

Review of *David Hume and the Culture of Scottish Newtonianism: Methodology and Ideology in Enlightenment Inquiry*, by Tamas Demeter, Brill, 2016

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Tamas Demeter presents a clear and compelling new perspective of Hume's methodology and conceptual structure in *David Hume and the Culture of Scottish Newtonianism*. Hume, he argues, is a Newtonian of the Scottish tradition, but not the mechanical kind that is modeled after the *Principia*. Instead, Hume should be understood as a kind of European Enlightenment "vitalist." As a result, his work reflects the more organic methodology that defines Newton's *Opticks*.

In brief, this means that Hume did not think that human beings are constituted by "homogeneous inert matter" (Demeter, 82) that is acted on by external forces in a mathematically predictable way. That is, human nature cannot be understood in an exacting *mechanical* way, i.e. the way that is used by Newton in the *Principia*.

Rather, Demeter argues, Hume thought that human nature may be understood in terms of "non-modular" (Demeter, 18) faculties that interact with qualitatively different components. In this respect, broadly speaking, Hume's method reflected the way in which his Scottish contemporaries did chemistry and physiology (e.g. Pitcairne, Whytt, Cullen, etc.). Unlike a mechanical approach, this method was primarily dependent on observation while mathematics played almost no role at all. Moreover, it admitted of a kind of kinetic holism, akin to the "vitalist" approach noted above; it "sought to discover the secrets of living nature, defined as a dynamic entity in which active forces worked in harmony within a complex set of interrelations" (Reil, QTD Demeter, 3)

In particular, according to Demeter, Hume, like many of his contemporary Scottish chemists and physiologists, proceeded as follows: we initially must, through direct observation, analyze qualitatively different components (data; i.e. in Hume's case, impressions and ideas). Following, through the "experimental method of reasoning" (Demeter, 126) we may identify a finite number of the "directly unobservable" (Demeter, 81) principles that explain the data. This constitutes the "analysis" aspect of this method. These principles are then employed at the level of "synthesis, to explain why our impressions and ideas follow one another in the order they do." (Demeter, 81) As such, Demeter argues, this method reflects Copernicus' "explanatory reductionism:" "For Hume, Copernicus is an early representation of efforts made towards a 'true philosophy; that is centrally committed to *explanatory reductionism*, i.e. a method of subsuming the variety of complex phenomena under a limited number of principles or laws whose combination results in an explanation." (Demeter, 58) And thus, Demeter concludes, Hume, like Kant, embraced a Copernican revolution, but in regard to *method*, not in regard to a switch in perspective, as Kant did.

Nor did the concepts that Hume employed reflect a mechanical *Principia*-like approach to human nature. Rather, Demeter claims: "much of the terminology that Hume chooses to represent mental phenomena reflect the influence of physiological theory." (Demeter, 85) In fact, "This physiological terminology is frequently combined with chemical imagery of association as elective attraction among ideas or of the mingling of contrary passions as 'alkali' and 'acid' or 'oil' and 'vinegar.'" (Demeter, 85)

Moreover, Demeter, argues, according to Hume, Ideas and impressions are qualitatively different: “The ability to enter into reactions with such different consequences clearly amounts a difference in kind between impressions and ideas that transcends their difference characterized in terms of different degrees of force, liveliness and vivacity.” (Demeter, 137) Thus, we should understand impressions and ideas in “*chemical terms*” (Demeter, 137), where impressions inspire substantively different reactions than ideas.

In sum: Demeter makes a very clear and convincing case, not only in regard to the big picture, i.e. understanding Hume as an *Opticks* Newtonian as opposed to a *Principia* Newtonian, but in regard to the details, e.g. the qualitative difference between impressions and ideas. As a result, most readers should come away from his book with a better appreciation of some of the more nuanced aspects of Hume’s method and concepts, in addition to developing a better understanding of the broader scientific context in which Hume lived and worked.

However, I would have like to have seen more time devoted to an explanation of just how Hume thought that the directly unobserved principles noted above were discovered. In particular, I would have liked to have seen Demeter engage in a close reading of the relevant texts; how, according to Hume’s own words, do we use “experimental reasoning” to “discover” directly unobserved principles? What role does the imagination play here; is it related to how Hume thinks we imagine ideas of certain objects (see T 1.4.2)? Finally, on a minor note, a subject index and a glossary of terms would have been very helpful.

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