

The Mirror, the Beaker and the Touchstone, or, What Can Literature do for Science?

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SCIENCE, IF DEFINED AS THE METHOD OF PRODUCING THE KNOWLEDGE we call "scientific," and not just as that knowledge itself, is a young discipline. For it is the way in which we *practice* science, and the ends for which it is used, that pose formidable problems today. The science practiced before the (aptly-named) Galilean revolution would not be recognizably "scientific" to a contemporary audience. Science is young; it is an upstart in the arena of applied arts and crafts; it needs to be educated, cultivated, supervised. Still an adolescent, there is the danger that it might turn out badly. Science needs to know itself, to become aware of its own nature, in order to know its limits and control its temptations.

In "bringing science into culture" (Lévy-Leblond, 1984, 1986), a major role is allocated to literature, because literature brings "what it alone can give to readers: a deeper, more complex and more accurate understanding than people can have by themselves of who they are, of their condition, of their life" (Nathalie Sarraute, in *L'Ère du soupçon*). In an era when our condition and our lives are whipped into subjugation to technoscience, I believe that literature can give us a "more complex and more accurate" understanding of ourselves than can many theoretical analyses, whether these analyses be historical, epistemological or sociological. This is true above all for scientists who are closed up in laboratories, places which are not known to facilitate the development of self-awareness. What follows is an attempt to implement the old Socratic adage "know thyself," aimed at both scientists and laypersons.

I am deliberately more interested in what literature can give to science than vice-versa. Certainly literature has for a long time drawn from the realm of science for images, metaphors, models, and forms, and numerous studies have been consecrated to these borrowings. For example, it is well known that Goethe's *Elective Affinities* is indebted to chemistry; the upheavals in physics early in this century (Einsteinian relativity, quantum theory) did not pass authors such as Virginia Woolf, Faulkner or Joyce unnoticed (Friedman & Donley, 1985); as for so-called "modern" mathe-