



## *The Sokal Hoax and Postmodernist Embarrassment*

**JAMES FRANKLIN**, *University of New South Wales*

Let me say what a privilege and a pleasure it is to be attacked by a scholar of Professor Hodge's reputation. (Hodge, 1999) I am especially flattered that he is able to draw correct conclusions from my article on the Sokal hoax (Franklin, 1997) which were not in the work itself. For example, he writes that 'The Sokal Affair as interpreted by people like Franklin was clearly dangerous for the kind of work that is done by colleagues I admire, especially for colleagues who are more junior and more vulnerable.' To imitate the ponderous explications of the rhetorical strategies of others which pepper his own article, I take it that this means I am supposed to be more in favour of sacking young deconstructionists than old ones, and that I would be or ought to be ashamed of that consequence. I am not ashamed of that consequence. I would prefer young deconstructionists to be sacked for two obvious reasons. First, old ones will clog up academia for a shorter period, and second, the young ones who are sacked will have a better chance of going away and doing something worthwhile with their lives.

The 'Sokal hoax' could have been a storm in a teacup. Alan Sokal, a physicist at New York University, wrote a spoof article, 'Transgressing the boundaries: towards a transformative hermeneutics of quantum gravity' containing gobbets of postmodernist nonsense that parodied what 'cultural theorists' have been writing about science. This is a short sample—which I include because Hodge's failure to do so distances the reader from the reality being discussed:

In this way the infinite-dimensional invariance group erodes the distinction between observer and observed; the  $\pi$  of Euclid and the  $G$  of Newton, formerly thought to be constant and universal, are now perceived in their ineluctable historicity and the putative observer becomes fatally de-centered, disconnected from any epistemic link to a space-time point that can no longer be defined by geometry alone.

He submitted it to *Social Text*, a leading American journal of cultural studies. The journal fell for it and printed it (no. 46/7, Spring/Summer, 1996), whereupon Sokal owned up, and a good laugh was had by all. That might have been that, if postmodernists, deconstructivists and fellow travellers had not insisted on behaving as if it were Singapore, 1942, and continued, as Hodge does, to pour resources into defending the indefensible.

A central issue, as Hodge rightly says, is the 'social construction of knowledge'. Hodge quotes me ranting about the deconstructivist view of 'the social construction of science, and of knowledge generally: the objects of knowledge do not have objective reality "out there", but are social constructs'. (Note carefully, before we go on, the

phrase ‘*objects* of knowledge’, meaning material things, laws of nature and so on.) Hodge’s comment on this is:

I have been accused of being a ‘postmodernist’ by Franklin, and indeed I confess I do see good reasons to believe that all knowledge was socially constructed, including scientific knowledge. Far from this belief making me uninterested in material reality, it is the material effects of scientific knowledge that make me especially concerned to see how this knowledge has been constructed and by whom, who is managing its discursive forms, why and with what effects. So I believe in the potential ‘reality’ of many things about which statements have been made in this debate, including Alan Sokal ...

The most interesting thing in this comment is the pair of quotation marks. Evidently, contrary to his declared interest in material reality, Hodge is so phobic about the very notion of reality that he can only bring himself to refer to it if it is in scare quotes. I fear Hodge has not read Stove’s expose of the use of quotation marks to neutralize success-words (Stove, 1998, ch. 1). The most important thing in his comment, though, is his change from ‘objects of knowledge are socially constructed’ in my quote to ‘knowledge is socially constructed’ in his. There is, obviously, a trivial sense in which knowledge, including scientific knowledge, is social: it is in people, it is often expressed in language, it is often learned from other people, it costs money to acquire and communicate it, and so on. No one disputed that; certainly not Sokal or me. What we were complaining about was the deconstructionist doctrine that the *objects* of knowledge—things, their properties, and the laws connecting those properties—were socially constructed. Opponents of postmodernist views of science have been asking for a long time such simple questions as whether different social conditions might have led Newton to discover an inverse *cube* law of gravitation (Slezak, 1989). A straight answer is still awaited. Hodge is a typical deconstructionist in his avoiding the distinction between knowledge and its objects when the pressure is on. Whether his obfuscation on this point is deliberate or inadvertent is, of course, for him to say.

