

# **DANGER AND OPPORTUNITY:**

**The Bloor-Latour Controversy 1979-2009**

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**ABSTRACT.** *A longstanding epistemological-ontological dispute between David Bloor of the Edinburgh Strong Programme and Bruno Latour of Actor Network Theory flared into acerbity in 1999. The present paper surveys this intra-STS dispute through STS analytics. Key philosophical differences between the agonists are presented but not adjudicated: equal agency is granted to all actors; all positions are examined in terms of social influences.*

## INTRODUCTION

While social historians persuasively argue that a valid depiction of the past must transcend a list of dated crises (wars, plagues, depressions) there remains a place in the historical record for at least one type of Great Event: the intellectual controversy. Here one sees in compressed form two positions that had previously (if uneasily) coexisted, suddenly concluding that further coexistence is impossible. The two sides then thrash things out in the public arena. At some point public consensus declares the battle over and declares a victor, after which there may emerge the beginnings of an epistemological resolution (1).

The study of historical controversies has proved especially useful in science and technology studies (STS). The heliocentric ellipses of Copernicus *vs.* the geocentric epicycles of Ptolemy; the experimental witness of Boyle *vs.* the *argumentum ad auctoritatem* of Locke; Pasteur's microbial theory *vs.* Pouchet's spontaneous generation: STS scholars have used such contests to tease apart the tangle of beliefs and suppositions that characterize every age, above all an age in transition. Once the sun rose, then the earth spun. Once truth was the King's word, then it was what gentlemen agreed it was. Once life's creation seemed continual; then it was accepted as a once-only event.

1. I am insufficiently sanguine to omit the qualifying phrase '*beginnings of.*' A final resolution emerges only when a position (theory, belief, construal) runs out of surviving opponents; as Max Planck once remarked, science changes one death at a time. Long before such closure, however, it is usually apparent which side has prevailed; and that consensus chokes off recruitment to the losing side. Time does the rest. While in some instances of ideological conflict the clash of thesis and antithesis leads to a synthesis that blends the two competing sides or at least bestows a continuing cultural legitimacy on both (*e.g.* the mid-1880s debate on the supremacy of Brahms or Wagner), in most cases the synthesis looks very much like only one of the initial positions. By 'public arena' I mean the set of all people to whom the debate is important; obviously no one outside Western culture, or within it but lacking musical

literacy, would have cared whether absolute music or *leitmotiv* carried the day. This being said, the controversy this paper addresses is still very much in process of resolution.

As a rule, the more recent a controversy, the less likely it is to have been resolved.

Bohrians accept logical irregularities at the nanoscale, Einsteinians counter with a credo of strict causality. Not only do both sides have adherents: both sides continue to recruit *new* adherents, indicating the continuing viability of both. Bohr and Einstein soldier on.

STS is not without its own controversies; although these, being as neonatal as the discipline itself, often remain unresolved. It is possible that, like the Brahms-Wagner furor, they will ultimately be deemed nugatory by their involved public (*viz.* tenured STS theoreticians) and filed away as tempests in a teapot. It is also possible that the highest-profile among them will continue to be seen, as it is now, as a battle for the collective heart and mind of STS. This is the controversy manifested in the responsorials published by David Bloor and Bruno Latour in *Studies in the History and Philosophy of Science* in 1999. What STS should do, and how; its conception of nature and society: these are the stakes. It remains to be seen if this high-profile controversy, now less of a firefight than in 1999, will at some point again become a full-blown crisis. If so, the outcome may not be uniformly deleterious to STS; as well as danger (loss of disciplinary vision, schism keeping strong and important personalities from important communal work) there will be opportunity (renewal and refinement of vision, clarification of aims and methods) (2).

### ***PRE-CONFLICT I: LATOUR***

On the dedication page of *Laboratory Life: The Construction of Scientific Facts*, just below his acknowledgement of the Salk Institute of La Jolla CA where he did his fieldwork, Bruno Latour presents two quotations. The second is from Michel Tournier's 1967 novel *Vendredi: Méfiez-vous de la pureté, c'est le vitriol de l'âme* (3). The quotation that precedes

2. Note that the Mandarin representation of *crisis* juxtaposes two ideograms: *Danger* and *Opportunity*.

3. ‘Mistrust purity; it corrodes the soul’ (my translation). This seems cognate with an apothegm cited by Voltaire, to the effect that perfection is the enemy of excellence. Latour’s co-author here is Steve Woolgar. Tournier’s warning is the *raison d’être* of STS: “If sociology could not be applied in a thorough going way to scientific knowledge, it would mean that science could not scientifically know itself.” The attribution is minimal, one word plus one date: *Bloor (1976) (4)*.

