Linguistic Intuitions and Cognitive Penetrability

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M I C H A E L  D E V I T T  
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LINGUISTIC INTUITIONS  
AND COGNITIVE PENETRABILITY

ABSTRACT: Metalinguistic intuitions play a very large evidential role in both linguistics and philosophy. Linguists think that these intuitions are products of underlying linguistic competence. I call this view “the voice of competence” (“VoC”). Although many philosophers seem to think that metalinguistic intuitions are a priori many may implicitly hold the more scientifically respectable VoC. According to VoC, I argue, these intuitions can be cognitively penetrated by the central processor. But, I have argued elsewhere, VoC is false. Instead, we should hold “the modest explanation” (“ME”) according to which these intuitions are fairly unreflective empirical theory-laden central-processor responses to phenomena. On ME, no question of cognitive penetration arises. ME has great methodological significance for the study of language. Insofar as we rely on intuitions as evidence we should prefer those of linguists and philosophers because they are more expert. But, more importantly, we should be seeking other evidence in linguistic usage.

1. INTRODUCTION

Linguists tend to think that the intuitive linguistic judgments of competent speakers about their language, metalinguistic intuitions, are the main evidence for grammars\(^1\), and philosophers tend to think that they are the only evidence for semantic theories.\(^2\)

**Linguistics:** Intuitions in linguistics are judgments about the syntactic and semantic properties of linguistic expressions. Thus there are intuitions that

(1) John seems to Bill to want to help himself

is a grammatical/acceptable\(^3\) sentence, and that in it ‘himself’ co-refers with ‘John’. Since these intuitions are judgments they are clearly in the “central processor”, the home of beliefs, hopes, wondering-whethers, etc. and the place where conscious inference occurs. But are these intuitions the *product* of a linguistic competence residing in a sub-central module of the mind? The received view of Chomskian linguistics is that they are.

Chapter 7 of my book, *Ignorance of Language* (2006a), and the article, “Linguistic Intuitions” (2006b) based on that chapter, argue for a pointedly unChomskian view of linguistic intuitions. This view has received a storm of criticism, to which I have responded.\(^4\)

**Philosophy:** What do philosophers think of the intuitions that play an evidential role in the philosophy of language, for example, the judgment that a person who is largely ignorant or wrong about Einstein nonetheless refers to him with ‘Einstein’? And what should they think? In chapter 2 of my book, *Coming to Our Senses* (1996), and the article, “The Methodology of Naturalistic Semantics” (1994), based on that chapter, I address these questions and offer the same view of these intuitions as of the ones in linguistics.\(^5\)

My aim in this paper is to summarize these earlier discussions of linguistic intuitions and relate them to the issue of penetrability. In what way, if any, are these intuitions thought to be the result of cognitive penetration, and in what way are they?

2. THE RECEIVED VIEW IN CHOMSKIAN LINGUISTICS

I have, somewhat playfully, named the Chomskian view of linguistic intuitions, “the voice of competence” (“VoC”). It is the view that linguistic competence, all on its own,

provides information about the linguistic facts…So these
judgments are not arrived at by the sort of empirical investigation that judgments about the world usually require. Rather, a speaker has a privileged access to facts about the language, facts captured by the intuitions, simply in virtue of being competent... (2006a, p. 96)

On this view, competence not only plays the dominant role in linguistic usage, it also provides informational content to metalinguistic intuitions. Those intuitions are indeed, “noise” aside, the voice of competence. That is why they are reliable.

I cited a great deal of evidence that VoC is indeed the received Chomskian view (2006a, p. 96). The following passage from Chomsky is particularly striking evidence:

It seems reasonably clear, both in principle and in many specific cases, how unconscious knowledge issues in conscious knowledge...a person has unconscious knowledge of the principles of binding theory, and from these and others discussed, it follows by computations similar to straight deduction that in [I wonder who the men expected to see them] the pronoun them may be referentially dependent on the men whereas in [The men expected to see them] it may not...That this is so is conscious knowledge. (1986, p. 270)

I thought that the evidence for attributing VoC to Chomskian linguistics was overwhelming. It never occurred to me that the attribution would be controversial. Yet it has turned out to be. It has been controverted by three knowledgeable philosophers: John Collins (2008), Gareth Fitzgerald (2010), and Peter Ludlow (2011, p. 69–71). I have responded to Fitzgerald (Devitt 2010b, p. 847–7) and to Ludlow (Devitt 2013a, p. 274–8). I have provided more evidence (2013a, p. 273) in the works of Barry Smith (2006), Mark Textor (2009), and Georges Rey (2013). I still think that the evidence is overwhelming.

