

## ALTERNATIVE (RE)VIEWS

*Editors' note:* We invited six commentaries on Vyvyan Evans's book *The language myth* from scholars with differing perspectives. The reviewers were free to choose what they focused on; that is, they were not asked to provide a complete review of the contents of the book. The reviews are listed in alphabetical order by the names of the authors. [Gregory N. Carlson and Helen Goodluck]

**The language myth:** Why language is not an instinct. By VYVYAN EVANS. Cambridge: Cambridge University Press, 2014. Pp. xi, 304. ISBN 9781107619753. \$29.99.

### Beyond caricatures: Commentary on Evans 2014

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'In order to understand what another person is saying you must assume it is true, and try to imagine what it might be true of.'—George Miller, quoted by Ross (1982:8)

As will be familiar to a *Language* audience, many of the central questions of language study were identified by luminaries of language—Wilhelm von Humboldt, Hermann Paul, Ferdinand de Saussure, Mikołaj Kruszewski, William Dwight Whitney, Edward Sapir, Leonard Bloomfield, John R. Firth, Roman Jakobson, and Charles Hockett, among others—who preceded both mainstream generative grammar (MGG) and modern cognitive/functional approaches.<sup>1</sup> These earlier generations of linguists were both awed and challenged by the intriguing properties of human languages. How can they be understood as biological, physiological, cognitive, and/or social objects? What is the relation between the synchronic and diachronic aspects of language, and how does this impact the definition of the linguistic objects to be explained? What is the nature of the different (sub)systems that make up language, and how are they learned so quickly, without explicit instruction? Are there unifying properties underlying the obvious diversity of languages? Can an understanding of other animal communication systems provide insight into human language? How does language development, both in communities and in individuals, relate to issues concerning phylogenetic and ontogenetic development of other traits and behaviors in different complex adaptive systems?

Today, theoretical linguists largely agree that these and other big mysteries present challenges for the scientific study of human language. Divergences among modern approaches largely come down to the different bets they make about the best ways to address these questions. Disagreements concern different hypotheses about appropriate analytic assumptions, relevant methodologies of inquiry, effective theoretical constructs, the relevance of empirical crosslinguistic data to favorite theoretical assumptions and theory construction, and the relations between linguistic inquiry and research in other disciplines that explore the phylogeny and ontogeny of other natural complex phenomena. So, one could argue, it is not the fundamental questions that distinguish different approaches, but rather the variety of hypotheses marshaled to address them. In this context, theoretical linguistics should exhibit vigorous, substantive cross-theoretical debate about both

<sup>1</sup> This is not a book review; it is, as requested by the editors of *Language*, a response to the controversy elicited by Vyvyan Evan's book *The language myth*. We thank the editors for the invitation to participate in this set of commentaries. Given the restriction on length, we forego comprehensive critical evaluation of the content of the book and focus on the issues that it and responses to it raise in the modern linguistic context. Despite making broad observations, we confine ourselves to a fraction of the references that would be required in another forum. We thank several friends for insightful advice and comments: they know who they are.

analyses of particular phenomena and the general assumptions and methodologies that guide competing analyses.

If this was the state of discourse among the more commanding voices in the field, we doubt that Evans's *The language myth* (*TLM*) would have been written. The book reflects the combat rather than the convergences (both acknowledged and not) concerning ideas and methodologies that have begun to characterize modern research in grammar. Many linguists are collaborating and synthesizing across research traditions and theories that have conventionally ignored one another or paid just enough attention to disparage each other, largely by misrepresentation and triumphal dismissal. The new pluralistic and interdisciplinary research is moving beyond the caricatures of familiar theoretical paradigms. *TLM* and the responses from MGG that it has generated, however, seem set on perpetuating the culture of caricature. This diminishes a focus on the necessarily multidisciplinary qualitative and quantitative study of language and, thereby, impoverishes efforts to popularize its real mysteries and results.

