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Narratives of Science and Religion



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My arrival at the Wissenschaftskolleg in the fall of 1988 was accompanied by a "cultural shock" of sorts, engendered by the lyrical beauty of nature around, by material comfort, above all by the library facilities, effacing in one stroke my life-time physical distance from the objects of my professional preoccupations. In a rather euphoric state of mind I have set myself three goals, which I hoped to accomplish during the year. First, I was to complete my work on the manuscript of a book *Galileo and the Church: Political Inquisition or Critical Dialogue?*, to be published by Cambridge University Press. The book probes into the inter-relation of science and religion in the Catholic world of the Counter-Reformation era, through a revision of the traditional story of the Galilean affair. My historical story evolves as an inversion of the "conflict between science and religion" — in my view a myth, imposing its narrative structure upon most historical accounts, independently of many revisions of the details involved. Instead of setting an opposition between the power of an authoritarian Church and the growing body of scientific knowledge, I have attempted to conceptualize the encounter in terms of two types of power/knowledge structures confronting each other, but allowing, in the meantime a wide space of interaction through the mediation of the educational system. The original manuscript of this book was written in Hebrew. It has then been translated into English by a professional, but the translation work manifested a problem I had not foreseen. It so happened that the translator, an orthodox Jew, was unable, or unwilling, to

fathom the intricacies of Catholic theological discussions of the knowledge and will of God, in the course of which such concepts as certainty, contingency and causality were modified in interaction with the philosophical and scientific practices of a predominant intellectual elite of the Catholic Church. Thus, I found myself returning to an older project, reformulating some of the problems and clarifying some of the more obscure passages as a result of linguistic and cultural misunderstandings between me and the translator.

In a way, my interest in Catholic science during the Counter-Reformation grew out of my socialization into the discipline of the history of science during the 1970's, when the historical sociology of R. K. Merton was in the center of historiographical debate about the origins of modern science and its relation to Puritanism. Merton's study, *Science, Technology and Society in Seventeenth-Century England*, which had first appeared in 1938 was republished in 1970 with a new preface, and engendered a new wave of research relating to his work. Partly due to the centrality of this thesis, the problem of Catholic involvement in science became a non-subject. However, the historiographical scene had changed during the 1980's. A number of interesting studies dealing with Catholic, especially Jesuit, science broke the stalemate in this field and became an empirical challenge to Merton's implicit contention that Catholicism was not conducive to modern scientific work. Fifty years after the first publication of the Merton thesis, in 1988, I suggested to convene a conference in Jerusalem, dedicated to the reevaluation of Merton's implicit assumptions about Catholicism and science, based on recent historical research in the area of Catholic science. My second project at the Wissenschaftskolleg grew out of that conference, and consisted in editing, with Yehuda Elkana, a volume entitled *Around Merton: Catholic and Protestant Science*, to be published this fall (1989) by Cambridge University Press, in their series Science in Context.

In our introductory essay to the volume we have presented two challenges to the Merton thesis: systematic and historical. Merton's systematic presupposition was that scientific bodies of knowledge were always enveloped by an a-rational set of social values and norms which enhanced or constrained the acceptance and diffusion of science in society. Science itself, however, namely the body of knowledge, was for Merton a wholly rational system of ideas, essentially unaffected by the enveloping values and norms. Some of the papers in our volume, by using different categories than Merton's "norms" to account for the flourishing of particular scientific styles in certain environments, transcend the sharp distinction between internal and external factors in the emergence of science. This may signal that the internal-external debate, rooted in Merton's separa-

tion between "science" and "values" has become obsolete, and may give way to discussion of those cultural practices which shape society and mould bodies of knowledge in close interaction. In addition, Merton's historical argument attempted to relate the social values of Puritanism to the norms that accompanied the scientific enterprise in 17th century England, implying that those were more conducive to the development of science than the values of the Catholic tradition. The profusion of studies of Catholic science present a further challenge to Merton's historical "bias". Indeed, they tend to show that the Catholic environment enhanced different styles of scientific argumentation than the Protestant environment. This conclusion, however, still challenges Merton's rigid conception of one, fixed "nature" of science, stemming from his identification of the scientific ethos with the Protestant ethos.

The paper I contributed to the Merton volume, entitled *The Discourse of Pious Science*, is part of a third project in which I have been engaged during this year. The paper presents an analysis of a course in astronomy from 1689, written by a Jesuit Professor at the Collegio Romano. It aims at characterizing a neoscholastic scientific style as one of the discourses on nature which competed for cultural hegemony during the Scientific Revolution. In this project I investigate the relations between a series of different types of discourses — Giordano Bruno's and Montaigne's, Galileo's and the Jesuits' — in order to tell the story of the formation of certain boundaries: between religion and science, between the occult and the scientific, between science and literature. Also, it is a project which works on the meta-historical level. It aims at a definition of a set of theoretical concepts which would make possible a shift of interest from knowledge as an a-temporal system of ideas that represent reality, to the reality of "discourse" as a structured activity for the production of knowledge.

My overoptimism upon arrival was not detrimental to my progress, although I was far from accomplishing all three goals by the end of the year. The first months were wholly devoted to my third project. I wrote a new paper, criticizing the narrative structure of the traditional story of the Scientific Revolution, which presupposes the boundaries of science rather than investigate them. I also suggested an alternative in the form of a story of "survival in culture". This paper I presented in a meeting of a group of Parisian historians at Royaumont, which took place in December. Another paper, *Heresy and Hierarchy: The Authorization of Giordano Bruno*, was completed and dispatched to Stanford Humanities Review, where it appeared in the Spring issue of 1989. The third paper belonging to this project, *The Discourse of Pious Science* was sent to Cambridge, with the rest of the material for the Merton volume at the

beginning of October. The time which was left was dedicated to the manuscript of the Galileo book. Oddly enough, the task which was most urgent, and seemed to require the least effort remained unfinished. I completed six out of ten chapters, and am left to my struggle with the rest, in the hectic atmosphere of a busy academic year at Tel Aviv university.