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The Agency of Hybrids: Overcoming the Symmetrophobic Block

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The Agency of Hybrids: Overcoming the Symmetrophobic Block

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Abstract: We respond to 'challenge 3' presented in Rose, Jones and Truex's excellent polemic by way of elucidating the meanings of hybrids, actants, agency and symmetry in Actor-Network Theory. We provide a (very brief) account of Latour's project to unravel the modernist epistemological settlement that separates humans and non-humans in the world, and that alas so often results in errors and confusions. We contend that the framing of the challenge itself implies the very distinctions that ANT seeks to reject (namely the dichotomization of the world into mutually exclusive 'subject' and 'object' divisions). Following Latour, we argue that such pure forms do not exist—and furthermore that 'agency' is the property of complex hybrids comprised of various strands of human and non-human materials and abstract elements. This is the true meaning of the principle of symmetry! We conclude with some counter-challenges of our own.

Key words: Actor-Network Theory, actants, agency, hybrids, symmetry, symmetrophobia.

Why is the symmetry of human and non-human agency so troublesome? In a trivial sense, of course machines have agency, as the following example from the British Medical Journal excruciatingly illustrates (Citron and Wade 1980):

> We report four cases of penile injury sustained when using a vacuum cleaner, probably in search of sexual excitement: Case 1—A 60-year-old man said that he was changing the plug of his Hoover Dustette vacuum cleaner in the nude while his wife was out shopping. It "turned itself on" and caught his penis, causing tears around the external meatus and deeply lacerating the side of the glans… Case 2—etc.

Not exactly a congruous response to the injunction 'to take symmetry seriously' though nevertheless an entertaining and relevant (though gruesome) vignette; a tad gratuitous, we concede, but of unimpeachable scholarly provenance! But in advocating symmetry, Latour certainly had something more subtle and profound in mind, and as two scholars under the influence (of Actor-Network Theory!) let us now pick up the gauntlet of challenge 3, and set out a more considered rejoinder to Rose, Jones and Truex's stimulating essay.

Our response will centre on the crudely dichotomous way in which the question of causality is conventionally put. The real problem lies not in symmetry; couching the issue of agency as a mutually exclusive choice between one form of agency or another is what produces the aporia. The question, posed prominently in Rose et al.'s abstract, seems so innocuous and reasonable: "Does technology cause effects in organizations or is it humans that determine how technology is used?" The point of symmetry is not to answer the question, but in fact to reject it; more specifically, to reject the simple ontological polarisation (human vs. technology) that it insidiously implies, a dichotomy that paradoxically makes it impossible to resolve the issue that the question ostensibly seeks to clarify.

First, let us attempt to characterise Latour's basic position on humans, technology and what Rose et al. call 'the problem of agency.' We draw on *Pandora's Hope* (Latour 1999) as our primary source, where his general position is extensively articulated, in the context of a general philippic against dualism and essentialism. These are seen as the cornerstones of the modernist epistemological settlement, and all the evil that has flowed from it. We cannot, of course, do proper justice in attempting to distil the essence of a highly elaborate and complex argument into a few paragraphs. The book is ambitious in scope, nuanced in argumentation, sometimes obscure, always stimulating; moreover, its primary concerns are with science and scientific knowledge, rather than technology, although much is said regarding the latter. The decoction here has been extracted to serve present purposes; so much has inevitably

been left out, of a strange and exotic world of fetishes, fact-ishes, vascularisation, brains-in-vats, clinamen, and so on. In this brief riposte, we have only limited aims, hoping to clarify some broad points, to whet the reader's appetite, and to raise some brief questions of our own.

As we have said, Latour's project is an audacious one, nothing less than unravelling the modernist epistemological settlement, in a voyage that takes in such diverse locations as the Amazonian rainforest, Pasteur's laboratory, and Plato's Athens. In this settlement, traced back as far as Socrates, the world has been iconoclastically shattered into two ontological categories: human subjects (sentient, moral, purposive, of intrinsic worth) and inanimate objects (morally void, intrinsically worthless, of derivative value only when serving the ends of human actors). What errors and conundrums does the dualist world-view lead us into, especially regarding the agency of technology? Latour uses the gun as his technological exemplar. Here the question of agency is simply and topically posed; "Do guns kill people or do people kill people?" Transposing into the present context, we might equally ask: "Do ERPs standardise procedures, or do managers do it?"

There is no ready answer, at least not in terms of the dualist settlement that insists on a rigid subjective/objective distinction. The question cannot be reduced to unilateral agency on either side. Without managers, the ERP can have no impact on procedures; equally, without the ERP the managers' attempts to standardise would take a different course, perhaps never even be attempted. Whatever, they would be different in terms of means and outcome, forced to take a different detour. Of course, the answer to the question "who is responsible?" is that both actants are implicated. But there are two radically different ways in which we may formulate their joint operation. In the dualist worldview, the relationship of the human to the non-human is purely an instrumental one; agency is the exclusive prerogative of humans, and technology is merely an instrument. This is the world most clearly depicted in Rose et al.'s second vignette (ERP at Martin): The managers (subject) used the ERP (object) to standardise procedures (goal). Latour rejects the asymmetry that is subtly but profoundly embedded in this formulation. He argues that the modern world is so pervasively fabricated, tools and technology so ubiquitous, that we simply cannot meaningfully separate humans and non-humans. The symbiosis is mutually critical; literally neither can exist without the other. "The place where a person and a tool exist independently is a distinction for convenience's sake, not a functional one. Where does the person hammering in a nail exist independently from the hammer?" (Dreyfus 2004). We might add that the same is true for the hammer (and the nail for that matter); this is the nub of the principle of symmetry.

