The “Occult” and the “Manifest” in Early Modern Science: Reassessing the Contrast and Mersenne’s Contribution

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Abstract

Marin Mersenne (1588–1648) is often portrayed in historical accounts of the scientific revolution as a figure of secondary importance and more of an interlocutor of scientists. In this paper I articulate how notions of the “occult” and the “manifest” can help illuminate Mersenne’s context and his crucial contribution to the rise of modern science.

Most of scientific communication in the early seventeenth century occurred through letters, and Mersenne was among a few extremely well-connected individuals with correspondents all over Europe. Letters sent to Mersenne were often perceived as more of a “public report” than “private communication” (Meli 2006, p. 14), such that “to inform [Mersenne] of a discovery meant to publish it throughout the whole of Europe” (Lewis 2012, p. 757). But beyond letters, Mersenne facilitated the publication of books by young authors (e.g. Descartes) and translated the works of others (e.g. he published a French paraphrase of Galileo’s Mechanics). In this sense, Mersenne blurred the line between the “occult” and the “manifest” by using private communication to publicize scientific ideas as well as by translating (and thereby making available to a new audience) work written in foreign languages.

Mersenne’s work reveals another important sense of the notions of ‘occult’ and ‘manifest’. In his most recent book, Anthony Grayling draws a sharp contrast between “the short-cuts of occultism” and “the empirical and quantitative methods of genuine science” (2016, p. 186) based on the publicity of knowledge: occultism was intrinsically solitary and secretive (and, in that sense, “occult”), whereas science was collaborative and public. Grayling ignores the roots of the label ‘occultism’ in the pursuit of the “occult” or “hidden” powers and properties of objects and entities—conceptually akin to Aristotelian scholasticism and its “four causes.” Instead of opposing occultism with “genuine science,” as Grayling proposes, I argue that the proper contrast is between the occultist-Aristotelian tradition and the emerging mechanical natural philosophy (and its focus on “manifest” material causes). This interpretation coheres with influential accounts (e.g. Henry 2008), and it is also supported by evidence of Mersenne’s stance as a religious mechanical philosopher and critic of both occultism and Aristotelianism.
References


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Guilherme Sanches de Oliveira is a doctoral candidate in the Department of Philosophy at the University of Cincinnati. His areas of specialization are history and philosophy of science (HPS) and cognitive science, and his dissertation articulates an anti-representationalist cognitive account of model-based scientific methodology. He has given over 40 peer-reviewed research presentations at academic conferences in the Americas, Europe, and Asia. Recent publications include “Review of A. C. Grayling’s The Age of Genius: The Seventeenth Century and the Birth of the Modern Mind” (in Metapsychology), “Gibson’s Reasons for Realism and Gibsonian Reasons for Anti-Realism: An Ecological Approach to Model-Based Reasoning in Science” (in Proceedings of the 38th Annual Meeting of the Cognitive Science Society), and “Approaches to Scientific Modeling, and the (Non)Issue of Representation: A Case Study in Multi-model Research on Thigmotaxis and Group Thermoregulation” (in Model-Based Reasoning in Science and Technology, L. Magnani and C. Casadio (eds.), Springer, 2016). Before going to Cincinnati, Gui received a BA and an MA in philosophy from the University of São Paulo, in Brazil, and spent two years as a visiting scholar at Georgia State University and the Georgia Institute of Technology. Website: http://sites.google.com/site/gsolveirabr/