The sociology of scientific work : the fundamental relationship between science and society

Geneviève Teil

Book review Vinck, D., 2010, The sociology of scientific work; Edward Elgar.

Teil, Geneviève

The book title is at the same time well chosen and a bit misleading. Misleading because a few crucial themes in science studies such as « truth », « objectivity » or the difference between “scientific” or “profane” claims are not examined in depth.

Yet, the book is dedicated entirely to the sociology of science, and even better said, the sociologies of science.

It is an ordered compilation of the thousand and one ways to analyse science. Structuring such syntheses is indeed a difficult issue. The structure of the book pleasantly combines two threads; one historical and the other covers its object from the macro to the microsociology. The reader begins with institutional theories, more ancient and global, or “macro”, and finishes with ethnomethodology and the finely detailed studies of scientific activity. The transition between both currents occurs more or less within the sixth Chapter. One may regret that its title, “Society’s influence on knowledge content”, does not reflect the conceptual transition happening in the chapter, the relinquishment of the “social influences” and the “causal” social theories.

Indisputably, this book is a very detailed inventory of the different sociological works about science. The bibliography is thorough; it recalls forgotten, often un-cited, and unjustly unappreciated authors. The presented sociologies extend even towards a historical sociology rapidly depicted in the first chapter. But the main originality of this book is its commitment to privileging exhaustiveness to the mutual critique of the different points of view presented Conceptual criticism is reduced to a few lines here and there as the book progresses and a few pages at the end of the book. Sharply contrasted claims follow each other chapter after chapter covering science, its organizations, collectives, scientists, practices, instruments, and publications… switching from deterministic social studies to the most constructivist and pragmatic analyses.

This absence of criticism of the presented results has a particularly mollifying effect and transforms science into a plural social object. One may however regret the resulting fuzziness of important distinctions between different constructivist views for instance. The reader has to wait until the end of the book and an insert on page 244 to catch how the notion of ‘cause’ has been pointed out and clearly suspended by some of the often-cited-.authors. This absence has also another “relativistic” effect: all points of view seem equal and necessary to account for “science”. For Merton science and its claims are the result of power struggles and social positions. For Latour, and more “interpretationist” and pragmatic authors, they are the unforeseeable result of the scientific activity and proofs scientists use to test nature. Is it possible to juxtapose these claims without recalling in detail why these different views have come to such opposite analyses? Which particular problems, which answerless questions lead them to revert the fundamental hypotheses of the predecesssors?

Does everyone have to make his own choice, blindfolded so to say? If the author withdraws from weighing the differences between scientific positions, comparing their respective worth, is it in order to bequest the reader with this responsibility and ask him to follow his own judgment?

In this case, to what public is this book intended to?

Social scientists will find in this book a substantial panorama of the sociological views on science, students will too. They will be able to deepen social studies of science by consulting the various works mentioned.

Yet this book claims to address an audience composed of engineers.

From this standpoint, this book is not one more contribution brought to a renewed understanding of science, but a general undermining of the idea according to which science is a particular human activity succeeding in extracting "truth" from its social envelope, a purpose that science servants substitute to any other possible aim. Indeed all social studies of science are mobilised towards this end: while history in chapter one shows a slow differentiation and empowerment process of the scientists. Merton and Ben-David dip science back into sociological processes; chapter six reviews all the social "influences" on scientific knowledge; thanks to his own work and experience, the author emphasizes the internal conflicts occurring in science, he points out the denunciations of their lack of independence, their compromises, the difficulties faced in achieving unbiased evaluations… Studies in the field show the humanity common to scientists and human beings, their blabber and hesitations, their mistakes in this patient collectively planned production of scientific claims.

By the end of the book, science has become a human activity as any other, with its specificities, its never achieved purposes, its always-readjusted means and practices.

Is such a pulling down of science detrimental? Or is it on the contrary necessary to the training of engineers? Certainly. As much of the work reported in the last chapter "the laboratory in society" suggests, the lack of understanding between scientists or experts and citizens may well be at the core of their rejection from science activities. If today's goal at stake is the reconstruction of new relations between science and society, this book is a very useful manual for engineering students. It will help them to think of themselves as servicing a plural truth, embedded in collectivities and most of all at the heart of society.