

Condorcet : A Theory of Knowledge

Michèle CRAMPE-CASNABET

« Theory of knowledge » is not an expression belonging to Condorcet's vocabulary. It appears at the beginning of the 19th century in relation with the German philosophers who consider themselves successors of Kant. Nevertheless, Condorcet offers a theory which claims to provide us with an analysis of the mechanisms of the human mind in its theoretical as well as practical activity.

Under the influences of the Empiricism and Sensualism of his time, he works out a theory of ideas, language and of the future of the human species and its progress towards rationality and happiness.

To think, to know, to speak, to educate, to behave as an autonomous citizen are the new objectives of metaphysic, a science of man who is an historical being. This science for modern times is expressive of the maturity of the human mind which could be called a rational empiricism.

*Condorcet : From Political Economics to
the Social Sciences*

Jean-Claude PERROT

Condorcet's political economics did not interest his contemporaries nor historians. This article seeks to explain this anomaly. It notes that this academician's economic culture was extensive, that we cannot confuse his analyses, upheld by rational arguments, sometimes algebraic, with the production of a publicist. Nevertheless, the theoretical fluctuations of the author need to be explained. For this purpose we must place ourselves on an epistemological level. Condorcet's final works, le Tableau, l'Esquisse, demonstrate his coherence. They integrate economics into the social sciences. By utilising an historical approach buttressed by the

theory of probability, they make his changes of exposition understandable : Condorcet has always held economic politics as the principal exercise of political economics. Conditions of knowledge can be the object of a science, but its content is doomed to a decline through the evolution of society. By challenging a science of economics founded on the model of natural sciences, in the sense of the physiocrats, Condorcet contradicts all the aspirations of his age and those of the 19th century. He pays the price for it.

*The Faith of the Geometer, the Vocation
of Knowledge for Condorcet around 1770*

Éric BRIAN

This article is a first step toward an attempt to reconstruct the scientific and political growth of Condorcet's ideas on probability and moral sciences. The text describes the practice of mathematical analysis, as understood by Condorcet and his master d'Alembert. As a conclusion we sketch a restitution of the development of Condorcet's conception of the application of analysis to moral sciences.

Statistics and the Happiness of Humanity

Bernard BRU

We discuss the following question : how Condorcet, friend and follower of both d'Alembert, who threw out the theory of probabilities, and Turgot, who despised political arithmetic, came to propose a precise « social Art » through the doctrine of probabilities. We try to show that Condorcet was consistent and profoundly original.

How Decisions Are Taken on Major Equipment Dominique PESTRE
in Big Science Laboratories :
A Description Followed by Remarks

The article comprises two parts. The first presents a case study, the decision on CERN's second generation of accelerators in the 1960s. Finally financed in 1965 (the Intersecting Storage Rings) and 1971 (the 300 GeV synchrotron), these machines dominated CERN's experimental program in the 1970s and 1980s. The second part considers what counts in the decisions on heavy equipment in big science laboratories. Compared with other areas of post-war science, the respective roles of technical and political ways of arguing are considered, as well as the professional rifts which characterize large research units. In conclusion, the dimension of process which every decision exhibits is stressed.