Evaluating Cartesian Linguistics: From historical antecedents to computational modeling.

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There can be no dispute that Noam Chomsky (b. 1928) is a defining figure in modern linguistics. The latter-day tradition of commentary and critique of his linguistic writings alone provides sufficient evidence of this status. The book under review, Christina Behme’s Evaluating Cartesian Linguistics, is among the latest contributions to this sub-field. As its title states, the book offers an evaluation of Chomsky’s ‘Cartesian linguistics’, understood as a research program based on the investigation of a supposed innate language faculty unique to humans. Over four substantive chapters, Behme picks apart various claims made by Chomsky and his followers within this project. She begins in the chapter “Cartesian Linguistics” with an assessment of the validity of Chomsky’s appropriation of the label ‘Cartesian’ for his work by comparing Chomsky’s doctrines with various writings of Réné Descartes (1596–1650). She then turns in the following chapter, “The Evolution of Chomskyan Linguistics”, to a critique of the conceptual foundations and scientific methodology behind Chomsky’s linguistics, arguing that his theorising is plagued by a lack of clarity and that his methodology has moved progressively further away from what she calls “accepted scientific practice” (p. 100). In the final two substantive chapters, “Language Acquisition” and “Computational Modeling of Language Acquisition”, she draws on empirical evidence from a range of psychological and computer modelling studies of language acquisition in an attempt to refute several key arguments for the existence of a dedicated, innate language faculty.

The approach taken throughout the book is very much that of an ahistorical philosopher: arguments are quoted from Chomsky and his followers, and then counter-arguments are presented from various other sources, without any consideration of the historical or intellectual context in which these arguments were originally made, or what motivations may have been behind them. This approach, coupled with an almost legalistic literal-mindedness, brought on perhaps by the book’s palpable polemical spirit, leads to some questionable tactics. Behme’s central point in the chapter “Cartesian Linguistics” that “[...] Descartes would not have agreed with several core claims of Chomsky’s Cartesian Linguistics” (p. 73) does not convincingly “[...] challenge Chomsky’s suggestion that his views about language acquisition and language use can be traced back to a Cartesian tradition, if the term ‘Cartesian’ has anything like its commonly accepted meaning” (p. 76). While we may not want to go so far as to endorse Chomsky’s (in Chomsky and Foucault 1971) well-known ‘art lover’s’ approach to the history of ideas, we might still feel that the right to insert oneself into a putative ‘Cartesian tradition’ cannot be judged on a strict reading of Descartes’ primary philosophical productions alone. In the introduction to Cartesian Linguistics — in a passage that Behme (p. 28) in fact cites — Chomsky (2009[1966]: 58) himself makes the point that
a tradition of ‘Cartesian linguistics’ is his own construct, assembled out of personal interpretations of several Enlightenment-era thinkers assumed to be working in the wake of Descartes. A more thoughtful critique might have considered more of the figures that Chomsky discusses and asked if they can plausibly be subsumed under a single label. Behme is not unaware of this more apposite question — as her introductory review of several classic critiques (31-37), most notably Salmon (1969), Lakoff (1969), Aarsleff (1970; 1971), and Percival (1972), demonstrates — but she nonetheless persists in restricting ‘Cartesian’ to only what she can find directly in Descartes’ writings.

This tendency to pursue a narrow line of argument without sufficient justification for its significance continues into Behme’s discussion of the conceptual foundations of Chomsky’s linguistics and his scientific methodology in the following chapter, “The Evolution of Chomskyan Linguistics”. Here she asserts that the formulation of Chomsky’s theories has become increasingly vague and that as a result they defy falsifiability (93-98), drawing on several critiques of Chomsky’s recent ‘minimalist program’ for support (p. 97); representative here are perhaps Evans & Levinson (2009) and Cullicover (1999). This may be a charge that Chomsky can reasonably be called to answer, but it could perhaps be expected that Behme, as a philosopher, would recognise that the notion of ‘scientific method’ cannot simply be treated as a given and that she would argue for her preferred position. Via a footnote (note 3, p. 99) in which she quotes a passing comment from Seuren (2009: 100) on Chomsky’s philosophical allegiances, Behme does indeed acknowledge the existence of a few conflicting voices in 20th-century philosophy of science, but she defaults throughout the chapter, without any attempt at justification, to a kind of Popperian falsificationism, which remains unnamed as such. This implicit adoption of falsificationism as the one true scientific method would, however, not seem to trouble the mainstream linguistic community, given that much of the material in this chapter appears in similar form in a recent journal article, Behme (2014).

Being neither a historiographic work nor a particularly insightful or innovative philosophical critique, this book probably holds very little of interest for the historian of linguistics and associated fields. But there is still significant material contained in the book. Even if the argumentative strategy they serve is questionable, the interpretations of Chomsky and Descartes that are offered are thoroughly grounded in the primary texts and supported with numerous references to the secondary literature, and will be grist to the mill of the Chomsky specialist. The discussion of Chomsky’s theorising and methodology makes similarly comprehensive use of the existing literature, even if it could have been couched in more nuanced terms. The last two substantive chapters, “Language Acquisition” and “Computer Modeling of Language Acquisition”, which present a range of experimental evidence on language acquisition from psychology and computational modelling, offer a neat but detailed survey and assessment of work in these fields relating to questions of innateness.
References