This having been said, this evidence is predominantly from philosophers of linguistics. I have pointed out that it is interestingly hard to find recent statements of VoC from linguists themselves (2013a, p. 273). Indeed, so far as I can see, linguists hardly ever discuss the source of intuitions at all. They mostly just presuppose VoC without even stating it explicitly. There seems to be little if any attention to the key epistemological question: Why are these metalinguistic intuitions good evidence in grammar construction? This is surprising given the importance attached to the intuitions as evidence.

Is there cognitive penetration on the VoC view? Are linguistic intuitions that are the product of a person’s underlying competence in a module partly the result of interference by her central processor? It is obvious that these intuitions may partly reflect “noise”, but might that noise include the influence of the person’s beliefs? If so the intuitions of linguists could reflect their theoretical bias. Linguists do seem to believe that there is cognitive penetration and so the intuitions might be biased. Evidence of this belief is to be found in the recent concern about linguists relying much more on their own intuitions than on those of the folk. Edouard Machery and Stephen Stich have a nice discussion:

syntacticians’ theoretical commitments risk influencing their intuitions, undermining the evidential role of these intuitions. Several examples discussed by Schütze [1996] show that this worry is not merely speculative (see also Labov 1975). Lasnik & Saito (1984) assert that sentences such as “Why do you think that he left?” are ambiguous; Aoun, Hornstein, Lightfoot, and Weinberg (1987) claim that they are not. Unsurprisingly, the ambiguity of this type of sentence follows from Lasnik and Saito’s theory, but not from Aoun et al.’s theory! (2012, p. 497)

As Machery and Stich report, the concern has led to a proposal:

Linguists and philosophers have not only criticized syntacticians’ reliance on their own and their colleagues’ intuitions, they also have put forward an alternative methodology: the careful survey of the intuitions of ordinary competent speakers (Bard et al. 1996; Schütze 1996; Cowart 1997; Marantz 2005; Sorace & Keller 2005; Featherston 2007). Such intuitions are not contaminated by linguistic theories. (p. 497)

As a result, generative syntacticians are relying “increasingly on experimental surveys of people’s intuitions (Schütze 2005; Myers 2009)” (p. 498).
If the source of intuitions was not cognitively penetrable, we would not expect those intuitions to change with linguistic education. Yet there is some evidence that they do change. In one experiment, subjects with at least one course in generative grammar agreed more with the linguists than did “naïve” subjects (Spencer 1973). In another, subjects who were encouraged to reflect on a sentence rather than give an immediate reaction agreed more with the linguists (Gordon & Hendrick 1997).

All in all, if VoC is correct, the cognitive penetrability of linguistic competence by the central processor should be accepted.

3. THE RECEIVED VIEW IN PHILOSOPHY

Why do philosophers think that metalinguistic intuitions are good evidence for a semantic theory? The received view is that a competent speaker of a language does indeed have knowledge about her language, propositional knowledge, ‘tacitly’ at least, simply in virtue of being competent in the language:

It is an undeniable feature of the notion of meaning…that meaning is transparent in the sense that, if someone attaches a meaning to each of two words, he must know whether these meanings are the same. (Dummett 1978, p. 131)

The natural view is that one has some kind of privileged semantic self-knowledge. (Loar 1987, p. 97)

The idea of this sort of privileged access — that we are in a special position to know about our own competence — is an instance of general ‘Cartesianism’ (McKinsey 1994, p. 308). It seems to be an almost unquestioned part of the semantic traditions of Frege and Russell.

