

Samuel Schindler, Anna Drożdżowicz & Karen Brøcker (eds.), *Linguistic intuitions: Evidence and method*. Oxford: Oxford University Press, 2020. Pp. xiii + 320

Reviewed by GABE DUPRE, Keele University

Richard Feynman famously claimed that philosophy of science is as useful for science as ornithology is for birds. Perhaps linguists are simply more self-reflective than most avians, but this has never seemed true in linguistics. On the contrary, in the modern history of linguistics, linguists have not merely paid attention to philosophical debates concerning the relations between evidence, theory and reality, but have actively contributed to them. Continuing this admirable trend, *Linguistic Intuitions* brings together fourteen chapters from linguists and philosophers centred on the question: (How) can linguistic intuitions provide evidence for empirical linguistic theory?

This disarmingly simple question raises a variety of important questions, ranging from the ‘philosophical’ (What is language? What is evidence?) to the ‘scientific’ (What is the argument structure of ‘get’? Are movement islands grammatical or perceptual?). The first half of the book, mainly by philosophers, is centred on identifying the causal antecedents of linguistic intuitions. The second half, mainly by linguists, focuses on debates concerning the need, if any, for large-scale surveys and statistical analysis in linguistics, beyond the traditional method of consulting one’s own intuitions. This division by topic and field understates the continuity of these debates. While the emphasis, and reference points, vary, the chapters are remarkably coherent with several themes occurring throughout. Given constraints of space, I will focus on just one such theme.

One significant determinant of the character of a science is the observability of the domain it aims to investigate. Sometimes we can directly observe the target of inquiry. Sometimes we can only construct measuring devices which, if well designed, enable us to observe states which correlate with the target. Predictably, this difference leads to variations in disciplinary methodology. In linguistics, it is not clear whether we are even in the latter category. However, what linguists can do is utilize human beings as measuring devices. While we cannot observe languages directly, we can ask people about their native tongues. This book is centrally an investigation into the reliability of this methodology: should we take native speakers’ intuitive judgements about language to tell us about language itself?

Answering this question depends on distinguishing between several senses of ‘reliability’. First, given that linguistic intuitions are typically reported in the form of declarative sentences, we can ask whether these intuitions are (typically) TRUE?¹

[1] Drożdżowicz cites Machery’s (2017) definition to this effect.

Further, we can, as Jon Sprouse and Samuel Schindler & Karen Brøcker do, distinguish between what statisticians call RELIABILITY and VALIDITY. Reliability in this sense is consistency. A process is reliable when it produces the same result upon repeated applications. Validity is instead a matter of whether the process is measuring what theorists take it to be measuring. It is typically claimed that validity presupposes reliability, so once we establish that a result is consistent, we can ask what it consistently shows. Finally, we can define reliability simply with reference to information: a reliable process carries information about the target of interest.

Many of the chapters investigate whether intuitions are reliable in any of the first three senses, with the assumption being that if not, they should not be relied on as evidence. For example, Michael Devitt and Carlos Santana argue that intuitions reflect acquired theories of language, rather than linguistic competence, and thus that they are not valid measures of what linguists claim to be studying. Anna Drożdżowicz, on the other hand, argues that our knowledge of language processing mechanisms suggests that, at least with respect to meaning, such intuitions are reliably true. My contention is that only the final, weakest, sense of reliability, i.e. information transmission, is necessary for linguists to justifiably rely on linguistic intuitions in theorizing.

While the human/measuring device analogy is often helpful, it conceals a crucial dissimilarity. Whereas a measuring device provides information about SOMETHING ELSE, in linguistics, intuitions provide evidence about the speakers themselves. Thus human linguistic behaviour serves as the EXPLANANDUM for linguistic theories. This fundamentally alters the significance of ‘reliability’.

First, as phenomena to be explained, linguistic intuitions need not be true to be evidentially useful. Much work in (psycho-)linguistics is interested in explaining why we consistently MISREPRESENT linguistic properties of utterances. That people take a given sentence to be (un-)grammatical can thus serve as evidence for a given linguistic theory, without thereby serving as evidence that the sentence is indeed (un-)grammatical, and this could even be the general case. What matters is that the intuitions are explained by the theory, not that they are shown to be true by it.