We suspect that many readers will find the tone of *TLM* to be baitingly belligerent and occasionally obnoxious: for example, E employs sometimes recurring dismissive phrases ('the language-as-instinct crowd', 'Chomsky and co.', 'self-dubbed evolutionary psychologists', 'swathes of fervent followers', etc.) and makes irritating references to 'supermodels' in language examples throughout. He intends to deliver a drubbing and does so in a way that likely would leave a critical but naive reader wondering what is wrong with this unfamiliar field called linguistics. It is a jeremiad against perceived inequity, if not iniquity, in the house of language analysis.<sup>2</sup>

E places a vigorous focus on 'debunking the myths', as he understands them:

While I, and a great many other professional linguists, now think the old view is wrong, nevertheless, the old view—Universal Grammar [(UG)]: the eponymous 'language myth'—still lingers; despite being completely wrong, it is alive and kicking. I have written this book to demonstrate exactly why the old view is a myth; and to show what the reality is. This book is thus a users' manual for all language users, and for all thinking people. (4)

This provides the (overly) rhetorical context in which a reader learns a considerable amount of interesting research that, with defter and more disciplined argumentation, might have been shown to challenge certain fundamental assumptions of MGG. But it is our basic contention that this missionary 'truth-telling' actually diminishes the value of some of the thought-provoking interdisciplinary research he describes. As lapsed lexicalists,<sup>3</sup> we are broadly sympathetic with many of the general and specific criticisms of MGG, including its history of frustrating opacities concerning its most contentious claims, its insular scholarly practices, and its lack of considered and knowledgeable responses to plausible alternatives. However, we also find ourselves frustrated by many similar problems with E's text: its casual imprecision concerning important distinctions, questionable argumentation, and rhetorical repetitiveness. The book shares with some of the work in MGG a curious lack of recognition about how modern grammar research, outside of the sometimes cloistered confines of these communities, has progressed and changed in exciting ways: a transition from the acid acrimony that has characterized research in syntax for several decades to a domain where more and more researchers representing different theoretical perspectives and expertises have begun to collaborate and respond seriously to each others' research.

E uses the popularized version of MGG presented in Pinker's (1994) book *The language instinct* as his primary rhetorical foil. While directly targeting *The language instinct* may have seemed motivated as a point of departure for Sampson's (1997) *Educating Eve* and even its revised 2005 reissue as *The 'language instinct' debate*, too much has happened and too many positions and practices have changed, including Pinker's, for this to be a main resource for received opinion in 2015.<sup>4</sup> It seems to us that there are other books that offer a better model of taking on

<sup>2</sup> A book with this focus is evidently something that E has been hankering to write for a while, as he reveals in the acknowledgments: 'I have wanted to write this book since I was a graduate student. But some things are better for the time it takes to grow, experience and learn' (x).

<sup>3</sup> It is surprising that the ideas and results in this fertile tradition receive no mention in *TLM*.

<sup>4</sup> E, unfortunately, is likely to leave readers with the impression that Pinker, except for a single laudable moment of skepticism (257), is still one of the MGG 'die-hard language-as-instinct stalwarts'. This, of

orthodoxies similar to MGG within cognitive science more broadly, in particular, Moore 2001, Blumberg 2005, Jablonka & Lamb 2005, Bateson & Gluckman 2011, and Prinz 2012. These books address what the authors regard as the central dogma(s) in biology and psychology, much as E endeavors to address what he might consider to be the central dogma in theoretical linguistics. A reader looking for cogent arguments against MGG approaches to theory construction might find this genre of popular developmental science books instructive. It is a literature that voids the value of nature/nurture and nativist/empiricist dichotomies that often obtain in the larger research context of linguistic theory: this literature demonstrates the importance of multi-causal dynamic explanations in accounts of complex phenomena, such as language (see Oyama et al. 2001 for discussion).

Predictably, *TLM* has elicited a ridiculing and belittling response from some of its MGG targets. A reader of the book and its responses would be justified in inferring that this seems to be a research field in which everything is taken to be either totally true or totally false, either rational and scientific or irrational and mythical. Moreover, it is a field in which both sides are viewed as being so obviously irrational and unscientific by their adversaries that it is difficult to understand their longevity short of assuming a perverse pertinacity on the part of their adherents.

E, of course, is not original in this preemptory stance; the field of grammar analysis is well known for its fractious incivility. It is evident at the origins of the generative grammar he pillories. Consider Chomsky (1967:142) reflecting on his intentions in his earlier and legendary review of B. F. Skinner's book *Verbal behavior*:

The conclusion that I hoped to establish in the review ... was that the general point of view was largely mythology, and that its widespread acceptance is not the result of empirical support, persuasive reasoning, or the absence of a plausible alternative.