Why should we suppose that ordinary competent speakers have this knowledge of semantic facts? Many philosophers seem to think that the knowledge is a priori. Thus Jerrold Katz claims: ‘We know sense properties and relations of expressions on the basis [of] the speaker’s a priori linguistic intuitions in clear cases’ (Katz 1997, p. 21). And Michael McKinsey thinks that it is ‘fairly clear’ that ‘the principle that

the meanings of words are knowable a priori…is taken for granted by most philosophers of language and by many linguists’ (1987, p. 1). If we go along with this a priori view of linguistic intuitions, it is hard to see how the issue of cognitive penetration, an issue in the science of the mind, could even arise.

However, we should not go along with the apriorism. I have argued that we have no reason to suppose that we have some a priori way of forming a justified belief about the semantic properties of expressions (1994; 1996; 1998; 2011a; 2014).

Despite the apparent popularity of apriorism, it may be that, implicitly, many philosophers rest their Cartesianism on something more scientifically respectable. Stich has suggested that they may, implicitly, be taking an idea from linguistics and hold VoC (1996, p. 40; see also Hintikka, 1999 and Williamson, 2007). Just as linguists think that the speaker’s syntactic intuitions are derived from her underlying competence by some sort of computational process, philosophers may think that so too are her semantic intuitions, for example, her referential ones. So, just as the true grammar is already embodied in the mind of every speaker, so too, according to this suggestion, are true semantic theories. Semantic intuitions, like syntactic ones, are the result of something like a deduction from a represented theory.

We noted that if VoC is the correct theory of intuitions in linguistics, then we should accept the cognitive penetrability of linguistic competence by the central processor. And just the same goes, of course, if VoC is the correct theory of intuitions in philosophy.

However, I have argued that VoC is not the correct theory. I will summarize my argument in section 6. But, first, in thinking about VoC we need to keep in mind two crucial distinctions.

4. FIRST CRUCIAL DISTINCTION; USAGE VS INTUITIONS

It is trivial that competence (along with some other factors) is causally responsible for linguistic usage. But that is not what VoC is about. It is about competence as a source of metalinguistic intuitions. So, in rejecting VoC, I am not resisting the familiar Fodorian claim that “you can’t help hearing an utterance of a sentence (in a language you know) as an utterance of a sentence” (1983, p. 52–3). And, I have no problem
with remarks like the following:

“speech perception involves...a highly modularized per-
ception of linguistic features of the speech vehicles themselves”;
“we hear the utterances of a language we know in terms
of [morphemic constituency, syntactic structure and logical
form]” (Rey 2013, p. 255).

Consider our understanding of the utterance

(1) John seems to Bill to want to help himself.

We hear (1) as having certain linguistic features and not others in that,
as a result of all the processing in the language system, when all goes
well, we come up with a mental representation that has those features
and not others; for example, the representation has a feature that takes
‘herself’ to co-refer with ‘John’ not ‘Bill’. But in rejecting VoC, I am
denying that, in hearing (1) in this way, the central processor thereby
has the informational basis for the intuitive judgment that ‘herself’ co-
refers with ‘John’. Hearing an utterance in a certain way is one thing,
judging that it has certain properties, another.

Some discussions seem to lose sight of this distinction between us-
usage and intuitions: for example, Collins (2006, p. 480; 2008, p. 31).
And some try to blur the distinction by positing something, sometimes a
“linguistic seeming”, that is both “in between” the processes of language
use and metalinguistic intuitions, and that provides evidence for gram-
mars? (Miščević 2006; Textor 2009; Fitzgerald 2010; Smith 2013). I
argue (2010a) that there are no such “in betweens”.

