THE RISE OF MODERN SCIENCE: ISLAM AND THE WEST

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Introduction

The rise of modern science has evoked responses from both Muslim and Western thinkers. Since science is a central feature of modernity, their responses to science can also be read as their responses to modernity. These intellectual responses can best be gauged through discourses in the history and philosophy of science since the 1970s.

Although the history and philosophy of science are commonly understood as academic disciplines that study science in its historical and philosophical aspects, discourse in the history and philosophy of science can nevertheless be seen as part of the wider discourse on modernity (Ravetz 1990; Rouse 1991). Scholars have attempted to define the meaning and content of modernity and what makes it different from pre- and postmodernity. Its essential features, among others, are: rationality, objectivity, empiricism, scientific method, the concept of progress, and secularism. As the modernists have associated these characteristics of modernity with science itself, the issues concerning modernity are therefore discussed in the academic discipline of the history and philosophy of science, in terms formulated by those who advocate and oppose modernism as ways of life and thought, respectively. To a certain extent, discourses on the history and philosophy of science sometimes reveal the contestation of ideas between modernists and anti- or non-modernists, and it is on this issue that the present essay shall dwell, albeit from a comparative perspective involving Islamic and Western thought.

Apart from the introduction and the conclusion, the main body of this article will be divided into three sections. The first section offers an exposition of Western philosophy of science in its two main forms, (1) positivist/modernist and (2) postpositivist/postmodernist. Postpositivist or postmodernist philosophy of science can be regarded as a reaction to positivistic and modernist philosophy of science. Such an exposition is necessary since discourse in Islamic philosophy of science cannot be understood independently of the Western background, given that Muslim thinkers such as Nasr, Sardar, and al-Faruqi are themselves in dialogue with