

Book Review of *The Philosophy of Linguistics*

Min Zhang

Faculty of English Language and Culture, Guangdong University of Foreign Studies, Guangzhou, China

Email: amy Zhang1989@126.com

How to cite this paper: Zhang, M. (2026). Book Review of *The Philosophy of Linguistics*. *Open Journal of Modern Linguistics*, 16, 506-512.

<https://doi.org/10.4236/ojml.2026.165031>

Received: September 28, 2026

Accepted: October 24, 2026

Published: October 27, 2026

Copyright © 2026 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

This review of *The Philosophy of Linguistics* by Ryan Nefdt (2025) aims to introduce and evaluate a concise and cutting-edge work in the philosophy of linguistics. It gives a detailed introduction to sections of the book. It finds that Nefdt not only introduces multiple views on related topics but also offers his own position, especially from a structural realist perspective. Given the relation of this book to previous work in the field and the questions it opens for future inquiry, it can be a useful and enlightening read for learners and specialists interested in linguistics and the general philosophy of science.

Keywords

Philosophy of Linguistics, Philosophy of Science, Generative Grammar, Realism, Scientific Model

1. Book Review

The philosophy of linguistics remains a relatively underexplored topic today, yet Ryan M. Nefdt appears determined to revitalize this branch of the philosophy of science. *The Philosophy of Linguistics* is one of his consecutive contributions to this field. Published as part of the Cambridge Elements in Philosophy of Science series, it is a concise and intellectually cutting-edge work.

In the Introduction, Nefdt points out that this *Element* does not address the “scientific status” of linguistics but “approaches the philosophy of linguistics from the perspective of the philosophy of science” (p. 1). Section 2 aims to answer the question of what kind of science linguistics is, but focuses only on its connections with other subfields in the philosophy of science and hence on the insights it can offer to the philosophy of science. Section 2.1 approaches a dominant position in the philosophy of linguistics that regards linguistics as a cognitive science. It starts with the contributions of generative grammar to the philosophy of cognitive science. First, it establishes a mathematical basis for describing properties of natural

language, one distinct example of which is an infinite set of sentences derived from the alphabet and a finite set of rules. Second, it posits a generative system—an internal, individual, intensional mental state of individual language users. The two contributions, as Nefdt puts it, pave the way for the computational theory of mind hypothesis and offer a fulcrum for cognitive science to conduct related computational research. They offer insights in areas such as AI, robotics, and the philosophy of mind. Besides, linguistically, generative grammars are either formal models or scientific models in scientific terms. The competence-performance debate on language acquisition also offers insights into the rationalist versus empiricist debate, nature versus nurture debate, discrete versus continuous representations in science, and even the epistemology of evidence (p. 7). However, the author calls our attention to the relative isolation of generative grammar from general cognition and moves on to how cognitive science can influence linguistics. From the perspective of cognitive linguistics, the autonomy of syntax and the somewhat consequent computationalism are questioned. The close relations between form and meaning, syntax and semantics are instead emphasized. Language is treated as domain-general rather than domain-specific, closely related to motor cognition, social cognition, semiotic systems, metaphor systems, social pragmatics, etc.

Section 2.2 treats linguistics as a social science. When formalism and internalism are questioned, language is primarily a tool for communication, and thus linguistics is a study of social phenomena (p. 11). The connections between social science and branches in linguistics such as pragmatics, sociolinguistics, and phonology are illustrated. The author further argues that viewing linguistics as a social science will result in cross-fertilisation: in social sciences, the Pareto or 80/20 principle states that roughly 80% of outcomes result from 20% of causes; in linguistics, Zipf's Law shows that the frequency of a word in a given corpus is inversely proportional to its rank in the frequency table.

Section 2.3 deals with linguistics' correspondence with biology, especially the issue of language evolution. As regards this topic, the Minimalist account by generative linguists, the functionalist account by Millikan, and other accounts specializing in the intervention of cultural norms and conventions are introduced. While thinking highly of the cooperation between biology and linguistics, Nefdt identifies neurobiology as the most promising biological perspective for linguistics, alongside other approaches such as palaeontology and evo-devo. He suggests that the fog between linguistics and biology will not clear until one of two things happens: biology expands its toolkit, or linguistics explores the biological options it has so far neglected.

Section 3 discusses the role of the philosophy of linguistics as a “conduit” to the general philosophy of science through several philosophical issues in linguistic theory, e.g., naturalism, scientific revolutions, the nature of explanation, relativism, rationalism, and the realism debate. In Section 3.1, the link between Kuhn and linguistics is explored. According to the author, Chomsky's earlier work and critiques of Skinner's radical behaviourist account of language, together with the

greater explanatory power of his mentalistic computationalism, contributed to a cognitive revolution. However, disputes over whether Chomsky's revolution satisfies Kuhnian criteria—both the existence of a distinct prior paradigm and the emergence of consensus—and over his status as a revolutionary given his intellectual debts to Harris and the formal tradition, make linguistics a valuable case for the sociological turn in the philosophy of science: one that shifts focus from “explaining science as a rational process to understanding it partly (and largely) in terms of its sociology” (p. 22). The dispute between orthodox Chomskyans and generative semanticists over transformations between deep and surface structure turns on a contrast between a distributional approach to syntax, focused on the formal properties of constituents, and a mediational approach, focused on how those properties relate to semantic ones. The incorporation of many generative semanticists' views into later Chomsky and the establishment of their own disciplines such as cognitive linguistics push us to rethink what makes a distinct paradigm. Furthermore, regarding Kuhn's relativism and the dismay it has caused, Nefdt seems to imply that the philosophy of science should heed the folk concepts of language and learn from what the philosophy of linguistics can say about linguistic relativity and incommensurability.

