Controversy and Truth

1. The Pouchet-Pasteur Debate over the Spontaneous Generation

This first lecture aims at reopening the case of the controversy over spontaneous generation, debated between Pasteur and Pouchet in the years 1859-1864. After giving a definition of a scientific controversy, a detailed chronicle of the debate is given. We recall the interpretation of this affair by the representatives of the new sociology of science (Farley and Geison 1974, Mendelsohn 1987, Latour 1989, Collins and Pinch 1993, Vinck 1995, to cite but a few authors). The controversy is reinterpreted from archival materials, which provide new and conflicting evidence on this affair. The origin of the relativist-constructivist reading of the controversy is being questioned on that basis. The lecture ends by an assessment of the programs dedicated to the analysis of controversies, explaining their shortcomings in light of the outcomes achieved on the Pasteur-Pouchet debate.

2. Truth

The second lecture aims at focusing on the notion of truth, which has generated much discussion especially in the second half of the 20th century. I shall merely survey and discuss the different meanings of the notion, with examples drawn from the philosophy and the sociology of science: the correspondence theory of truth, consistency theory of truth, the reduction of truth to usefulness, power or social consensus, as well as the outright abandonment of the notion of truth. Although none of these theories is immune to criticism, a simple test of logical contingency highlights the flaws of the eliminativist and reductionist theories, thus suggesting the endorsement of the strongest of these theories – the truth as correspondence – and revision of the aspects on which correspondence is achieved (namely, field and filtering).