That Bloor is thus given pride of place in a book that vaulted Latour into superstar status seems to me not insignificant. Latour acknowledges not only that STS is indeed the science of science, but also that the PRIMVS INTER PARES of these meta-scientists is David Bloor. How did a relationship of master-disciple descend within two decades into one of battling Titans?

Vitriolic controversies can occur between agonists who conceptually differ in very little. If X and Y agree on everything except a single point, that point by definition subsumes 100% of what separates them and may, counterintuitively, cause growing friction (5). Further, in terms of depth psychology the Bloor-Latour debate may fall under an Oedipal rubric. Consciously or unconsciously, senior actor X may regard any deviation from his own position by junior actor Y to be a personal betrayal, ostensibly of dogma but psychologically by Y-as-son against X-as-patriarch (a modern instantiation of this rubric is Freud-Jung). Rare and saintly are the supervisors who genuinely encourage students to find their own voice. Through their life, work, and example such scholars embody the highest traditions of the Academy (6).

Perhaps not coincidentally, another of Latour’s seminal books appeared almost exactly midway between the first edition of *Laboratory Life* and the 1999 flare-up with Bloor. This was *Science in Action: How to Follow Scientists and Engineers Through Society* (1987). Latour

4. From Bloor, D., *Knowledge and Social Imagery* (1976 & 1991). See Bibliography

5. “Nowhere do we [devils] tempt more successfully than on the very steps of the altar” – C.S. Lewis, *The Screwtape Letters*. Add to this a body of (also counterintuitive) behavioural experiments which demonstrate that competitive frenzy may rise as rewards decline (e.g. in academia), and one has fertile ground for strife.

6. Recently confided to the author and others at a University of Iowa conference by a Princeton professor emeritus and former President of the American Historical Association. “My graduate students are so resentful when they find out I’m human.”

begins its first chapter, titled *Literature*, by discussing (of all things) technoscientific controversies. In this chapter he investigates the “many methods for studying the fabrication of scientific facts and technical artefacts (7) . . . We will not try to analyse the final products . . . instead we will follow scientists and engineers at the times and at the places where they plan [those things]” (8). Latour thus begins his book by stating one of the key tenets of his theoretical approach to STS: the unshakeable belief that technoscience is best examined by description alone, freed of the heavy chains of causal logic (9). This tenet dovetails with Latour’s overarching theoretical construct, Actor Network Theory (ANT).

ANT has been astoundingly influential in science and technology studies: love it, hate it, or modify it (as in so-called ‘Anglo-ANT’), ANT has attained and still sustains the status of a global STS framework (10): it is a touchstone, a go-to position, a principal reference. Latour like Marx may be disputed but never ignored; most disputation occurs on a field of his own choosing, using his own concepts and terms. Given this, perhaps the best way to construe the Bloor-Latour dispute is as a frontal assault by the Edinburgh school against ANT-Latour, with the tactical aim of dislodging a formidable Continental philosophy from its theoretical ascendancy (11).

Starting with its initial premise of descriptive noncausality, ANT proceeds to parse technoscience as a dynamic process in which a large number of actors relate. The agency of each actor constantly changes, both quantitatively and qualitatively; humans and nonhumans are

7. Note how the fact of factual construction is implicitly assumed in this statement. Note also the use of the word ‘fabrication’, which may be used either neutrally (design => parts manufacture => assembly of a technoscientific product) or else pejoratively (inventing lies).

8. Latour (1987) p.21

9. *Pace* Blaise Pascal, who famously asked who might free him from logic’s heavy chains.

