

Tamás Demeter, Kathryn Murphy and Claus Zittel (eds.). *Conflicting Values of Inquiry: Ideologies of Epistemology in Early Modern Europe*. BRILL 2015. 428 pp. \$181.00 USD (Hardcover ISBN 9789004281707).

Questions about the constitution and possession of knowledge are amongst the ageless problems of the history and philosophy of science. It is far from self-evident whether something is imbued with epistemic value or not, or through what kinds of processes we might obtain knowledge about these things—there are various theoretical and extratheoretical factors that shape and modify our epistemological views. The title of the present volume, edited by Tamás Demeter, Kathryn Murphy and Claus Zittel, makes mention of the *conflicting values* that have always defined the potential starting points and the subject matter of philosophical and scientific research—and that still continue to do so. The fact that an unattainable, ideal form of objectivity is to a large extent detached from our concept of science is hardly newsworthy—putting the emphasis on the values that reside in the very core of scientific research therefore does not promise a ‘fall of the idols’ of any kind. Instead, it wishes to expand our views on *what* could become the object of valid information (knowledge) in the early modern period and *why*, through a critical and analytical presentation of case studies, situating the various kinds of value-judgements in the context of the history of science.

The ‘heroes’ of the articles attempted to establish their knowledge-claims regarding special segments of reality in an age that brought about a radical shift in the predominant worldviews. It was the era of substantial metaphysical, natural philosophical and perspectival changes occurring between the 15th and the 18th centuries that we usually refer to as the period of the ‘scientific revolution’. This scientific revolution, however, was far from a swift and powerful occurrence that quickly swept away all formerly accepted values to replace them immediately with new standards and norms—the term is much more fruitfully associated with the rather slow and gradual reshaping of the dominant modes of thinking and criteria of knowledge. To borrow Steven Shapin’s happy phrase, there was no such thing as ‘the’ scientific revolution—but the process through which the methods of gaining information (and the potential objects of this information) have undergone this gradual change still left its mark on the period that the volume’s contributors attempt to investigate from new, unusual, or hitherto neglected perspectives. The authors paint various pictures about the views of Descartes, Kepler, Hobbes, Locke, Hume, Newton or Kant on knowledge-production—and while the topic gave them ample theoretical and historical room to present the problems and flesh out their argumentations, one of the main virtues of the volume is that both the thematic sections (all six of them) and the whole text itself remain unified and in accordance with the proposed goal of the two conferences that comprise its foundation: to integrate the seemingly diverse early modern physical, metaphysical, theological and epistemological discourses into a coherent narrative.

In the following, I will focus on two concepts while attempting to assess the volume’s virtues: the concept of *ideology* that is present in the volume’s subtitle and is also the topic of Tamás Demeter’s introduction (1–9), and on the concept of a *revisionist stance* that is to be found in most of the volume’s chapters. I will not use ‘ideology’ to mean political commitments or a hierarchy of values that ultimately underlies party preferences—instead, I wish to use it to refer to worldviews formulated on a conceptual level: ideology is everything that the authors discussed took to be the constitutive parts of the natural and social world surrounding them, thereby influencing the kind of knowledge that they could have attempted to gain, and the appropriate objects thereof.

This hermeneutically understood concept of ideology proves to be a useful interpretational

medium, since the tendencies on the basis of which the most prestigious thinkers of the early modern period reconfigured both scientific and everyday worldviews reveal themselves throughout the volume's articles. The relevance of that reconfiguration concerning the history of science is of course rather well-known, and is usually presented in an extremely abbreviated version as consisting in the triumph of a Baconian, observation-based, inductive science over Aristotelian, deductive natural philosophy. Such abbreviations, however, not only summarize the most important points, but also heavily distort certain processes at work in the history of ideas, philosophy and science as well—the volume's contributions attempt to draw attention to all that is necessarily lost through this simplification.

This attempt is precisely what gives most of the articles their revisionary character, their stance taken against some of the more-or-less universally accepted views regarding the key figures of the period. Most of the conventional narratives regarding the thinkers discussed and the ideologies usually reconstructed based on their *oeuvres* come into question in these papers—while the authors offer up fresh narratives that might be able to integrate certain elements of the early modern period that had previously been considered to be anomalies. Viewed from this perspective, one could be said to be able to read *two* volumes at once: one about the generally accepted and one about newly suggested narratives regarding the reconstruction of the discourse on the history of science.

The traditional view concerning the early modern history of ideas has a tendency to picture it as an ongoing process of enlightenment and rationalization beginning in the 15th century at the latest, which has the following attributes (among others): the radical rethinking of the scientific method—either on rational or empirical foundations; the constant flight from supernatural forces in the explanations of natural phenomena; and the synchronization of the preferred modes of conduct (ethics) with human nature. On this view, the defining ideology of the early modern period is the realization that as thinking and acting human beings, it is in our power to understand and change the world surrounding us—even without constantly having to rely on supernatural factors in our explanations. It is by no accident that Peter Dear's programmatic contribution on the various meanings attached to the concept of *reason* in the period (and their ideological implications) is the one to open the volume (10–38): it is certainly a key concept for both the accepted and the suggested narratives.

