# No Way To WAM

**ABSTRACT.** Many epistemologists explain the empirically attested contextual variation in knowledge ascriptions by appeal to a kind of warranted assertability maneuver (WAM) that finds the locus of variability in epistemic norms of assertion. I show that this way to WAM fails. It cannot explain the variability of embedded uses of knowledge sentences in assertoric speech acts in which the knowledge sentences are not themselves asserted.

## 1   Introduction

Epistemic contextualism has always met with the resistance of epistemologists of a more traditional bent, who objected that if anything changes from context to context, it is warranted assertability conditions rather than truth conditions. Invariantists have developed objections of this kind, dubbed warranted assertability maneuvers (WAMs) by DeRose (2002), in several ways. On one prominent way, it involves a thesis about the epistemic norms of assertion holding sway over conversation. This way to WAM is my target here. I show that contextual variability in knowledge ascriptions cannot be due to any epistemic norm of assertion, since we can find characteristic contextual variability even when knowledge ascriptions are used in assertoric speech acts in which they aren't themselves asserted. WAMs of this kind do not provide a general way to account for the variability of 'know that.'

## 2 WAMs and the Generality Observation

Epistemic contextualists claim, roughly, that the truth conditions of unembedded, bare knowledge sentences – sentences of the form *S knows/does not know that p* – can vary with non-truth-relevant features of a context of utterance. Their claim has been argued to receive support from a range of cases in which the same knowledge sentence seems true as asserted in one context and false as asserted in another context, where these contexts differ only in some practical factor or in the salience of error possibilities. DeRose's bank cases[1] and Cohen's airport cases[2] were early and paradigmatic examples, and intuitive judgments of truth or felicity, on the one hand, and falsity or infelicity, on the other hand, have received persuasive though not conclusive empirical confirmation since then.[3] Call the fact that speakers' judgments of truth and falsity (or of felicity and infelicity) of token knowledge attributions may vary with epistemically relevant features of the context of utterance *contextual variation*.

Contextual variation poses a *prima facie* problem for classical invariantism, according to which a single knowledge sentence semantically expresses truth conditions that do not depend on the mentioned non-truth-relevant features of context. In response to contextual variation, many invariantists have endorsed a *warranted assertability thesis*: Assertions of the same knowledge sentence may vary in their warranted assertability conditions, though not in their truth conditions. A *warranted assertability maneuver* (WAM), as DeRose (2002) called it, is a popular invariantist response to the challenge from contextual variation: An assertion of a knowledge sentence that is (semantically) true may seem intuitively false, or infelicitous, in some context because it is not warrantedly assertable in that context; an assertion of a knowledge sentence that is (semantically) false may seem intuitively true, or felicitous, in some context because it is warrantedly assertable in that context. Truth and warranted assertability may come apart, as truth conditions and warranted assertability conditions may. Intuitive judgments of truth/falsity, or felicity/infelicity, often track warranted (un)assertability rather than (semantic) truth/falsity.

WAMs have been developed in two ways. First, as a thesis about the pragmatic implicatures carried by assertions of bare knowledge sentences in context (e.g., Black (2005); Brown (2005, 2006); Hazlett (2009); Locke (2017); Lutz (2014); Pritchard (2010); Rysiew (2001, 2007)). On this way to WAM, judgments of truth/falsity are said to often track the content that assertions of knowledge sentences pragmatically implicate rather than the content they semantically express, and such pragmatic contents may be true (false) even when the semantically expressed content is false (true). This implicature-driven way to WAMs faces serious problems, and I will not consider it here as a promising way to WAM.[4]

Second, WAMs have been developed as a thesis about the epistemic norm(s) of assertion holding sway over conversation. On this way to WAM, contextual variation in judgments of

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[1]DeRose (2009, 1-2)

[2]Cohen (1999, 58)

[3]See Buckwalter (2017) and Gerken (2017, Ch. 2) for an overview of experimental work on knowledge ascriptions.

[4] For objections to implicature-driven WAMs, see Blome-Tillmann (2013), Dimmock and Huvenes (2014), Dinges (2018), Iacono (2008), and Kindermann (2016).

truth/falsity is explained by the hypothesis that the degrees of warrant required for epistemically felicitous assertion can vary from context to context. Variability is thus to be found in the norm(s) of assertion rather than in truth conditions. This second, norm-driven WAM is implemented in either of two ways. On the first, assertion is governed by a single epistemic norm, whose degree of warrant required for felicitous assertion may vary with context (e.g., Brown (2010); Gerken (2012); Goldberg (2015); McKinnon (2013); Rescorla (2009)). On the second, there are several epistemic norms of assertion, which differ in the degree of warrant they require for felicitous assertion and which get selected by context (e.g., Greenough (2011); Levin (2008); Stone (2007)).[5] Both implementations of the second, norm-driven way to WAM are the target of this paper; their differences won't matter to my arguments.[6]

Norm-driven WAMs receive some *prima facie* support from the *generality observation*:[7] In 'high standards' contexts, in which it is difficult to properly assert '$S$ knows that $p$', it seems equally difficult to assert the embedded '$p$'. For instance, in the high standards context of DeRose's bank cases where 'I know that the bank will be open on Saturday' seems infelicitous, an assertion of 'The bank will be open on Saturday' also seems infelicitous. Skipping many details, the observation is that epistemic propriety requirements govern conversation in general, and variability in such requirements does not spring from the presence of words like 'know.'