Devitt’s chapter argues against what he calls the ‘voice of competence’ view (VoC). One central claim of VoC is that linguistic intuitions are the ‘product of linguistic competence’ (52). Devitt rejects this claim, instead viewing linguistic intuitions as reflective of the folksy linguistic theory that speakers develop in response to empirical exposure to language. Santana presents a similar proposal, claiming that ‘the etiology of linguistic judgements must not reside in competence’ (139) but is rather a reflection of learned linguistic theories. Sprouse, Drożdżowicz, Steven Gross, and Georges Rey provide models aimed to show that such intuitions are ‘relatively direct’ (34) products of competence. I take the dispute here to be one of the validity of our intuitions: do these intuitions reflect the target of interest (competence) or simply speakers’ beliefs about the target?

Much of the second half of the book focuses on the consistency of linguistic intuitions. Building on their own foundational work (Sprouse & Almeida 2012, Sprouse, Schütze & Almeida 2013, Schütze 2016), Sprouse and Carson T. Schtze

argue that survey data, taken on its own, offers no deep methodological benefit over traditional uses of intuitions, in large part due to the strong correlations between linguists' intuitions and average intuitions of survey subjects. This, added to the practical benefits of using intuitive data discussed by Frederick J. Newmeyer, presents a strong case for continued use of these methods, although see Sam Featherston's contribution for dissent.

Now, as far as I can tell, none of the authors in this collection adopt the extreme position of DENYING the weakest reading of 'reliability' that I offered earlier, according to which linguistic intuitions carry information about the target of interest and linguistic competence. And indeed, however complicated one thinks the causal pathway from competence to linguistic intuitions is, it seems highly implausible that there is not one. Standard poverty of stimulus considerations, exemplified by linguistic intuitions, seem to require that our judgements are sensitive to aspects of competence which are not reflections of environmental language data. So if all parties agree that intuitions carry information about competence, what is at stake in figuring out whether they are reliable in these more demanding ways?

Of course, linguistics would be EASIER if it could be established that competence is the primary causal determinant of linguistic intuitions. The more confounding factors there are influencing linguistic judgements, the more work is needed to isolate the linguistically specific factors which are to be reflected in linguistic theories. However, a much stronger inference often seems to be assumed in this collection. Namely, that if linguistic intuitions did not have such a special etiology, linguists would not be justified in using them as evidence for theories of competence. Santana argues for this explicitly, concluding that intuitions do not provide evidence at all. Devitt instead concludes that linguistic intuitions are better conceived of as evidence for what they are reliable indicators of, namely public language conventions. But even those sympathetic to the role of intuitions in (psychological) linguistics seem to accept that something beyond difficulty is at stake here. Gross, Drożdżowicz and Rey each frame their proposals concerning the etiology of linguistic intuitions as defenses of 'mentalist' linguistics, seemingly taking it for granted that the unreliability of linguistic intuitions would pose a deep worry for such a view. I believe this fear is mistaken.

Assume that speaker intuitions are central processor responses to many different influences (Devitt), including irrelevant and actively misleading ones such as prescriptive assumptions learned in grammar school (Santana) and misinterpretations of the stimulus (Schütze). Intuitions have no 'special etiology' and competence is just one cause among many. How then, should linguists proceed to identify those specifically linguistic aspects of cognition? The answer is: in just the way they do now!

Linguistic intuitions are phenomena in need of explanation. One kind of explanation appeals to competence. On standard assumptions, some structure's being (un-)grammatical explains why a particular sentence which expresses that structure is (un-)acceptable. But this is not, and never has been, the only tool in the linguist's explanatory toolkit. Explanations appealing to factors other than competence have

been standard since at least Chomsky (1965). And there is no reason why such explanations should not appeal to just the kind of confounding influences sceptics of intuitions highlight. Just as explaining the unacceptability of multiply centre-embedded sentences with appeal to memory constraints shows that we do not need to posit a rule constraining embedding in our grammar, showing that some linguistic intuitions are explained by a prescriptive education, or by a folksy theory of language, could mean that our grammatical theories do not need to account for such intuitions. And indeed, linguists do appeal to such confounds in arguments that grammars need not license certain attested phenomena. See e.g. Guasti & Cardinaletti's (2003) argument that pied-piping is acquired through prescriptive teaching and is not licensed by core grammar.

