

Seeing in the dark

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Scientism: Philosophy and the Infatuation with Science. By Tom Sorell. Routledge: 1991. Pp. 206. £35, \$45.

ABOUT 20 years ago, in an informal seminar held in connection with a drama festival at the University of Cambridge, one of the most prominent literary critics of our time suggested that Molière and Stendhal have more to teach us about the workings of the human mind than any conglomeration of academic psychologists. Whether or not the remark was intended as a serious thesis about the limitations of science, it has remained with me as an exemplary formulation of the concerns that underlie accusations of scientism. At a time when various intellectuals are again offering more-or-less strident denunciations of the alleged hegemony of natural science, it is salutary to focus the issue on a clear and interesting claim: is the psychological understanding achieved by the great dramatists, poets and novelists superior to that gained in the laboratory?

Despite its title and some of the comments on the back jacket, Sorell's *Scientism* is a measured book. Sorell believes that much scientific work is valuable, and worries only that our appreciation of its qualities will blind us to the virtues of nonscientific approaches. Indeed, he is sufficiently concerned about some modes of denouncing science (for example the charges levelled by 'creation scientists') to limit his argument to a narrow domain. Philosophy, he suggests, has been overawed by the natural sciences. As a result, since the seventeenth century, generations of philosophers have adopted pale imitations of what they take to be scientific thinking in an attempt to resolve philosophical problems. Unfortunately, the really deep problems of philosophy resist such approaches, and, cutting themselves off from fruitful, nonscientific sources of ideas, philosophers doom themselves to failure.

Sorell's strategy for defending this position is to chip away on many different fronts. He begins with those rather predictable targets, the logical positivists, apparently everyone's favorite villains these days. (It is worth recalling not only the intellectual liberation brought about by the Vienna Circle, but also the steadfast efforts of their members in opposing Fascism.) Turning his attention next to the seventeenth century, he tries to expose the roots of philosophy's infatuation with science, arguing that both

Bacon and Descartes slighted the credentials of nonscientific branches of learning.

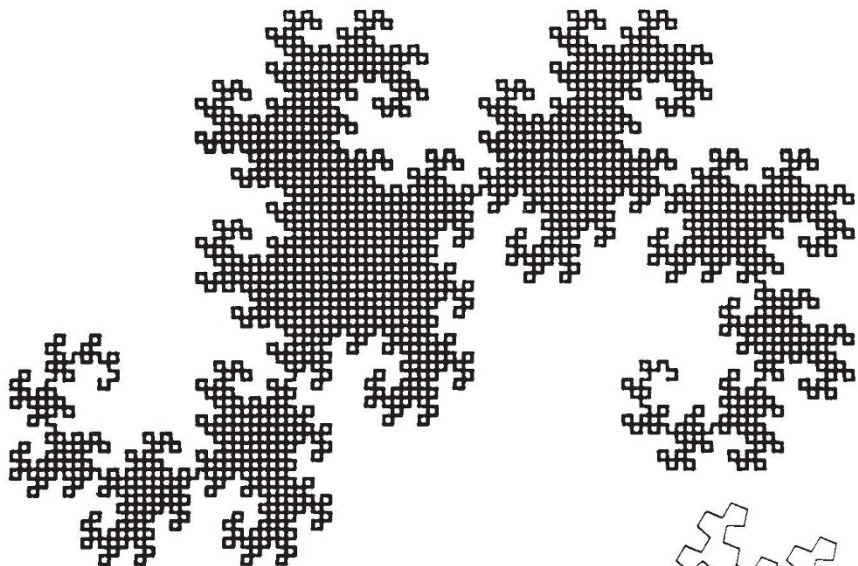
Sorell continues with some fairly detailed textual exegesis — and, to my mind, a certain amount of special pleading — designed to show that Kant was on the side of the righteous. Despite his obvious respect for eighteenth-century science, Kant recognized the value of other modes of thinking, notably our moral reasoning. But instead of trying to develop a kantian conception of knowledge and action, Sorell changes focus, offering first some sensible reflections on moral assessments of science, then an ecumenical look at the 'two cultures' debate, and finally some specific criticisms of 'scientistic' ventures in contemporary Anglo-American philosophy. These pages are dotted with useful points, but, in my judgement, they will leave the reader unsatisfied.

By the end of the book, we know that Sorell respects the employment of science in its proper sphere. We also know that he believes that there are nonscientific modes of generating insight, pre-eminently in the realms of moral thinking and in the arts. What is lacking is any systematic treatment of exactly what kinds of problems resist assimilation to the ideas or methods of the natural

sciences, and of exactly what kinds of ideas or methods might be appropriate to these problems. For all its piecemeal criticism, Sorell's book never provides a crisp thesis about the rival claims of two well-defined modes of inquiry — as, for example, the suggestion that the great dramatists have more to teach us about the springs of human action than do the academic psychologists.

The absence of a definite positive view weakens some of Sorell's criticism. In one of his later chapters, he takes on the suggestion, offered by Patricia Smith Churchland, that contemporary developments in neuroscience can reform the theory of knowledge and the philosophy of mind. Sorell believes that the really big problems about knowledge and mind will always elude reductionist analyses. Perhaps. But just as philosophy has played midwife to the sciences, the sciences have tutored philosophy. The 'new science' of the seventeenth century advanced philosophical discussions in epistemology and metaphysics. Developments in nineteenth-century mathematics have transformed logic. Recalling an earlier period, we can imagine a fourth-century-BC Tom Sorell protesting that the really big issues about change and motion will always resist scientific solution, not foreseeing the ways in which mathematics

Images of chaos



IMAGINE folding a narrow strip of paper in two, and then repeating this twice, folding in the same direction. On unfolding, you would have a strip that from the side would appear as a meandering line, the vertices of which are folds. With a computer, you could draw the meandering line that results from folding any number of times. The line on the right would result from six folding steps. The 'dragon' curve shown above is a special case resulting from 14 steps and is so called because it reminded its discoverer, J. E. Heighway, of Chinese dragons. Surprisingly, it does not intersect itself and has the same basic form as the line below. In *Fractals*, Hans Lauwerier introduces the concept of fractals by discussing these and other meandering lines, making clear the underlying mathematics of fractals as well as explaining how to conjure up these "endlessly repeated geometric figures" on computer screens. Accessible and colourful, the book is translated by S. Gill-Hoffstadt and published by Penguin/Princeton University Press. Price £9.99, \$14.95.