Chomsky's own plausible alternatives, as each has developed and been superseded, are viewed as validated in Chomsky 2011, where only rationalists are rational and posit the existence of language, while empiricists are irredeemably irrational, operating from the premise that language (defined in a way that they do not define it) does not exist:

The question of whether language exists is, basically, the question of whether UG exists. Though, as already noted, this is commonly denied, I know of no coherent alternative ... There are several salient differences between these distinct approaches. The first is with regard to results. I think it is fair to say that there are virtually none in the nonexistence literature, except in terms of the curious notion of 'success' that has been contrived, departing from all of science. In contrast, there are quite substantial results in the existence literature. (Chomsky 2011:270)

Over its many decades of development, the specific content and structural characterization of UG as proposed by MGG has changed radically, adopting (often without acknowledgment) features of earlier counterproposals. This is sometimes framed within MGG as incremental and sometimes revolutionary insight in the service of early and original guiding ideas.<sup>5</sup> One way of reconciling theoretical malleability with claims of consistency might be to see the framework as autological, as an instance of the Platonism it advocates: since its inception, it has tried in different ways to make manifest fundamental ideas about language that simply seem right.<sup>6</sup>

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course, is not consistent with the numerous disagreements with that framework that Pinker has expressed, including in the introduction to Pinker 2013 and in Jackendoff & Pinker 2005.

<sup>5</sup> Uriel Weinreich worried prospectively about this style of argumentation in his 1967 rejoinder to Jerry Katz: 'By this mysterious power to change his theory without changing it, Katz seeks to guarantee the perennial correctness of his approach, abstracted from any particular formulation of it' (Weinreich 1967:286).

<sup>6</sup> The conception of an 'inner form' of language seems cogently summarized by Popper (1945:25–26), as cited in Joseph 2002:8:

The things in flux, the degenerate and decaying things, are ... the offspring, the children, as it were, of perfect things. And like children, they are copies of their original primogenitors. The father or original of a thing in flux is what Plato calls its 'Form' or its 'Pattern' or its 'Idea' ... It is ... more real than all the ordinary things which are in flux, and which, in spite of their apparent solidity, are doomed to decay; for the Form or Idea is a thing that is perfect, and does not perish.

This attitude of ‘perennial correctness’ of certain fundamental assumptions establishes a hierarchy of researchers: those who do science and work on the real problems of language, and those who are simply bedazzled by the superficialities of language, imputing to these an unwarranted importance. From E’s perspective there is also a hierarchy of researchers: those who do science and work on the real problems of language, and those who, mesmerized by a small set of allegedly core grammatical phenomena, try to account for them by means of implausible psychological assumptions and indefensible abstract linguistic representations.

While to adherents of MGG several generations of revolutions are seen as evidence of its responsiveness to new conceptualizations about fundamental leading ideas, such as language as a mental organ, representational language biases that guide language learning and are responsible for constraints on possible grammars, and so forth, perceived problems with core assumptions of this lineage, as well as particular implementations of them, have led numerous established figures in theoretical linguistics to develop alternatives, even entire competing theories, not because they did not understand the contemporary goals and assumptions of the framework, but because they did and do. The existence of so many plausible, but effectively ignored, alternatives suggests that what is reflected in *TLM* and its responses is a tired skirmish between linguistic Hatfields and McCoys. A book that focuses only on what is completely wrong and what is completely right fails to convey the richness of the modern field to nonspecialist readers, even though E does provide many good and arresting examples of language in its relation to human cognition and social context.

We suggested above that many linguists are engaged in efforts at more productive dialogue and even collaborative cross-theoretical interaction. A good example of this is Ambridge, Pine, and Lieven’s (2014; AP&L) critical exploration of UG assumptions and their purported role in learnability considerations:<sup>7</sup>

Our goal in this article ... is to consider the question of whether the individual components of innate UG knowledge proposed in the literature (e.g. a noun category, the binding principles) would help the language learner. ... We should emphasize that the goal of this article is not to contrast UG accounts with alternative constructivist or usage-based accounts of acquisition ... Rather, our reference point for each domain is the set of learning mechanisms that must be assumed by all accounts, whether generativist or constructivist. We then critically evaluate the claim that adding particular innate UG-specified constraints posited for that domain simplifies the task facing the learner. (p. e53)