The generality observation lends initial support to norm-driven WAMs, which posit contextual variability in the norm(s) of assertion holding sway over conversation in general. For norm-driven WAMers, the observed parallel in variability of judgments about assertions of '$S$ knows/does not know that $p$' and about unembedded '$p$' is easily explained by appeal to the factivity of 'know that': 'know that $p$' presupposes that $p$. So, when '$p$' becomes epistemically unassertable, so does '$S$ knows/does not know that $p$,' since the latter communicates not only that $S$ knows/does not know that $p$ but also that $p$.[8] (Okay, that's too general, for the negated '$S$ does not know that $p$' does not communicate that $p$ in *all* contexts. The dominant explanation of this variation in the presuppositional behaviour of 'cognitive factive' verbs like 'know', 'realize,' 'discover,' 'notice' etc. is that they do carry presuppositions, but that these can be cancelled in context (cf. Beaver (2010)). We will return to this where necessary.)

Of course, the support norm-driven WAMs receive from the generality observation is quite limited. DeRose (2002, 188ff.) already objected that while the warranted assertability of 'I know that $p$' (in the first-person case) and the assertability of unembedded '$p$ "fade away" together as epistemic standards in the context of assertion go up, WAMmers cannot explain why the assertability of the knowledge denial 'I don't know that $p$' goes up in the

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[5]See Simion (2016, ch. 6) for a helpful overview of WAMs, on which my distinctions are based.

[6]The paper does not target multi-pronged norm-driven accounts such as the one in Gerken (2017), which combines a psychological account with an epistemic norm of action and a norm of recommendation for assertion to explain contextual variation.

[7]'Generality observation' is my label for the observation at the heart of the objection DeRose (2002, §1.5) calls 'generality objection.' This paper is not about epistemic contextualism, so the dialectical development of the observation into an objection against the view is of no concern here.

[8]I assume, in what follows that 'norms of assertion' target not only 'asserted' content, in the narrow sense, but also 'presupposed' content. For instance, the epistemically proper assertion of 'Lucy is picking up her sister from the airport' also requires sufficient warrant for the claim that Lucy has a sister, as presupposed by 'her sister'.

move to high standards contexts.[9] Against DeRose, invariantists like Pritchard (2010) have called into question whether 'I don't know that *p*' really becomes assertable in high standards contexts. Luckily, we don't need to decide the issue here. That's because, as we will see in the next section, *embedded* uses of knowledge sentences provide overwhelming evidence against norm-driven WAMs.

## 3   Against WAMs: A Different Kind of Generality

We can accept that there are varying norm(s) of warranted assertion holding sway over discourse in general. We could also accept the limited point that norm-driven WAMs account for the parallel variation in warranted assertability of 'I know that *p*' and unembedded '*p*.' Still, norm-driven WAMs fail to account for the contextual variability of 'know' *in general*. In this section, I will show that we can find contextual dependence in the warranted assertability of sentences in which '*S* knows/does not know that *p*' is embedded and is not part of what is asserted (or presupposed). So neither the warranted assertability of '*S* knows/does not know that *p*' nor of '*p*' can explain judgments of truth, or felicity here. I will present two kinds of cases. Before we can start, however, we need to get clear on a few things about assertion and presupposition.

First, there are sentences with embedded clauses whose assertion doesn't involve assertion of the embedded clause. In asserting the conditional 'If Jill comes to the party, Lisa won't come to the party', I assert neither that Jill will come to the party nor that Lisa won't come to the party. The warranted assertability of a conditional, in any context, doesn't require the warranted assertability of its antecedent or its consequent. In no context does warrantedly asserting 'If Jill comes to the party, Lisa won't come to the party' require that the assertion of 'Jill comes to the party' or of 'Lisa won't come to the party' be warranted. The same holds for many embedding expressions, including disjunctions, many attitude verbs such as 'believe' (though there can be complications), verbs of saying such as 'say', reportative evidentials such as 'reportedly' and 'allegedly', and others.

Second, it's almost universally agreed that knowledge is factive – that you cannot know falsehoods. What factivity amounts to is less clear. Philosophers have typically assumed that '*S* knows that *p*' *entails* that *p*. However, linguists have always pointed out that 'know that' behaves very much like other 'factive verbs' such as 'discover,' 'realize, and 'find out', which *presuppose* their sentential complement (e.g. Kiparski and Kiparski, 1970). One hallmark of presupposition is its constancy under negation: if sentence *S* presupposes *p*, then the negated sentence *Not-S* also presupposes *p*. For instance, both (1) and (2) presuppose that that the coffee Julia bought wasn't fair trade:

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(1)     Julia knew/realized/found out that the coffee she bought wasn't fair trade.

(2)     Julia didn't know/didn't realize/didn't find out that the coffee she bought wasn't fair trade.

