BOOK REVIEW

Conflicting Values of Inquiry. Ideologies of Epistemology in Early Modern Europe (ed. Tamás Demeter, Kathryn Murphy and Claus Zittel). Brill, 2015

What are the standards for natural philosophical inquiry? To this question Early Modern philosophers came with different particular answers, with different ideologies of knowledge¹ that centre around values such as usefulness or moral goodness. The challenges that early modern philosopher had to deal with were less the discovery of new facts and theories but the creation of the standards and values according to which his endeavours represent genuine inquiries into nature. Acknowledging the important social, politic, economic, etc. background of inquiry, insisted upon in the last 30 years, the present volume propose to "turn back to guestions of the epistemic content itself"² and analyse the epistemic values involved in the seventeenth and eighteenth-century scientific inquiry. The 15 contributions to this volume explore the main battlefields in which the epistemic values of Early Modernity were forged: the devices that orient and shape the ideology of inquiry, the role and characteristics of testimony, the religious requirements for epistemic research, the strategies of conflict, the exceptions raised by "the science of man", and the role of ethics *per se* in shaping epistemic values. The conflict between various values at play in Early Modern period shaped and are constitutive to the epistemic practices and theories developed during these battles for science.

The first paper of this volume begins by arguing that SSK (Sociology of Scientific Knowledge), which explained epistemic ideas in terms of socio-political context of their emergence, needs to accommodate the indissoluble epistemic links between ideas that evolve in intellectual debates of the period. After this introductory remarks Peter Dear gives an illuminating history of "Reason" in the seventeenth and eighteenth century, that goes up to D'Alembert's 'Preliminary Discourse' to the Encyclopédie. He shows that this concept evolves autonomously following the internal logic of intellectual history and this evolution "merely emphasizes the inseparability of the diverse categories-political, theological, intellectual, physical-that constituted the epistemic themes" (p. 37), instead of reducing each epistemic move to an external explanatory category.

The devices constructed by artisans and engineers of the sixteenth century play a major role in the emergent epistemic paradigm. The first subsection of the book,

¹ Tamás Demeter, "Values, Norms and Ideologies in Early Modern Inquiry: An Introduction", în *Conflicting Values of Inquiry. Ideologies of Epistemology in Early Modern Europe*, Intersections. Interdisciplinary Studies in Early Modern Culture 37, Brill, 2015, p. 1.

² Ibidem, p. 2.

"Devices and Epistemic Values", focuses on the way in which hydraulic devices and the *camera obscura* modulate the scientific discourses of pneumatology and perception theory. The change of focus from the external influences to the internal evolution of ideas become evident in the discussion by Matteo Valleriani of the Garden of Pratolino whose engineer, Bernardo Buontalenti, took up an analysis of vacuum outside the Aristotelian framework, developing an artifact-based model for natural philosophy debates. In the same manner, Dániel Schmal insists on the role of *camera obscura* as a model for the analysis of vision in Descartes.

An important theme for the newlyestablished Early Modern empirical philosophy was the problem of testimony since the laws of nature were established by unusual, carefully-calibrated and detailed experiments which have to be attested by attentive, educated and reliable persons. The second section of this volume, "The Epistemology of Testimony", analyses how testimony can be used in establishing the truth in the cases of Sergeant and Hume. John Henry shows how the need of defending Catholic tradition determines Sergeant to attack Locke's conception of ideas founded on the autonomous mind in favour of common notions forged by natural language by observing the usual course of nature. While Falk Wunderlich develops the arguments of Hume for total rejection of miracle reports in religious contexts.

In his "Kepler's Revolutionary Astronomy: Theological Unity as a Comprehensive View of the World", Giora Hon presents the seemingly diverse faces of Kepler, from the brilliant mathematician to the intricate occultist, as the struggle for both a theological unity of science and a divine foundation of knowledge. Contrary to this inclusive epistemology offered by Kepler, Hume is presented by Tamás Demeter as the one who tries to impose "secular methodological standards" (p. 176) to a century still haunted by the image of God's two equivalent books: the Book of Nature and the Bible. Against this "basic ideological framework" that gives equal status to religious' and natural philosophy's knowledge claims, Tamás Demeter shows that Hume engenders a *religious* fictionalism for which the truth-value of religious teachings has no bearing on their social and moral importance. The last paper that explores the relation between "Religion and Inquiry" is János Tanács' "The Problem of Parallels as a Protestant Issue in Late Eighteenth-Century Hungary" which presents the imbrications of mathematics and religious denomination. János Tanács shows how the belonging to the Protestant milieu of Hungary was instrumental in involving oneself with Kantian philosophy and the Problem of Parallels.

The fourth section, "Values in Controversy", focusses on the way in which epistemic values are forged and put to work in Early modern science and philosophy. Gábor Áron Zemplén presents Newton's use of new rhetorical and methodological strategies in promoting his theory of colours through controversies and readjustments. Similar controversies are analysed by Axel Gelfert in "The Birth of Epistemological Controversy from the Spirit of Conflict Avoidance: Hobbes on Science and Geometry".

This time the controversies proved to be detrimental for the main actor, Hobbes, who insists in his erroneous mathematical pursuits. Axel Gelfert shows that his insistence was driven by the conviction that geometrical demonstrations could preclude controversies and that his political philosophy has a demonstrative force similar with Euclid's *Elements*. If the main focus of Early modern philosophy is the study of nature, there is also, especially at the end of that period, a turn toward the "science of man", an attempt to study, with newly established methodologies, the moral realm. Thomas Sturm presents the challenges and failures faced by David Hartley, Êtienne Bonnot de Condillac, Charles Bonnet or Christian Gottfried Schütz in applying Newton's methods to human sciences. The Newtonian paradigm in natural philosophy also influenced the way Hume presents his own advances in moral sciences. Eric Schliesser shows in his paper "The Science of Man and the Invention of Usable Traditions" that, before the wide acceptance of Newton's theories. Hume presents himself as the Socrates of Early Modern who reforms moral philosophy after a century of reforms in natural philosophy, while the changes effected by Newton makes him reconsider the historical narrative and the model of progress of inquiry.

The last section of the book deals with proper ethical values, their role in shaping natural philosophical research and the transformation of such values into proper epistemic ones. Sorana Corneanu analyses the way in which Bacon takes a totally new approach toward charity, different from both Christian virtue and modern philanthropy, transforming it into a proper value of scientific research, a condition for the fruitfulness of his program. Ruth Lorand in

"Spinoza's Ethics: 'A Dominion Within a Dominion" and Catherine Wilson in "What was Kant's Critical Philosophy Critical of?" reevaluate Spinoza's and Kant's systems in order to show the moral aims of their philosophies. While Spinoza founded his metaphysics on the ideal man described in the fifth part of his *Ethics*. Kant's aim was to show "that we are not trapped in the causal nexus [...] that there are spurs to morality in the human mind that do not reduce to the states of sympathy, benevolence, and fear that can be empirically studied [and] that, although the doctrine of hexaemeral creation and God's historical agency and providential care have to be rejected, nature has given us hints through her beauty, though the appearance of human beings on earth, and through the evidence of building forces constantly at work in nature, [the] pessimism is unwarranted." (p. 403)

As one can see, the codification of the proper values of natural philosophical inquiry was the result of a multitude of heterogeneous conflicts. The present volume "Conflicting Values of Inquiry. Ideologies of Epistemology in Early Modern Europe" offers a comprehensive image of the internal struggles for the establishment of epistemic values and as such it constitutes a valuable resource for every researcher of the Early Modernity.

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