, even if no such conjunction occurs in a world beyond mental custom. If occasionalism really is the central problem in the history of philosophy, as I hold, then we could group families of philosophers together based on how they address the need to balance the autonomous life of objects with the forces that breach their firewalls.

In this spirit, we can pose the occasionalist question to Bruno Latour. In his philosophy, we find that everything happens in only one place and one time, and this seals every actant in an utterly specific reality that cannot endure across different places and moments. Yet at the same time, he is the philosopher of relations *par excellence*; few if any thinkers have ever granted as much prestige to networks and interactions as he does. Where, then, is the 'point of exception' in Latour's philosophy? Where does interaction occur for him? It is clearly not found in the hypocritical deity of the occasionalists. Unlike most present-day European philosophers, Latour is not an unbeliever. But if he ever writes a theology, it is a safe bet that his God will emerge as a translator and negotiator of uncertain forces, even if this divine actant is especially powerful and wise. Even more clearly, Latour does not retreat to the Coconut Island of the skeptics, where links between actants occur only within the flimsy psychological sphere of customary conjunction. He is too much of a realist for that, too willing to let all manner of nonhuman forces affect all others.

No, the answer in Latour's case is more general. The answer is that his translations and interactions occur *in the world*. While this may sound vague at first, it has several immediate negative implications that are crucial for his philosophy. First, it entails the instant rejection of any otherworldly Platonic realm of pristine forms uncontaminated by base matter. This rejection will shock no one, since Platonism of every sort is nearly as unfashionable in philosophy today as Kant's geographical racism. More pointedly, as we have seen, Latour's immanent worldliness abolishes any Aristotelian potentiality that would lie in reserve behind what is actual, and also cancels any cryptic withdrawal of being or beings in the Heideggerian fashion. For Latour, everything that exists is inscribed somewhere in the world—right now. There is nothing outside the current moment and all its sites in various networks, each of

them compressing and yielding amidst the forces of the others. Everything is actual. Nothing is unexpressed, and nothing is so deeply contracted or enfolded as not to be registered somewhere in the current universe.

With all of these theories, Latour courageously gives us a full-blown metaphysics of reality, unlike the celebrated neo-Copernicans who dominate both analytic and continental philosophy, and who suppress their metaphysical suppositions behind a screen of repetitive disputes over the conditions by which reality is given to humans. In his rejection of potentiality and his insistence that everything is actual, Latour reminds us of the ancient Megarian school, enemies of Aristotle. And if anyone wishes to spark a truly useful controversy with Latour, it should not be through the tired accusation of social constructionism, but rather with analogous charges to those made by Aristotle against the Megarians in *Metaphysics* Book IX. For instance:

- a. If a house-builder is not currently building, the Megarians say that he is not a house-builder. Aristotle counters that this would put the sleeping professional builder on the same footing as someone entirely ignorant of the craft, which seems counterintuitive. An analogous question for Latour would be this: would an imaginary failed Pasteur really be no different from the vast tribe of humans who also make no revolution in medicine? We will admit that a failed Pasteur, or a Pasteur killed in an accident at the age of ten, would never have been remembered as 'Pasteur'. But this strikes me as a question of how genius is *known* or *manifested*, not of its reality. Is it really true that potential forces are not inscribed in an actant over and above the actant's current total state of affairs, its track record of success? This issue seems worthy of debate.
- b. Aristotle also charges that since the Megarians allow nothing in reserve that is not currently expressed in the world, they have no way to explain change or motion. Yet if I grow old, or walk from Athens to Megara, or from the Latin Quarter to Invalides, it is I who do this—not the current total state of 'I', with all its transient momentary relations to other things.
- c. If actants are constantly in relation with others, each of these others will encounter it differently. But then what makes an actant 'the same thing' for each of the many other actants to which it relates? What makes my shoe the 'same' shoe for the concrete sidewalk, an endangered ant crawling nearby, the shoeshine man who approaches me, the sunlight filtering through the air, and the tiny seismic tremors that cause my shoe to vibrate imperceptibly in every instant? The danger for Latour here is that an actant becomes reduced to a titanic series of manifestations, each of them connected to the rest only by something along the line of 'family resemblances', which are an epistemological solution to a metaphysical problem.

d. Finally, there is a question that Aristotle never posed to the Megarians. Namely, if every actant in its utter concreteness is closed off in a single instant of time, then what links each of those things across its trajectory through the ages? Here we brush up against the other classical doctrine of occasionalism: the continual creation of a universe filled solely with isolated perishing instants. If I am not actually 'the same' actant at each moment of my history, what links each of these numerous selves in a way that allows me to be the same person? Here once more, 'family resemblances' do not work (and they may not even be Latour's preferred solution). It is not a question of how others can identify me as the same person across moments of time, for this is merely a problem of knowledge. The underlying metaphysical problem is whether there really is anything identical as the drama of the world unfolds. Latour's answer would appear to be 'no', and this also strikes me as worthy of debate.

The fact that Latour can provoke such questions at all is enough to show that he has succeeded in reviving metaphysics in continental philosophy. The same cannot be said for the more famous figures (a few of them great philosophers anyway) who merely seek new permutations of the lonely human subject facing a dark, unknowable world. The philosophical importance of Bruno Latour lies in his shift toward an object-oriented philosophy. Sadly, since the appearance of Irreductions in 1984, few authors have followed him down this path. If a more radical work of philosophy appeared during the otherwise dreary 1980s, it is unknown to me.

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^{2.} Bruno Latour, The Pasteurization of France, trans. A. Sheridan (Part I) and J. Law (Part II), Harvard University Press, Cambridge MA, 1988.

^{3.} Unpublished manuscript, in preparation.

^{4.} Bruno Latour, The Pasteurization of France, p. 153. 15. The Pasteurization of France, p. 166.

^{5.} The Pasteurization of France, p. 154.

^{6.} The Pasteurization of France, p. 155.

^{8.} The Pasteurization of France, p. 192.

^{9.} The Pasteurization of France, p. 193 [italics added]

^{10.} The Pasteurization of France, p. 193.

^{11.} The Pasteurization of France, p. 164.

^{12.} The Pasteurization of France, p. 164.

^{13.} The Pasteurization of France, p. 227.

^{14.} The Pasteurization of France, p. 197.

^{16.} The Pasteurization of France, p. 158.

^{17.} The Pasteurization of France, p. 158.

- 18. The Pasteurization of France, p. 158.19. The Pasteurization of France, pp. 158–9.20. The Pasteurization of France, p. 159.

- 21. The Pasteurization of France, p. 162.22. The Pasteurization of France, p. 188.
- 23. The Pasteurization of France, p. 161. 24. The Pasteurization of France, p. 166.
- 25. The Pasteurization of France, p. 160.
- 26. The Pasteurization of France, p. 181.
- 27. The Pasteurization of France, p. 177.
- 28. The Pasteurization of France, p. 176.

- 29. The Pasteurization of France, pp. 176–7.30. The Pasteurization of France, p. 185.

- 31. The Pasteurization of France, p. 159.
 32. The Pasteurization of France, p. 171.
 33. The Pasteurization of France, p. 233.
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- 35. The Pasteurization of France, p. 165.
- 36. The Pasteurization of France, p. 165.
- 37. The Pasteurization of France, p. 165
- [punctuation modified]. 38. The Pasteurization of France, p. 165.