The volume is, however, not a radical separation from the accepted views—it does not attempt to deny that the criteria mentioned above played any part in the slowly unfolding change in the general outlook of natural philosophy. The focus is placed, rather, on the shifting of emphases. Within the traditional framework, it is hard to account for such aspects of the 'revolution' as Kepler's theologically motivated astronomy (which is nevertheless a more effective transformation of the Ptolemaic worldview than the theories of Copernicus – as it is argued by Giora Hon (155–75)), David Hume's seemingly simultaneously upheld atheism and his 'belief' in the valuableness of religion (demonstrated, regarding his views on miracles, by Tamás Demeter (176–99) and Falk Wunderlich (125–52)—while Eric Schliesser's contribution (306–36) deals with Hume's ability to 'invent' traditions), or Thomas Hobbes's insistence on carrying out impossible geometric operations (and its connection to his political philosophy; the topic of Axel Gelfert's paper (246–71)).

The aforementioned revisionist stance proves to be of great help in dealing with these apparent anomalies. The early modern period was undoubtedly an era of substantial transformations and changes of perspective—but it was also an era in which the prevailing worldview (and ideology) was fit to accommodate theologically motivated revolutionary astronomy, denominationally based

mathematical investigations (János Tanács, 200–220), the differing interpretations of the internal/philosophical and external/scientific importance of visual representations (Dániel Schmal (69–91) and Gábor Zemplén (223–45), respectively), the ultimately unsuccessful attempts to employ methods of analysis and synthesis in the field of the human sciences (Thomas Sturm, 275–305), and the attunement of all these with insights about how to live a more valuable and moral life (Sorana Corneanu (339–64), Ruth Lorand (365–85) and Catherine Wilson (386–406)). The link binding these apparently diverging paths is specifically the possibility of knowledge—the realization that authors of the early modern period did not subscribe to a *single* valid mechanism of knowledge-production, but their epistemological views were motivated by multiple sources based on their differing ideological backgrounds.

John Henry's account of the 'debate' between John Locke and John Sergeant (95–124) perfectly exemplifies such considerations. Very briefly, the debate stemmed from the following: Sergeant, an orthodox believer in the time-tested wisdom of the uninterrupted Christian tradition and in the so-called *rule of faith*, was highly sceptical of Locke's epistemological views, taking them to be entirely individualistic. According to Sergeant, an epistemology that attempts to explore the world based only on the knowing subject (and some specific capacities of the mind) must fail, since it neglects the community whose traditions and accumulated judgements the knowing subject is born into. Locke's response was restricted to a small number of marginal notes, and a rather satirical reconstruction of Sergeant's views in his letters (the so-called *notionism*, that ascribes a dual existence to the objects to be known—an objective one in the external world, and a conceptual-notional one within the mind). The traditional narrative echoes his treatment, and takes Sergeant to be a backward thinker, hopelessly clinging to values that were thought to be irrational to hold even in his own time. The situation seems to be simple: Locke, the empiricist, proposes a thoroughly modern, 'scientific' theory concerning the problems of perception and knowledge-acquisition, while Sergeant, living in the past, attempts to derail the progress of the scientific revolution by constantly referencing supernatural/transcendent powers.

Against such a narrative, Henry argues that Sergeant's relevance for the history and philosophy and science does not stand or fall based on his views concerning the uninterrupted nature of the Christian tradition. What should be infinitely more important is that this 'backward thinker' was one of the first authors to regard the concept of *community* as a potential source of knowledge-acquisition—presenting a view that seems to be rather close to what is nowadays called *social epistemology*; while his theory of meaning lends itself to comparisons with the later Wittgenstein's remarks on language use. The traditional view can only consider Sergeant to be an anomaly, the last defender of an obsolete style of thought—a representative of *false consciousness*. The 'revisionist' view, however, can easily integrate his thinking, since it does not draw as sharp a distinction between induction, rationalism or empiricism on the one hand and transcendence, social or other extratheoretical factors on the other as traditional reconstructions of the transition from the Middle Ages to the early modern period usually do.

Henry's contribution, along with many other papers of the volume, demonstrates how knowledge claims stemming from entirely heterogeneous sources could have fared equally well in an era that finds its identity in constant but gradual changes—and in which scientific achievements could have exemplified practical applicability and usefulness even without the knowledge of theoretical commitments towards those values (as it is argued by Matteo Valleriani (41–68) in the case of Italian developments in engineering and architecture). This is no contradiction: if ideologies are

merely conceptually formulated worldviews, then the possible effects of these worldviews could very well be shown even in cases when the protagonists themselves do not consciously strive to express them on that conceptual level.

The current discourse on the history of philosophy and science could profit greatly from the volume's articles that aim to show the reader pieces of the 'new ideology' in such a way that enables one to picture a whole system of thought motivated by a multitude of values. There could be two fundamental reactions to such a reconfiguration: one could transform the existing narratives, or try to defend them even after the integration of the new insight offered. What one cannot do is remain passive and indifferent—which is probably the most important historical and philosophical lesson one could take away after reading the volume.

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