Section 3.2 touches on two key topics in the philosophy of science: justification and explanation. The philosophy of linguistics borrows vocabulary from the philosophy of science, such as naturalism, formalism, and idealization. Yet, UG and its alleged unfalsifiability raise a challenge for Popperian falsifiability: they present a case in which a mature, formally rigorous science appears to operate with a standard of justification that Popperians would find suspect—one that insulates the theory's core postulate from empirical disconfirmation. They bring back the rationalist versus empiricist debate and provide more data to further the discussion on what counts as evidence, justification, as well as observation. With respect to theoretical linguists' preference for explanation over prediction, Nefdt traces it to an overcorrection in the wake of logical positivism and behaviourism, and calls for prediction to be reintegrated into linguistic methodology rather than treated as irrelevant or suspect. Scientific models are his choice of example that is relevant to both explanation and prediction. He treats generative grammar as the “doyen of computationalism in the early cognitive revolution” (p. 35) and introduces the use of modelling in semantics and pragmatics, hoping to pull linguistics out of methodological restriction.

Last but not least, this section addresses scientific realism, which underlies most of the topics in this *Element*. Scientific realism, Nefdt says, is a common stance in the philosophy of linguistics, exemplified by the Chomskyan commitment to I-languages—the unobservable structure of the mature state of the language faculty—as the true objects of scientific linguistics. Arguments against scientific realism, such as the pessimistic meta-induction (PMI) and the underdetermination of theory by data, are also reflected in the philosophy of linguistics. Nefdt shows that the pessimistic meta-induction is reflected in the radical shift from earlier

generative frameworks to Minimalism, while underdetermination appears in the problem of empirically equivalent grammars and the appeal to third-factor principles to decide between them. In defense of realism, the author draws on two arguments: the “no-miracles” argument of Putnam and a structural realist view that Nefdt himself has developed in earlier work (e.g., Nefdt, 2023). The former stands up for the existence of the unobservable object by refusing to take the successes of science as miracles, while the latter treats the mathematical patterns that survive theoretical revolutions and competitions as real, without committing to the existence of theoretical entities. Interestingly, Nefdt notes that constructive empiricism—a dominant anti-realist alternative—has not been explicitly applied to linguistics, despite its relevance to many views about language. After pointing out the similarity between this view and surface grammars in linguistic theories, he suggests that constructive empiricism could be of assistance to the philosophy of linguistics once the observable-unobservable (performance-competence) distinction is made clearer.

Sections 4 and 5 are case studies for Section 3 in the philosophy of linguistics, with a focus on infinite generalization and scientific modelling, respectively. To appreciate how linguistics has explored the concept of infinity and used the tool of infinite generalization, the author moves from the notion in mathematics to “discrete infinity,” or countable infinity, in linguistics. He then traces the mathematical definition of recursion and discusses Chomsky’s attempt to connect Merge to the successor function. In a summary of lessons for the philosophy of science, the author holds that formal linguists might have confused aspects of their formal models with properties of the human brain/mind. If so, the question of whether natural languages are genuinely infinite—or whether it is merely convenient to talk as if they were—remains open. On the positive side, linguistic infinity provides many arguments and evidence for the general science to study either the existence of infinite sets or objects in the physical world, or infinite generalizations and idealizations in the theoretical world.

Section 5 focuses on the relevance of remarkable engineering achievement, specifically large language models (LLMs), to linguistic theory. Again, the philosophy of linguistics works as a conduit to the role and nature of statistical, engineering models in the philosophy of science. Regarding the question of whether LLMs can serve as scientific theories of language, Nefdt divides recent research into three camps. On the positive side, Baroni (2022) and Piantadosi (2024) are introduced as holding that LLMs can take the role of theories of language. On the other side, LLMs are not linguistic theories because they lack the ability to offer “relevant structure, information, or tools” and “distinguish possible from impossible human languages” (p. 50). Still, there is a moderate camp in between, which argues that LLMs can serve as scientific models of competence. The most common arguments for LLMs’ relevance to understanding human language are as follows: LLMs can help us test cognitive hypotheses, such as those related to innateness; they are competent at various linguistic tasks; and they may operate in ways anal-

ogous to human brain networks. On the other side, the aspects where LLMs differ from human language processing include efficiency, semantic grounding, and communicative intent. According to Nefdt, one of the best ways to interpret the role of LLMs in linguistic theory is that they are “model organisms,” a term borrowed from biology. Although not exactly the same as the human language system, they can mimic complex linguistic behavior. This means that simply studying how different models work can tell us a great deal about linguistic representation when we recognize that they can provide comparative sight rather than direct inference for human cognition. Whether or not LLMs are taken as linguistic theories, Nefdt believes that they can add to the toolkit of modern linguistic theory and that they might transform the philosophy of linguistics. He also maintains that, with the resources of the philosophy of science, work in the philosophy of linguistics can make a substantial contribution to the explanation-prediction issue and even to our knowledge of human beings.

