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Understanding 'Social'

Peter R. Saulson

Gabriel Stolzenberg laments the many misreadings by scientists of works in the sociology of science. Certainly, many such misreadings occur. Part of the project embodied in *The One Culture?* (Labinger & Collins, 2001) was to work through a few of these.

I think it is worthwhile to consider some of the many reasons for these misreadings. With the greatest respect for sociologists, I'd like to suggest that sometimes they enjoy being misread. The word 'social', over which much of the dispute surrounding the Strong Programme has been fought, is used in a way that seems designed to bait the unwary into a misreading. As Stolzenberg notes, it can't be used with its ordinary meaning and still allow the claims of the Strong Programme to make sense. 'Social', in this context, has to include all that scientists would think of as actual experimental evidence of the nature of the world, *as soon as that evidence has entered human minds*. What on the face of it is a baffling insistence by Bloor and his followers to ignore the obvious (as my fellow scientists might see it) fact that we learn about nature by interacting with it, is perhaps more profitably understood as a hegemonistic claim on the part of sociologists that it is their discipline (and not, say, the philosophy of science) that is the proper one for understanding how knowledge of Nature is acquired.

The manifesto of the Strong Programme reduces any such subtle ideas to a few slogans written in code, not ordinary language. Thus framed, they beg to be misunderstood. And I think that some sociologists enjoy pretending to be saying something outrageous, even while they actually believe something that is merely interesting.

But as Stolzenberg points out, the engagement of most scientists with the social studies of science is at just the superficial level at which misunderstandings are likely to multiply rather than to be cleared up. Why is this so?

Partly, the reason is that we don't really care what sociologists think of us, especially those who eschew a deferential posture for one that pretends to be outrageous. Here we are, minding our own business and doing our work, when along come some guys who are going to explain it all to us.

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Who needs this? And why should we be expected to work hard even to understand their gratuitous commentary?

The previous paragraph was written in the voice of many of my colleagues, not my own or that of the other scientists who cared enough to contribute to *The One Culture?* The book was written out of a commitment that a genuine dialog was worthwhile. But it is important to remember that there is an inherent asymmetry underlying that dialog. Sociologists of science, after all, are professionally committed to understanding what scientists do, and so they spend their lives thinking about it and engaging with others who have thought about it. They work in an environment where words mean what they say they mean, no more and no less.

Natural scientists spend their lives doing science. What thinking we do about how science functions, or about how others might see it, we do at the level of a hobby. Any contest to be the most learned is stacked against us from the outset. If a proper dialog requires anything approaching the level of commitment to scholarship in the sociology of science that a professional sociologist has made, then the prospects for such a dialog are doomed. If there is to be understanding, then the learned need to make a commitment to clearing away the obstacles to that understanding. The dialog in *The One Culture?* is a start in that direction. If neither the scientists nor the sociologists succeeded in clearing away all such obstacles, that may be a shame but it is no crime.

But there is a deeper level on which the very sloppiness of reasoning by scientists about science conveys an important message. For most scientists, the connection of their work to Nature is not something that it appears sensible to question. This conviction has all of the hallmarks of a religious faith.

In one of his essays in *The One Culture?*, Collins discusses the anger that might be provoked in religious believers by a 'methodological relativist' approach to belief in transubstantiation during the Mass. Catholics would be outraged that its reality is questioned, while Protestants would be upset that its possible reality is even entertained. While this example gives a description of the outward feelings of believers, and the difficulties this could cause for a sociologist, it does not give an understanding of the reason for the intense commitment of a believer to a belief.

It is important to recognize that religious belief doesn't occur because of a rational evaluation of evidence, or as an elective choice in an intellectual parlor game. The crucial element in religious belief is its moral dimension. Belief in God is a commitment to a moral order in the universe. And belief in particular aspects of the natural order (such as transubstantiation for Catholics) is part and parcel of connection to that moral order.

For most scientists, belief in science's connection to Nature is just such a *moral* commitment. We are proud of our commitment to reason, and of the benefits in the form of knowledge (both practical and beautiful) that accrue from that commitment. But more than that, we are brought up to believe that the scientific method isn't just a good idea, but that it is the

embodiment of intellectual virtue, a light unto the nations. If only more people would apply its principles in their daily lives and in their own fields of endeavor, the world would be a better place, or so we hope at least.

Many of my colleagues, especially among those who most strongly share the views outlined in the previous paragraph, would resent my calling this a religious commitment. After all, one aspect of the belief in reason is the belief that it is the way that people can be liberated from superstition, a category that we would say includes most of the factual claims associated with traditional religious belief.

But physicists in particular feel that their work brings them into direct communion with the natural order. How else to explain Steven Weinberg's supreme confidence that, very soon, all doubters will be silenced by the manifest truth of the Final Theory. And Alan Sokal's own explanation of the motivation for his hoax embodies a similar commitment: that only by returning to a belief in objective truth, revealed by the methods of science and reason, can we clear the path for progressive social change.

There is one other feature that scientists' beliefs have in common with those of a religious believer: a feeling that their truth is so evident that it is difficult even to use reason to defend them. How, indeed, to make a reasoned argument in favor of Reason? Either you get it or you don't.

This, in my opinion, is the reason for the rather simplistic defenses of science by most scientists. They should best be thought of as testimonies of faith and denunciations of error. The actual conversion of unbelievers has to come through a mysterious personal journey, only partly mediated by written texts.

Perhaps this is exactly what Stolzenberg is trying to say, when he makes the statement that most scientists don't even recognize that there is an incommensurate sociological point of view from which to view science. He laments this state of affairs. I think it is unreasonable to expect it to be otherwise, so we should learn to live with it. The most we should expect is a return to tolerance. I hope that dialogs such as that embodied in *The One Culture?* are useful steps in that direction.

Reference

Labinger, Jay A. & Harry Collins (eds) (2001) *The One Culture? A Conversation about Science* (Chicago, IL: University of Chicago Press).

Peter R. Saulson is Professor of Physics at Syracuse University.

Address: Department of Physics, Syracuse University, Syracuse, New York 13244, USA; fax: +1 315 443 9103; email: saulson@physics.syr.edu