5. SECOND CRUCIAL DISTINCTION: DATA VS INFORMATION

In the course of presenting my own view of linguistic intuitions, I make
a related distinction between a speaker's access to linguistic data and
her access to information about that data. I argue that intuitive judg-
ments about language, like intuitive judgments in general, “are em-
pirical theory-laden central-processor responses to phenomena, differ-
ning from many other such responses only in being fairly immediate
and unreflective, based on little if any conscious reasoning” (2006a,
p. 103). And the distinction is as follows. Although a speaker’s com-
petence in a language obviously gives her ready access to the data of

that language, the data that the intuitions are about, it does not give her
ready access to the truth about the data; the competence does not pro-
vide the informational content of the intuition. In this respect my view
is sharply different from VoC. And it is sharply different in another re-
spect: it is modest, making do with cognitive states and processes we
were already committed to. So, following Mark Textor (2009), I now
call it “the Modest Explanation” (“ME”).

Some discussions of VoC are vitiated by a failure to keep our access
to linguistic data provided by competence sharply distinct from our a-
leged access to linguistic information provided by competence; see par-
ticularly Fitzgerald (2010), discussed in my 2010b; also Collins (2006,
p. 480; 2008, p. 31); Textor (2009). We have access to data provided
by competence on anyone's view. But, in rejecting VoC, I am rejecting
the view that we have access to linguistic information that may reside
in competence.11

On ME, there can be no question of the competence module being
cognitively penetrated in its production of linguistic intuitions because
it does not produce them. The intuitions are simply a central processor
matter.

6. THE CASE AGAINST VOC

So, what is wrong with VoC? The main problems with it, I have ar-
gued (2006a; 2006b; 2010b; 2013a), are as follows. First, to my knowledge,
has never been stated in the sort of detail that could make it a real
theory of the source of intuitions. Just how do the allegedly embodied
principles yield the intuitions? We need more than a hand wave in
answer. Second, again to my knowledge, no argument has ever been
given for VoC until Rey's recent attempt (2013) which, I argue (2013a),
fails. Third, given what else we know about the mind, it is unlikely that
VoC could be developed into a theory that we would have good reason
to believe.

I have pointed out some other implausibilities of VoC. These are
briefly as follows. (i) If competence really spoke to us, why would it not
use the language of the embodied theory and why would it say so little?
(ii) There would be a disanalogy between the intuitions provided by
the language faculty and by perceptual modules. (iii). Developmental
evidence suggests that the ability to speak a language and the ability to have intuitions about the language are quite distinct, the former being acquired in early childhood, the latter, in middle childhood as part of a general cognitive development.

Perhaps the best reason for rejecting VoC, is that there is a better explanation of intuitions and their evidential role. That is ME.

7. METHODOLOGICAL SIGNIFICANCE FOR LINGUISTICS

I noted at the beginning that linguists tend to think that the intuitions of competent speakers are the main evidence for grammars. But they do not think that these intuitions are the only evidence: the role of usage as a source of evidence is often acknowledged. Thus evidence is found in the corpus, elicited production, reaction time studies, eye tracking, and electromagnetic brain potentials.

Clearly, the degree to which grammar construction should be reliant on speakers’ intuitions for evidence depends on whether VoC or (something like) ME is right. Thus, if VoC were right and competence really did produce these intuitions, then of course the intuitions should be the pre-eminent source of evidence for grammars: “noise” aside, they must be true. But if VoC is not right but ME is, as I have argued, then intuitions should lose that pre-eminence: other evidence should come to the fore. Indeed, the extent to which the speakers are reliable about their language at all becomes an open question. At least that reliability needs to be thoroughly tested against evidence in usage.

Furthermore, if VoC were right the earlier noted concern about the linguists’ practice of relying much more on their own intuitions than on those of the folk (sec. 2) would be appropriate. VoC gives no reason to prefer the intuitions of native speaking linguists to those of native speaking folk. Indeed, we should prefer those of the folk because those of the linguists may be the result of cognitive penetration by the linguist’s theories and hence biased. But this preference should disappear given that (something like) ME is true. For, ME supports the common, but criticized, practice. According to ME, intuitions are like ordinary central processor “observation judgments” in being “theory laden”. So, when we do use intuitions as evidence, we should prefer those of the linguists to those of the folk because linguists have the better background theory and training; they are more expert (2006a, p. 111, 115).