The question is: are there some intuitions that CANNOT be explained in this way? If there are then the use of intuitions is justified. For example, it seems highly unlikely that patterns of acceptability in parasitic gap constructions can be explained by appealing to extrapolation from one's linguistic environment, or to non-modularized 'learned linguistic theories'. Thus, such intuitions provide evidence for a grammatical theory that can explain such patterns. This is so even if linguistic intuitions are highly inconsistent and reflective of many causal influences.

Another way to see this is to note that validity is not a 'hereditary' property. If some set of measurements is invalid, it does not follow that subsets are also invalid. Thus, with the right background knowledge an invalid measure can be highly useful. A device which lights up when ambient temperature OR radiation is high provides an invalid measure of either, but can be used successfully to measure one when the other is known to be low. It seems likely that linguistic intuitions are exactly like this: there is nothing that linguistic intuitions in general are particularly reflective of, but distinct subsets of these intuitions can be highly reflective of particular causes. The linguist's job is to find that subset which reflects competence. And a good way to do this is to see which intuitions CANNOT be explained by appealing to the various non-linguistic confounds just discussed.² In this way, pointing to all the non-competence sources of causal influence over intuitions cannot IN PRINCIPLE show that intuitions are not good evidence for linguistic theories.

All of this is not to say that the debates in this collection are not useful (and intrinsically interesting). Getting clear on precisely the causal pathway that leads to linguistic intuitions would be hugely helpful in identifying which such intuitions are indeed evidentially useful to the linguist. And finding the extent to which intuitions are reliably indicative of competence would tell linguists how much of the data they are responsible for explaining. But I believe the significance of these debates is best conceived of as contributing to this task, rather than of figuring out whether intuitions can serve as evidence. Given the naturalistic trend in contemporary philosophy of science, which assumes that successful science justifies its own methodology, this is all to the good.

[2] See Dupre (2019) for a defence and elaboration of this methodology.

As I have said, the reliability of intuitions and the significance of this for linguistic theorizing is but one thread in a fascinating book. I have not touched on Brøcker's helpful sociological survey, uncovering the (apparently contradictory) methodological and metaphysical assumptions made by generative linguists, John Collins's proposal to ground intuitions as judgements of semantic/pragmatic potential, nor the proposal that grammar is gradable rather than categorical (Featherston and Jana Häussler & Tom S. Juzek), nor various other deserving issues. But hopefully I have said enough to encourage others to look through the book on their own. The chapters in this collection are of a consistently high standard and would richly reward any readers interested in the methodological and epistemological foundations of linguistics.

REFERENCES

- Chomsky, Noam. 1965. *Aspects of the theory of syntax*. Cambridge, MA: MIT Press.
- Dupre, Gabe. 2019. Linguistics and the explanatory economy. *Synthese* 2019, 1–43.
- Guasti, Maria Teresa & Anna Cardinaletti. 2003. Relative clause formation in Romance child's production. *Probus* 15.1, 47–89.
- Machery, Edouard. 2017. *Philosophy within its proper bounds*. Oxford: Oxford University Press.
- Schütze, Carson T. 2016. *The empirical base of linguistics: Grammaticality judgments and linguistic methodology*. Berlin: Language Science Press.
- Sprouse, Jon & Diogo Almeida. 2012. Assessing the reliability of textbook data in syntax: Adger's *Core syntax*. *Journal of Linguistics* 48.3, 609–652.
- Sprouse, Jon, Carson T. Schütze & Diogo Almeida. 2013. A comparison of informal and formal acceptability judgments using a random sample from *Linguistic Inquiry* 2001–2010. *Lingua* 134, 219–248.

Author's address: Keele University, School of Social, Political, and Global Studies,
Chancellor's Building, Keele, Staffordshire ST5 5BG, UK
G.g.dupre@keele.ac.uk

(Received 5 January 2021)