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This brings us to the second thrust of Latour's critique, his rejection of essentialism. For Latour, existence is a matter of action. There is no room for essences in his system, i.e., *a priori* ahistorical properties that capture the intrinsic nature of a phenomenon or entity (be it human or non-human). All actants have a history, and it is only through their action in the world that they have an identity. There is no essence of ERP any more than the microbes revealed by Pasteur have a definitive, timeless nature; all actants are changed as they combine and associate with other elements of an evolving and ever-more ramifying network of actants. The idea of an ERP without agency (i.e. one that does not act) is an ERP that, by definition, does not exist. By their deeds ye shall know them, would seem to summarise Latour's pragmatic credo. An ERP is what an ERP does.

What then does Latour offer in place of the modernist settlement? The primary principle is that of symmetry, emblematised in his coining of the term 'actant,' applying equally to humans and non-humans alike. Both humans and non-humans act, they do things; they have equal claim to play the role of grammatical subjects in sentences. We see this in the third vignette in the following statement which explicitly attributes agency to technology: "The ERP came largely to structure the new work practices." There is really nothing more radical in the principle of symmetry than that, that technology as the subject in a sentence is not a mere trope, but is to be taken literally. The sentence is still problematic though: asymmetry remains but in the opposite direction, erasing now the human actants. What restructures work practices is neither the managers nor the ERP acting alone. Both working indissolubly together has the effect, a 'hybrid actor' (in Latour's terminology) compounded of both managers and ERP technology[1].

Returning to our original example, the principle of symmetry leads to the following reformulation: "The managers plus the ERP (hybrid actor) restructure the work practices (goal)." This is no semiotic trickery or parlour game; it is deadly serious. Nothing else will do for Latour. For him, humans and non-humans are inextricably enmeshed in ever more complex networks of associations, which Latour denotes sociotechnical collectives. Only collectives can act. Our lives are so bound up with artefacts, that merely to put on our clothes produces a complex collective, a hybrid actor. The repertoire of the naked man is perforce a limited one compared to the collective that includes his clothes, his mobile phone, his car, as well as the man himself. Maintaining the subject-object dichotomy prevents our full understanding of such collectives, even to recognise their existence and the fundamental part they play: "It is neither people nor guns that kill. Responsibility for action must be shared amongst the various actants" (p. 180). Latour's argument is to redistribute competences, to

move away from the zero-sum antagonism of the person/thing dualism in which "any extension of the competences of one is gained at the expense of the other" (Pottage 2001). Competence and responsibility are the properties of sociotechnical composites.

The question posed in challenge 3, to say how computer actants act and the consequences thereof, should by now seem a bizarre one. In short, we have seen that technology cannot act without people, any more than people can act without technology. Agency cannot be reduced to either pure humans or pure machines. The reason is exquisitely simple, that such transcendental forms do not exist in the sublunary world. It is hybrid actants composed of humans and non-humans that act; and the act and the actants cannot be separated. Moreover, the computer itself is not some sort of an irreducible atomic entity. It is a composite itself, a 'black box' that can be recursively opened up to reveal ever more complex associations of human and non-human components, forming networks stretching back through history, ramifying bewildering through time and space. All these embedded actants (designers, chips, circuit boards, programmers) played a part inits fabrication and are complicit its behaviour. The attempt to impose or attribute a stand-alone concept of agency upon actants is thus a notion quite alien to ANT, one that its adherents would have difficulty recognizing, a false consciousness they avowedly set aside when they adopted the principle of symmetry. Inscribed in challenge 3 is the implicit separation, the very duality that ANT exhorts us to eschew. But the subject/object dichotomy is so ingrained in our habits of thought, that it is hard to slough off. As well as the abstract and the challenge, it infiltrates much of Rose et al.'s paper. We would highlight the assertions that ANT "seeks to position itself firmly in the middle of the spectrum between technological and social determinism"[2], and again, "in ANT, technology becomes an independent actor in its own right." These exhibits show how hard it is to resist the compulsion to separate the social and the technical, a cognitive pathology that we might characterise as 'symmetrophobia.'