8. METHODOLOGICAL SIGNIFICANCE FOR PHILOSOPHY

I noted at the beginning that philosophers tend to think that the intuitions of competent speakers are the only source of evidence for semantic theories, for example, for theories of reference. I note now that philosophers, like linguists, tend to rely on their own intuitions rather than the folk’s. Indeed, until the rise of experimental philosophy (Machery et al. 2004), philosophers seemed to rely only on their own intuitions.

Let us set aside the idea that these intuitions are a priori. The rivalry between VoC and (something like) ME as a theory of linguistic intuitions has similar significance for philosophical practice as for linguistic practice. In particular, if ME is indeed right, then, insofar as we use intuitions as evidence, we should prefer those of the more expert philosophers to those of the folk. Much more importantly, we should be looking for other evidence for semantic theories. And we should be using that other evidence to assess the reliability of intuitions, whether those of the folk or of philosophers.

This raises an interesting question: What other evidence? As noted, philosophers, unlike linguists, do not acknowledge any other evidence. I have argued that they are very wrong not to. There is in fact lots of other evidence and philosophers should take ideas from linguists in trying to find it. Philosophers should seek evidence in usage, particularly using the idea of “elicited production”. They should seek direct evidence in linguistic reality itself rather than simply relying on the indirect evidence of intuitions about that reality (2011b; 2011c; forthcoming).

9. CONCLUSION

If VoC is right then linguistic intuitions are largely supplied by linguistic competence but with penetration from the central processor. If ME is right, the intuitions are supplied solely by the central processor and there is no question of the competence being cognitively penetrated. I have argued that ME is right. This has great methodological signif-
icance for the study of language. Insofar as we rely on intuitions we should prefer those of linguists and philosophers because they are more expert. But we should be seeking other evidence in linguistic usage.

Notes

1It seems obvious that this is so but nonetheless John Collins (in the guise of “Ling”) talks dismissingly of “the absurd idea that we are after speaker/hearers’ explicit propositional judgments on the linguistic status of strings” (2006, p. 480). For discussion, see Devitt 2010b, p. 838–9.
2Max Deutsch (2009) and Herman Cappelen (2012) disagree but I think that they are wrong (Devitt forthcoming).
3Linguists have recently made much of the distinction between intuitions about grammaticality and acceptability, far too much in my view (2010b, p. 839–44). I argue that ordinary acceptability intuitions are evidence only insofar as they are grammaticality intuitions; see Gross and Culbertson (2011) for a response.
4Collins 2006; Matthews 2006; Miščević 2006; Rattan 2006; Rey 2006; Smith 2006, all of which are responded to in Devitt 2006c; Pietsroki 2008, responded to in Devitt 2008; TeXtor 2009, responded to in Devitt 2010a; Culbertson & Gross 2009, which led to the exchange, Devitt 2010b, Gross & Culbertson 2011; Fitzgerald 2010, responded to in Devitt 2010b; Ludlow 2009 and 2011, responded to in Devitt 2013a.b; Rey 2013, responded to in Devitt 2013a.
5My view of these intuitions in philosophy are further developed in Devitt 2006d, 2012, forthcoming.
6Ludlow’s discussion is notable because of its egregious misrepresentation of the evidence.
7But see Maynes & Gross (2013) for a nice discussion of the matter.
8Culbertson and Gross (2009) casts some doubt on the effect of education on intuitions; see Devitt (2010b) and Gross & Culbertson (2011) for further discussion.
10My account of linguistic intuitions in 2006a is misleading in two respects (and contains a minor misstatement); see my 2010a, p. 254–5, for clarification.
11A clarification is appropriate. Competence obviously provides information about what is said; that is part of understanding an utterance. I am rejecting the view that competence provides information about the syntactic and semantic properties of expressions (2006a, p. 112–3; 2010b, p. 850–1).
12For example, it is acknowledged by Liliane Haegeman (1994, p. 10), despite her earlier claim that ‘all the linguist has to go by…is the native speaker’s intuitions’ (p. 8); and by Andrew Radford (1988, p. 24) after an extensive discussion of the evidential role of intuitions.
13See Krifka (2011) for a helpful summary of the evidence that linguists use.

References