10. An ironic statement, since Latour has consistently denied the usefulness to ANT of ‘frames’ (defined as explanatory approaches, the governing metaphor being a picture frame that defines what is and is not to be looked at). Latour discusses frames in ‘On using ANT for studying information systems’ (2004). *See Bibliography*

11. “ANT is best seen not as coherent body of thought, but a series of debating points with examples. Latour is out to goad; to stimulate discussion; he is intentionally outrageous. ANT is almost certainly not internally cohesive, but

Latour does not care. So although ANT has *not* carried the day in STS (and never will), it has been amazingly influential.” From my lecture on Latour given to STS 2411, York University TEL 0001, 2012 October

treated exactly the same, epistemically if not ontologically; technoscience is seen as a welter of ever-shifting connections. Newer configurations replace older ones (one cannot say ‘result from’, as this would insert causality in place of strict description) as the network of actors continually renegotiates its alliances – another key conceptual term in ANT. Not only are technoscientific facts by definition constructed (L. FACTVS = ‘made’); they are conceived, corroborated, and defended via social consensus – that is, by and within a network of actors. Through ANT and his other writings, Latour functions as a lumpner not a splitter ; he analyzes only to develop enhanced conceptual constructs. To this end he has consistently opposed the idea of the binary – us/them, good/bad, human/nonhuman, man/nature, subject/object. Such distinctions (he maintains) are pernicious, and serve only to cloud our perception (12).

### ***PRE-CONFLICT II: BLOOR***

David Bloor, now a professor in the Science Studies Unit of the University of Edinburgh and previously its Director, was an early champion of what is now a core STS belief: that science is not a positivistic detection of absolute facts, from which scientists then infer Platonic truths. As a 34-year-old he published the influential book *Knowledge and Social Imagery*, in which he argued a sociologist’s contrary position: that science is a group process, not an inhumanly disinterested accumulation of increasingly detailed data.

Bloor and his Edinburgh colleagues also rejected the notion, till then dominant in the mainstream history of science, that only erroneous theories and observations were subject to explanation via social factors. Instead, Bloor maintained, scientists’ internal beliefs are externalized in their observations. Still, not all alternatives to this positivism were equally valid. Strict empiricism, the direct encounter between individual and reality, leads too easily to solip-

12. Viewing Latour's rejection of the binary in this way, *viz.* as a concept developed over decades, makes his 2003-4 paper 'Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern' seem less anomalous and much more an extension and confirmation of a longstanding belief. *See Bibliography*

sism: 'Reality is what I see' ignores society. Strict idealism on the other hand, at the opposite end of the epistemological spectrum from strict empiricism, holds up the social as omnipotent: 'Reality is but verbally encoded consensus' ignores nature. Scientists, said Bloor, continually fall into the overempirical: they try to be totally objective because of an ingrained prejudice that that is what they *should* be. They are striving, paradoxically, to be idealistic rather than empirical.

Bloor and his colleagues established what they called the Strong Programme in SSK (the social study of knowledge). This school was defined by four principles: Impartiality, causality, symmetry, and reflexivity. That is, sociologists of science must be nonjudgmental (13); must trust that situations and beliefs do not emerge spontaneously but are always the consequence of preëxisting situations and beliefs; must treat 'untrue science' or 'pseudoscience' as evenhandedly as they do 'true science', looking to the causes of each in nature as well as society; and must continually reëxamine their underlying beliefs to root out unscholarly bias.

### ***1999: THE GLOVES COME OFF***

In Vol.30 Issue 1 of the peer-reviewed journal *Studies in the History and Philosophy of Science* (1999), David Bloor published a closely reasoned polemic unapologetically headlined 'Anti-Latour.' To this point, an attack so *personally* vitriolic was rare within the global STS fraternity. In sixteen venomous pages Bloor proclaims the Strong Programme's falling-out with Latourian thought, both as instantiated in ANT and in all other areas. "In Latour's eyes," he fumes, "the sociology of knowledge . . . will continue to fail" (14).

13. Note that *impartiality* (not jumping to conclusions) is held by the SP to be more theoretically desirable than *neutrality* (refusing to come to any conclusions at all).