In Section 6, Nefdt mentions the worth of other subfields of linguistics besides syntax in the philosophy of science, such as morphology, phonology, metasemantics, translation studies, psycholinguistics, and neurolinguistics. In these studies, resources from the philosophy of science have been harnessed for cross-disciplinary methods and insights. In the end, the author expresses his optimism about the bright prospects of both linguistics and the philosophy of linguistics.

In keeping with the Cambridge Elements series, this *Element* offers a snapshot of current research on the philosophy of linguistics, although the author does so with a focus on the philosophy of science, rather than providing a guided tour of the general philosophy of linguistics landscape as he does in Nefdt (2023). A number of minor errors, mostly typographical (e.g., “predessors” for “predecessors”), would not prevent the book from being a useful and enlightening read for learners and specialists with a basic grounding in linguistics and the general philosophy of science. Apart from introducing multiple views on related topics, the author offers his own position. He clarifies how the Chomskyan competence model displays an isolation from general cognitive science and how Minimalism constitutes a departure from standard biological theory. His structural realism can be seen as a way of reconciling generative grammar with rival approaches. It does not require rival frameworks such as generative grammar, dependency grammar, and model-theoretic syntax to agree on the ontology of specific theoretical entities; rather, it highlights structural continuity—the structural components that persist across formal differences and are invariant across multiple grammars. Methodologically, his use of scientific modelling reflects his opposition to methodological restrictions in linguistic research.

As a concise and accessible contribution to the philosophy of linguistics, this *Element* deserves attention both for how it positions itself relative to previous work and for the questions it opens for future inquiry. For example, both Pateman (1987) and Nefdt take up a realist stance on the nature of linguistics. Pateman’s realism spans both the mental and social dimensions of language, whereas Nefdt’s

realism operates at the level of invariant structure across theory change. Faced with the impossibility of predicting language use and language change, Pateman doesn't choose between positivism or idealism but adopts a realist alternative to save the status of linguistics as a science. Continuous with Pateman (although with a different orientation), Nefdt embraces structural realism when linguistics is attacked by both the PMI and the underdetermination issue. Also, they may share the view that a philosopher should have contact with scientific questions and methodologies and that a linguist should have philosophical self-consciousness. Second, Nefdt's work is somehow relevant to Pullum's. Pullum (2019) claims that philosophers of linguistics throughout the 1970s were occupied with "exegesis of Chomsky's writings" and "answering his counterattacks" (p. 55). This *Element* both stays in touch with and breaks from the Chomsky-dominated tradition. Chomsky still features prominently in it, with his terms such as I-language, innateness, competence/performance, and poverty of stimulus found everywhere. It can be said that the issues Chomsky raises have long dominated the philosophy of linguistics. Nevertheless, unlike many of his predecessors, Nefdt moves beyond exegesis: rather than revisiting the traditional questions along the border of linguistics and philosophy (cf. Peregrin, 2012), he situates generative grammar within a broader philosophy of science framework and devotes a large portion of this *Element* to evaluating how the philosophy of linguistics connects with other philosophies of science, both conceptually and methodologically. Following Nefdt's reframing of the field, there may be more innovative research into what kind of science linguistics is and how other linguistic subfields can contribute to the philosophy of science.

Acknowledgements

Work on this text was supported by the research grant of the International Training Program for Outstanding Young Research Talents in Higher Education, Guangdong Provincial Department of Education, and the Postgraduate Research and Innovation Program at Guangdong University of Foreign Studies.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- Nefdt, R. M. (2023). *Language, Science, and Structure: A Journey into the Philosophy of Linguistics*. Oxford University Press.
<https://doi.org/10.1093/oso/9780197653098.001.0001>
- Nefdt, R. M. (2025). *The Philosophy of Linguistics*. Cambridge University Press.
<https://doi.org/10.1017/9781009491952>
- Pateman, T. (1987). Philosophy of Linguistics. In J. Lyons, R. Coates, M. Deuchar, & G. Gazdar (Eds.), *New Horizons in Linguistics 2* (pp. 249-267). Penguin Books Ltd.
- Peregrin, J. (2012). Linguistics and Philosophy. In R. Kempson, T. Fernando, & N. Asher (Eds.), *Philosophy of Linguistics* (pp. 1-31). North Holland.

<https://doi.org/10.1016/B978-0-444-51747-0.50001-9>

Pullum, G. K. (2019). Philosophy of Linguistics. In K. Becker & I. D. Thomson (Eds.), *The Cambridge History of Philosophy, 1945-2015* (pp. 49-59). Cambridge University Press.
<https://doi.org/10.1017/9781316779651.006>