Symposium

The Arts and Scientism: A Comment on 'Wittgenstein and Aesthetics'

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In his 'Wittgenstein and Aesthetics' (*Literature and Aesthetics*, Spring 1993), Lloyd Reinhardt raises the question of scientism: in its strongest form, the doctrine or ideology that only science can enable us to understand anything, and in its weaker forms the view that scientific explanation should act as a model for other types of explanation. As he points out, one helpful way of focusing on what is at stake here is to attend to the contrast between explaining things by providing causes of their occurrence (where this is taken to be distinctive of scientific explanation) and explaining them by providing reasons for them. And further enlightenment can be gained by examining those disciplines where there is some uncertainty as to whether one should be explaining in terms of reasons or causes: do we explain the Indians' rain-dance in terms of the social cohesion that this otherwise useless exercise secures (causal explanation) or in terms of the clear intention on the part of the participants to induce it to rain (reasons)? Wittgenstein drew attention to the problematic cases of anthropology (in his discussion of Frazer) and psychoanalysis, but such disputes have parallels in a number of areas in the arts and humanities, from social theory (e.g. in the disputes of the 1960s and 1970s over whether Marxism was a scientific or humanistic discipline) to musicology (e.g. in the recent disputes over analysis versus contextualized accounts).

Now one can try to deflate such issues by maintaining that the provision of reasons and the provision of causes are designed to achieve different things, so there isn't really any *competition* between them: indeed they could, perhaps, complement one another in any account that had any claim to completeness. But matters are not quite so simple. For one thing, the advocate of causes will insist that causes provide us with something fixed and permanent which holds independently, whereas reasons tend to be context-specific and vary from case to case. And it may also be maintained that once we have the causal explanation we have the basic account of why something occurred, so that everything else is an added extra. On this view, while reasons may occasionally supplement causal accounts, they can never supplant them.

This brings us to the issue of scientism, where what is ultimately at stake is the value of the arts and humanities in comparison to the value of the sciences. Those who pursue the arts and the sciences find them intellectually satisfying, but are those who pursue the arts satisfied with less, with a less profound form of understanding perhaps? Or to put the issues in harsher terms, if our aim is understanding and intellectual satisfaction, could we, if pressed, do without the arts but not the sciences? I take it such a view is implausible, but the degree of its implausibility is not matched by the ease with which the misunderstanding on which it rests can be identified.

One thing we cannot do is risk a converse implausibility, by effectively identifying scientism with science, so that we end up taking sides for the humanities and against science, something Wittgenstein comes close to. We must avoid a 'ranking' of arts and sciences along a spectrum of profundity. (Indeed, I have general doubts about the value of trying to place different disciplines on a spectrum and am not at all convinced that the value and distinctiveness of aesthetic judgement can be captured by placing it on a spectrum between ethics and mere preference, as Lloyd Reinhardt maintains, but I don't want to pursue this particular form of scientism—measurement fetishism—here.) But to question such ranking does not resolve the matter, nor does the solution lie simply in pointing out that the arts and the sciences have different intrinsic merits, for this is precisely what has to be established. The problem is, then, what kind of thing does one do to establish this? If we have sympathy with Wittgenstein's intuitions about scientism, can we indicate what at least some of the sources of the problem might be?

One source that I want to draw attention to, in a very speculative way, is a misunderstanding about science. One thing that is commonly thought to mark out science from the arts is that the former exhibits progress, whereas the latter do not. Yet no one who has made some effort to study the development of music in the century between Beethoven and Schoenberg, say, could deny that all kinds of progress have been made in the areas of orchestration, phrasing, the ability to construct continuous large-scale works, and above all in the ability to expand and explore an emotional terrain in music by the chromatization of harmony and the attempts to shape this chromatization. It is simply a question of musical fact that Wagner had the compositional techniques to do things in music that Beethoven could never have done, and that Schoenberg had the compositional techniques to do things in music that Wagner could never have done. Of course, this doesn't make Wagner's contribution to music greater than that of Beethoven, any more than Maxwell's having the techniques to explain the connection between electricity and magnetism makes his contribution greater than that of Newton, who lacked these techniques. After all, Wagner's contribution would have been impossible without Beethoven's, and

Maxwell's without Newton's. It seems we have progress in both cases, progress in which later contributions rely crucially on earlier ones.