14. 'Anti-Latour' p.2 (journal pp. 81f)

Bloor adds: “Because, on Latour’s reading, the Strong Program (15) explained nature in terms of society, there was no way that agency could be attributed to things” – an ANT tenet. Thus (so Bloor) Latour’s “aim is to produce some manner of non-sociological, non-reductionist analysis of knowledge, one that neither reduces nature to society, nor [reduces] society to nature.” Those who pursue the Strong Programme “are said [by Latour] to be trying to explain nature in terms of society . . . [which] is a profound misrepresentation. The [SP] aim isn’t to explain nature, but to explain shared *beliefs* about nature . . . for Latour, it is society and nature, not society and [its] *accounts* of nature, which are co-produced.” Further, says Bloor, by rejecting all binaries, Latour holds that “drawing a boundary between nature, and beliefs about nature, is just a form of this [binary] distinction” and thus not valid (16).

Bloor saves his greatest wrath for Latour’s pre-emption of a Strong Programme cornerstone: symmetry. Latour here transcends Bloor’s cautious call for impartiality and enters the forbidden zone of full-on relativism. The Latourian term for this far more radical concept is ‘general symmetry’ (GS). Latour then extends GS to a second Strong Programme cornerstone, reflexivity, and concludes that if natural realism cannot support the explanations given by the natural scientist, in the same way social realism cannot support the explanations given by the social scientist. Put another way: social scientists construct categories of nature in the course of investigation, exactly as do natural scientists! Latour, in other words, applies the Strong Programme rubric to the Strong Programme itself. Such reflexivity goes beyond self-analysis into infinite regression, and so threatens to make STS devour itself (17).

Bloor also challenges ANT’s premise that agency can be ascribed to nonhuman entities;

15. Spelled ‘programme’ by Bloor *et al.* but modified *passim* to the American form ‘program’ in various journals, which one presumes were not proofread by Bloor.

16. 'Anti-Latour' p.87 (*Italics DB's*).

17. I am indebted to Dr Darrin Durant (presently of the University of Melbourne) for some stimulating discussions on these topics at York University during summer term 2012.

this, he says, comes close to granting them conscious intentionality. Callon's ANT description of the French scallop fishery, for example, contains phrases such as 'the immature scallops elected not to occupy the traps.' According to Bloor, the network approach devolves into an unnecessarily complex restatement of a standard technoscientific case. ANT presents no novel insights; it offers nothing new. In practice, Bloor concludes, general symmetry "looks suspiciously like ordinary sociology of scientific knowledge, albeit of a rather limited and one-sided kind . . . I do not want to quibble over terminology, but do these metaphors really enable us to say anything deeper, different, or better than standard talk . . . ? I think not" (18). Yet Latour [so Bloor] does not care to examine such contradictions, and would not care if they were proven. Latour is not *invested* in anything; he is not a scholar but a quipping cynic.

The question arises: Why such rage? While academics tend to conflate work with self, so that challenging the former seems to menace the latter, they surely know that uncontested acceptance of every aspect of one's thought is an impossibility. Indeed it is wholly undesirable, since constructive debate can occur only when interlocutors disagree (19). Hence while Bloor's screed seems at times a mere bellow of pain, Bloor may be reacting to what he perceives as Latour's flippancy in ways that transcend psychology. Bloor may fear that Latour is mocking the very foundation not just of the Strong Programme, but of all STS; that he risks rendering the whole discipline nugatory by dissolving it in Wittgensteinian word-games.

Even given these professional allowances, however, I strongly suspect the cause of Bloor's distemper is a perceived threat. Latour, formerly the admiring supporter, has willfully strayed from orthodoxy into intolerable heresy; worse, he has made more converts than Bloor.

18. 'Anti-Latour' p.16 (journal p.100)

19. As John Kennedy liked to say: When everybody thinks the same thing, nobody's thinking at all.

ANT, an approach that claims to reject the conceptual frame, now frames the entire STS debate. Even those who disagree with Latour respect him this side idolatry; the bulk of them tender nothing but timid suggestions. Again, Latour is on a plane with Marx. Some differ with his interpretations, but few question either his universe of discourse or its analytical categories.

### AND THEN THE NIGHTINGALE REPLIES (20)

Latour's response to 'Anti-Latour' (21) appears in a follow-on article in the same issue of *SHPS*. Not only does Latour admit Bloor's characterization of himself as a disruptor; he revels in it. He even goes beyond characterization into caricature – the sophisticate replying to an ill-mannered rant with a lifted eyebrow. Consider the honorific of address. In Latour's answer Bloor is neither *Bloor* (authorial shorthand) nor *Dr Bloor* (compatriot) nor *Professor Bloor* (esteemed scholar); he is 'David.' *Le sujet doit dire Vous, le roi peut faire Tu*. Ouch.