Symmetry of human and non-human actants is fundamental to Latour's critique and to his prospectus, a *sine qua non*. Why then does it seem so troublesome? Only so, when symmetry is mistaken for equivalence! Manifestly, ontological differentiation is intended, else why retain the distinction between human and non-human actants? There is no crude argument in Latour that humans and machines are the same, no talk to be found anywhere of Turing tests, no contention that machines per se have human intelligence, spiritual aspirations or are actuated by moral impulses. Latour merely asks that we see the world not in terms of an unbridgeable schism between two incommensurate ontological types, but to treat all actants as existing within common socio-

technical collectives, as having equal status in terms of their capacity to enter into new associations, to 'articulate' with one another (swapping properties, combining elements) in the formation of 'propositions,' Latour's term for new hybrids before they become fully-fledged, institutionalised members of the collective.

Here we move into the larger debate, which is the true aim of Latour's intellectual labour. His project is a grand moral one, going well beyond a narrow consideration of the nature of agency and the power of machines (be they ERP systems or vacuum cleaners) to act autonomously. The final chapter of Pandora's Hope sketches out, *in abstracto*, the profundity of the change that is implied. By insisting, via the principle of symmetry, that non-humans and humans inhabit the same collective, they become subject to a common political agenda and field of action. In terms more familiar to IS, we can thus see the principle of symmetry as a principle for design, more specifically for the design of sociotechnical collectives. The scope for design is enlarged beyond that of fashioning mere technical artefacts. *Homo faber fabricatus* is dethroned, and the throne claimed rightfully by *Homo faber socialis*[3]. A moral aim takes shape, nothing less than to "live the good life together" (p. 297) in a 'well-articulated' collective, i.e., one where its members, human and non-human, are fully mixed together, talked about, their mutual entanglements and co-evolution visible for debate and scrutiny. A two-house collective (i.e., based on the dualist settlement) made up of free human subjects and mute technological objects, on the other hand is 'inarticulate,' no speech is possible on the relationships between the two houses, no debate around propositions for the betterment of all. This is the real point of the principle of symmetry. Although Latour's concern is much broader (political ecology and the survival of the planet) than our usual application domain (i.e., the organisation) it is clear what he means in our more parochial demesne. No more and no less than the need for open, democratic debate in which new 'propositions' (novel combinations of technology and people) are considered with the fullest participation of all members, aiming at the greatest collective benefit, not just the advantage of a small (mainly human) elite of owners and senior managers.

Considering briefly the three vignettes, the issues are easily dealt with. The contrast between the three reduces to no more than matters of thematisation and ellipsis, presenting no challenge to the principle of symmetry. They are narratives in which the action has merely been thematized to give prominence to certain classes of actant and to elide others; as accounts, they are all thus impoverished, revealing more about the motives and interests of the authors (of the accounts) than the events described. The third comes closest to an ANT reading, though is skewed as we have noted. A degree of symmetry is none-

theless attained, and the complexity and indeterminacy of causality in complex collectives is acknowledged. The non-human actants are effaced completely in the first vignette, airbrushed away. Yet they were there, and we are bound to ask what part did the ERP in particular play? In the second, let us be told more of how the ERP 'marshalled' the CEO instead of another lopsided, aggrandising account of the mastery of *homo faber*.

As a parting shot, let us ask a question or two of our own. Where do the authors stand in these deep and perplexing matters, regarding the central question of agency in particular? We suspect that they are dualists, as our remarks above imply. Duellists certainly in their issue of challenges! Symmetrophobes, defend yourselves! For our part, we would like to ask what exactly is meant by the "dual dance," an elegant but obscure metaphor when we try to delve into its meaning? A dance around what, and to what end? A balletic spectacle or a drunken bop, an improvisation or a highly choreographed piece, in which case who writes the choreography? Is agency somehow a product of the dance (some mysterious efflux of interaction) or perhaps even the dance itself? Should we think of technology and humans as two isolated dancers, with separate essences and asymmetrical roles revolving endlessly around each other? Does not the metaphor imply such a separation? There is much in their piece that directly suggests the modernist settlement, and that *homo faber* is alive and well. Anyway, it is not our place to put words in mouths, we seek merely to issue a counter-challenge and to call for further explication of this metaphor, at once both catchy and slippery, if that is not a contradiction.

We are now at the end of this short riposte. We have had greatly enjoyed its writing and have attempted to entertain and to provoke alike, in the spirit of stimulating debate. Conscious of the somewhat scatological character of the opening, it is fitting to end on a loftier note, leaving the final (tangentially relevant) words to W. B. Yeats (from the poem, *Among Schoolchildren*):

O chestnut-tree, great-rooted blossomer,
Are you the leaf, the blossom or the bole?
O body swayed to music, O brightening glance,
How can we know the dancer from the dance?

Notes

1. We would teasingly ask whether the subtle insertion of the adverb "largely" is an unconscious concession that the action is a joint one of a hybrid actor. We would like to believe so!

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2. Because ANT sees no separation of technology and society, there is no spectrum between them into which ANT would wish to position itself. ANT is not some sort of 'third way' compromise, an attempt to patch up the modernist settlement. It rejects that settlement outright, attempting to substitute a new, more democratic order that gives equal weight and status to all members, human and non-human, of the collective.

3. Respectively, Man, the tool-maker and Man, the creator of society; terminology taken from (Latour 1994).

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