This will be disputed if one thinks that only the latter case is one of *real* progress, but what is the basis for drawing the distinction? As often as not it is that science is aiming for the truth about the nature of things, a truth which it approaches as it develops, whereas the arts approach nothing like this: they don't progress *to* anything. And an advocate of this view might add that this explains why, while one can think Newton a greater scientist than Maxwell, one cannot prefer Newton's account of magnetism to that of Maxwell: whereas if one thinks that Beethoven is a greater composer than Wagner, one will prefer Beethoven's music to that of Wagner. The crux of this argument is that progress in the strict sense requires some end, some *terminus ad quem*, towards which the progress is directed and against which it can ultimately be judged: and only science can make such progress in the strict sense. This is ultimately the point we have to come to terms with if we are to respond effectively to scientism, for this is something from which scientism derives a good deal of its appeal.

One response we should avoid is to maintain that the arts actually do progress in this 'strict' sense. The idea of progress in the arts is an Enlightenment conceit, deriving from the idea that art, like everything else, can serve the common cause of progress. But while we are on the topic of Enlightenment conceits, we had better pause to consider Enlightenment conceits about science. After all, it was the Enlightenment that unveiled the conspiracy of priests and overthrew religion, claiming in the process the right, previously reserved by religion, for science to be the arbiter on matters of the ultimate nature of things. This had a gradual but remarkable impact, and I draw the reader's attention to just one: the virtually complete abandonment of 'nature' as a proper subject for aesthetic theory from around 1800, so that from then on aesthetics devoted itself to works of 'art' and simply fell silent on the questions of the beauty of nature. Like it or not, 'nature' was now the exclusive preserve of the sciences.

What I want to suggest is that the idea that science has a single end—'truth' or the understanding of 'how things are'—is as much an Enlightenment conceit as the idea of progress in art. The Enlightenment drove out teleology from nature, only to reinstate it in our search for understanding. Science and the arts both set up projects which enable us to answer specific questions or achieve specific things—why planets orbit in ellipses, whether the equations of the parabola and the ellipse are of the same degree, how to paint a picture so that its perspectival arrangement can be appreciated from any viewing angle, how to make the sonata form seamless so that the sense of a single musical argument can be conveyed, and so on. Of course there are substantial differences between

these projects and the means by which they are achieved, and amongst the criteria we use to assess whether they mark an advance beyond earlier approaches. This is not to suggest that the criteria of success are always purely internal, if by this we mean that only those inside the discipline are ever in a position to assess the viability of the way they are going about dealing with a problem, but few would doubt that internal criteria are what do the real work. To impose some overriding criterion—the idea that science converges on the truth—adds nothing to our understanding of what is going on. This is not to suggest that pre-Enlightenment philosophers and scientists never raised the question of knowledge in teleological terms, for they manifestly did. What they did not do, so far as I can tell, is to judge that it could simply be left to science to deliver the goods, that science was the ultimate arbiter. What earlier scientists did can of course be glossed as 'the search for truth', but what they were concerned with was finding (true—of course!) answers to specific problems.

The historian of science Alexandre Koyré pointed out in the 1950s that the successful study of motion began when Galileo and others stopped conceiving of the motion of a body in terms of a *terminus ad quem* (an end point or goal to which it was directed) and started to consider its motion in terms of its *terminus a quo* (its initial state). I suggest that similar benefits are to be reaped from thinking of scientific development in terms of the particular projects that various scientific disciplines take on, rather than in terms of some convergence on the truth. And if we strip science of this Enlightenment teleological gloss, we will be able to appreciate the errors of scientism without falling into the temptation to become anti-science.