Further, the title of Latour's response ('For David Bloor . . . and Beyond') is a sneer, riffing on Buzz Lightyear's vacuous motto in the children's film *Toy Story* (22). Rhetorically, Latour's self-defence is the suavest of attacks: an uncle patting a squalling nephew on the head while keeping snot from his tuxedo. Not to say that Latour's attack/defence lacks logical teeth: it effectively links the Strong Programme to an outmoded Kantian *numinous*. "[T]hings in themselves [*Ding an Sich*] are there to make sure that one is *not* an idealist . . . [but] are these objects allowed to *make a difference* in our thinking about them? The answer given by David [!] . . . is a resounding no," Latour says. He then asks: "I want someone to explain to me what it is for an object to play a role if it *makes no difference* . . . The things in themselves are there to make a difference, yes, but between 'empirical realism' (the belief that reality is made out of thin

20. Final line from *Peacock and Nightingale* by Canadian poet Robert Finch

21. 'For David Bloor . . . and Beyond: A Reply to David Bloor's 'Anti-Latour.' *SHPS* 30 (1), pp.116-118

22. 'To infinity . . . and beyond!' (What can be beyond infinity?)

air) and ‘transcendental [*sic*] realism (the belief that science grasps things-in-themselves” (23). Latour has here retired to the impregnable fortress of the philosopher, whose walls he is sure that *David* cannot scale. At this point Bloor becomes openly vituperative: “[F]allacious moves” – “perversion” – “attempt to tie me in knots” – “little actual argument” – and at last a total dismissal: “Latour has just abandoned his position” (24). No room for compromise here.

### ***CONCLUSION: MAKING SENSE OF IT***

In closing, what hermeneutics should we use to examine this controversy? Adopting the approaches of the agonists, both of which address scientific situations via social means, one could do worse than to advance an exegesis based on history. Bloor, I suggest, exemplifies a Scots intellectual tradition centuries deep. Napier in mathematics, Smith in political economy, Brougham and his fellows who established the *Edinburgh Review*: The ‘Athens of the North’ is a city that has long punched above its demographic weight. And it is a *sober* city. Nuance and irony have no role in Bloor’s Edinburgh: its *MODVS OPERANDI* is a Calvinistic earnestness; its aims are Progress, Equity, and Social Order, all obtainable through Common Sense. One sees this in Bloor’s depositions: they are not theses for disputation so much as *pronouncements*. Fontana quotes a similar Edinburger from Thomas Love Peacock’s satire *Crochet Castle*:

***Morals and metaphysics, politics and political economy, the way to make the most of all the modifications of smoke: steam, gas and paper currency: you have all these to learn from us; in short, all the arts and sciences. We are the modern Athenians*** (25).

Thus throughout the 1999 dispute, Latour seems prototypically Parisian – educated and brilliant but also ironic, ambivalent, and a half-sip of *Pisse-Dru* past sobriety. Bloor is linear,

23. ‘For David Bloor . . . and Beyond: A Reply to David Bloor’s ‘Anti-Latour.’ *SHPS* 30 (1), p.117

24. ‘Reply to Bruno Latour.’ *SHPS* 30 (1), pp.133-136

25. Cited in Fontana (1985) p.1. *See Bibliography*

Latour nonlinear. Given this contrast, which is cultural as well as scholarly, the accumulated acrimony is understandable; it may also be insurmountable. Then what's to be done? “[T]he mutual acrimony one finds in the post-Kuhn literature on both sides testifies to a real gap that call[s] out for more effective mediation”, says one observer (26).

Or does it? Perhaps this is one binary that need not, even must not, be negotiated away. Why choose between Brahms and Wagner, or chocolate and strawberry, or Latour and Bloor? Perhaps the takeaway here is a clarion call to intellectual promiscuity, or (to be more genteel) a constant openmindedness. Reserving one's decision may be the highest ground in the Academy; even *making* a decision might mean holding it only provisionally. *Pace* Dante, those who reserve their neutrality in time of crisis may not in fact deserve the hottest places in Hell.

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26. Rehg (2009). *See Bibliography*

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