The same failure to make obvious and obviously necessary distinctions is apparent in Hodge’s discussion of why Sokal ought to make common cause with deconstructivists over the social effects of science, and the action of social causes on scientific activity. Neither Sokal nor I have any objection to the sociology of science. The choice of questions that science studies is sometimes determined by reasons other than the purely scientific, undoubtedly, and it is interesting to study them. For example, the fact that people greatly desire to be secure and healthy leads to a lot of money being spent by military and medical scientists on looking into questions of little intrinsic interest. The effects of scientific research are also worth investigating, in such cases as the invention of the World Wide Web by research physicists for the purpose of sharing their papers, and their subsequent donation of it to the world absolutely free. It is scientists, indeed, who have clamoured loudest for sociological investigation of such questions as why students are enrolling in cultural studies, communications and so on instead of taking science degrees and acquiring some real knowledge. The sociology of science is a field of knowledge like any other, subject to the same canons of rationality (on the relation of evidence to conclusion, and so on) as any other. What Sokal and I object to is the deconstructivist project of undermining those very canons, which would make nonsense of the conclusions reached in the sociology of science as surely as it would of those reached in physics.

There are a number of less central misunderstandings that Hodge perpetrates. It is

worth clearing up a few of the most important. Hodge is mystified as well as scandalized by Sokal's brief remark that outsiders who want to understand something about quantum mechanics 'need no longer rely on the vulgarisations (in both senses) of Heisenberg, Bohr and sundry physicists ...' Why isn't Sokal defending his own, Hodge appears to think. The answer to this is simple enough, and well-known enough. Heisenberg, Bohr and a number of other early quantum theorists were physicists of genius, but their interpretations of the physics were infected by German idealist philosophy, which was an inescapable miasma hanging over German education at the time they grew up. (The story is well told in Miller, 1996.) The result was that they sometimes used phrases like 'reality dependent on the observer', which have no support in the physics itself. Later currents of thought of an idealist tendency, such as postmodernism, have taken heart from these antiquated phrases, and students in the less respectable reaches of the humanities have to put up with a good deal of misinformation along the lines of 'even in physics it's now realised that reality depends on the observer'. Sokal merely intends to remind the reader that none of this is justified by real physics. The whole matter is dealt with fully by Sokal's collaborator Jean Bricmont (Bricmont, 1995).

The isolation of Hodge's brand of cultural studies is shown not only by this solecism but by numerous small touches he adds when discussing those on the other side; for example, his supposing that Damian Grace is a journalist and that Carl Harrison-Ford may not exist. These gentlemen are a respected academic/author and an editor/writer, respectively, as Hodge could have discovered by a quick check of either a good library catalogue or APAIS online. These gratuitous rudenesses on his part are not very important, and perhaps indicate no more than that online electronic resources are not as familiar in the media and cultural studies world as they are in science. But the following about Sokal himself is truly extraordinary:

... it may be that one part of Sokal really wanted to attack Heisenberg, Einstein *et al.* while another part wanted to be like them. He couldn't get away with the first and wasn't up to the second. So, instead of trying to impress his scientific colleagues with his profundity, he drew on the good will of the editors of *Social Text* to publish a piece that was far more ambitious and speculative than he would have been able to place with a straight science journal.

Sokal is a successful physicist, and has impressed his colleagues sufficiently. The idea that he could possibly regard the deliberate nonsense he sent to *Social Text* as 'ambitious' is, well, beyond parody. Hodge reveals himself as completely out of touch with 'reality'. Sorry, now I'm doing it—with reality.

There is not much more to be said, except to recommend that interested parties look at Sokal and Bricmont's book (1998), which explains in simple terms what is actually wrong with the postmodernists' statements about science, and sets out in even simpler terms why science should be believed.

*Correspondence:* James Franklin, School of Mathematics, University of New South Wales, Sydney 2052, Australia. E-mail: j.franklin@unsw.edu.au

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*James Franklin is a Senior Lecturer in Mathematics at UNSW. He maintains the Australia's Wackiest Academic Web Sites page ([www.maths.unsw.edu.au/~jim/wackiest.html](http://www.maths.unsw.edu.au/~jim/wackiest.html))*