This seems a sensible enterprise that, in principle, could even provide further evidence for a UG perspective, once carefully investigated. It is an empirical inquiry with theoretical ramifications. For our purposes, it stands as an effort to take opposing views, predicated on very different analytic assumptions, seriously, and in a way that creates the possibility for productive and clarifying dialogue, if interpreted fairly. In her response to AP&L, Pearl (2014) notes:

The basic issue that [AP&L] highlight with regard to proposed learning strategies seems exactly right: What will actually work, and what exactly makes it work? They note that ‘nothing is gained by positing components of innate knowledge that do not simplify the problem faced by language learners’, and this is absolutely true. More importantly, I believe this should be a metric that any component of a learning strategy is measured by. That is, for any component (whether innate or derived, whether language-specific or domain-general), we need to not only propose that this component could help children learn some piece of linguistic knowledge but also demonstrate at least ‘one way that a child could do so’. (p. e107)

Pearl encourages the recognition of a common standard for the evaluation of language-learning strategies and, correlatively, the theories that they are formulated within. This suggests, in effect, a focus on (computational and psychological) mechanisms and reflects an impulse anticipated and shared from a different theoretical perspective in, for example, Bates et al. 1995 and in the computational simulations guiding Epstein’s (2006) *GENERATIVIST’S QUESTION*: ‘How could the decentralized local interactions of heterogeneous autonomous agents generate the given regular-

<sup>7</sup> The reader can also consult *Simpler syntax* (Culicover & Jackendoff 2005), *Constructions at work* (Goldberg 2006), *Linguistic nativism and the poverty of the stimulus* (Clark & Lappin 2011), and *Empiricism and language learnability* (Chater et al. 2015) for book-length explorations of this type.

ity?'. This is a common space occupied by researchers from different theoretical perspectives, and it facilitates profitable exchange across paradigms. Paraphrasing Epstein, if you can't grow it then you didn't explain it. This engagement of different theoretical approaches using similar methodologies is entirely missed in E's presentation of the field.

Relatedly, the acknowledgment of rampant language variation and empirically motivated typological generalizations, typified by the Greenbergian tradition, has motivated psycholinguistic and computational research guided by hypotheses concerning learning biases. Culbertson and colleagues (2013:392) engage this issue in the following way:<sup>8</sup>

What are the capabilities and limitations of human language learning? According to classical arguments from linguistics and the theory of learning, answering this question involves discovering the biases of human language learners. We propose here a formal model of such biases—set within an existing constraint-based theory of linguistic typology—and apply it to experimental results that connect laboratory language learning with recurring word-order patterns across the world's languages. Our model implements the hypothesis that learners use Bayesian inference to acquire a grammar under the influence of a set of hard (absolute) and soft (statistical) biases; we focus primarily on the soft biases, as their form and implementation are novel.

Finally, one often gets the impression from practitioners of MGG, which is reinforced by critics like E, that there are certain incontrovertible discoveries concerning UG that are foundational for theory construction. The role of binding theory and learnability seems to be in this class. Given this, one is appreciative of the sort of honest inquiry about such a fundamental universal as is found in Cole et al. 2015. On the basis of their detailed examination and analysis of Peranakan Javanese and Jambi Malay they

argue that the facts of Jambi anaphora cannot be explained by theories positing a Universal Grammar of Binding. Thus, these facts provide evidence that complex grammatical systems like Binding cannot be innate. Our results from Austronesian languages are confirmed by data from signed and creole languages. Our conclusion is that the human language learning capacity must include the ability to model the full complexity found in the syntax of the world's languages. From the perspective of child language acquisition, these conclusions suggest that Universal Grammar does not provide a general solution to the problem of poverty of the stimulus, and the solution to that problem must reside at least in part in special properties of the grammar construction tools available to the language learner rather than simply in a fixed set of grammatical rules hard wired into the brains of speakers. (Cole et al. 2015:138)

One need not endorse any of the final findings or results in order to appreciate that the existence of these and other frank accountings serves as an indication of greater productive synergies beyond the caricatures: they are good-faith, but critical, efforts to understand competing positions that otherwise seem entirely peculiar, and they help to locate where useful inquiry begins. In the end, the controversy surrounding E's book reflects hyperbolic posturing from the poles, but ultimately may help in identifying what is valuable and fertile in modern research: the possibility of consilience in the study of language.

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<sup>8</sup> See Culbertson et al. 2012 for an effort to connect their modeling results for noun-phrase-internal orderings to minimalist assumptions and Goldberg 2013 for a critical evaluation.

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