Karttunen (1971) observed that 'know that' belongs to a class of verbs he labelled 'semi-factive' attitude verbs. These are verbs that do not *always* pass up the presupposition of their complement phrase to the larger sentence when they are embedded under negation, in the antecedent of conditionals, in questions, or epistemic modals. Consider (3) and (4) involving the semi-factives 'know' and 'discover,' respectively:[10]

(3)     I don't know that Mullah Omar is alive. I don't know if he's dead either. (General Dan McNeill, Reuters, 19 May 2008)

(4)     If I discover that Bill is in New York, there will be trouble.

An assertion of (3) doesn't presuppose that Mullah Omar is alive, nor does asserting (4) presuppose that Bill is in New York. A pragmatic explanation of the presupposition's cancellation in (4) could go as follows: Hearers may assume that the speaker is cooperative; if she knew Bill's whereabouts, she would have discovered that Bill is in New York, which is incompatible with the conditional's implication that the antecedent is an open possibility, so (4) wouldn't be a cooperative contribution to the discourse.

   There are different theories of presupposition, with different explanations of the behaviour of semi-factives. For our purposes, those differences won't matter. It will be useful, however, to stick to one way of talking about presuppositions. I'll assume from now on, as I have above, that '$S$ knows that $p$' semantically presupposes that $p$, i.e. that the sentence is true or false only if $p$ is true, and neither true nor false if $p$ is false.

   Now to the cases. For concreteness, I will assume that norm-driven WAMs are put forward in defence of moderate invariantism, according to which the epistemic standard one invariably has to meet in order to count as knowing is moderately low. This assumption affects the choice of cases to follow but not the scope of the target. Parallel cases can be found that pose problems for norm-driven WAMs in defence of strict or sceptical invariantism.

   Both kinds of cases have in common that knowledge sentences are embedded in larger sentences that are asserted. The first kind of case has the following structure: (i) The assertions of sentences embedding '$S$ knows that $p$' (or a grammatical variant of the clause type) are false according to moderate invariantism; they (ii) neither assert nor presuppose that $S$ knows that $p$ or that $p$; yet (iii) they are intuitively true, or felicitous. Consider the following examples:

(5)     If I know that my car is parked outside, I can rule out that it's just been stolen.

(6)     Even when Misha is looking at Cem, she might not know it's Cem because she can't tell Cem from his identical-looking twin brother Erol.

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[10](3) is from Beaver and Geurts (2012, 2440), (4) from Chierchia and McConnell-Ginet (2000, 354).

It seems fair to say that (5) and (6) are intuitively true, or felicitous. (More cautiously: there are natural true readings of (5) and (6) which are easily retrievable without explicit contextual set-up.) But according to the moderate invariantist, (5) and (6) are false, so they should seem false, or infelicitous. For instance, moderate invariantism does not require that one at any moment be able to rule out that one's car has been stolen in order to count as knowing that one's car is parked outside; evidence from one's memory may suffice (cf. Vogel (1990)). However, the intuitive felicity of (5) and (6) cannot be explained by appeal to (variation in the) norm(s) of assertion concerning the embedded knowledge ascription of the form 'S knows that p' nor its complement clause 'that p'. Neither of these clauses is asserted, nor need it be presupposed,[11] by (5) and (6). For instance, (5) is asserted without the content of 'I know that my car is parked outside' and of 'I can rule out that it's just been stolen' being asserted. (5) is warrantedly assertable independently of the warranted assertability of 'I know that my car is parked outside' and 'I can rule out that it's just been stolen.'[12]

Note that judgments of truth, or felicity, of (5) and (6) do not require an explicit contextual setting that may be claimed to affect the epistemic norm of assertion which may guide our intuitive judgments. The sentences in (5) and (6) are here presented without any prior explicit context that may put one or another degree of warrant in place for the norm(s) of assertion. If anything, one might expect that the error possibilities mentioned in sentences (5) and (6) may *raise* requirements for epistemically proper assertion. But this would not yield WAMers' needed result that (5) and (6) are false yet felicitous.

Examples of this first kind aren't hard to come by, though some differ from our mould in that the complement of embedded 'know' may become a presupposition of the whole

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[11]My claim is only that there is some natural true reading on which (5) and (6) do not presuppose 'know''s complement. Thus, for instance, (5) is most easily heard as not presupposing that the speaker's car is parked outside when it is clear from the context that the speaker takes it to be an open possibility that the car isn't parked outside. This could be introduced by a preceding sentence: 'I don't know whether my car is parked outside.' Note the similarity of (5) and (4) with regard to the 'cancelled', inexistent presupposition.

[12]Examples like (5) and (6) are reminiscent of so-called concessive knowledge attributions (CKAs), assertions of the form 'S knows that p, but it's possible that/maybe/perhaps q' (where q entails not-p). (I am grateful to an anonymous referee for pressing this point.) Such assertions sound contradictory, yet this is at odds with fallibilism – the claim that one can know that p on the basis of evidence that does not entail that p (and hence that not-q, where q entails not-p). The relevance of fallibilism's issue with CKAs to my argument here involves a number of open questions I cannot hope to properly address here. One concerns the relationship between moderate invariantism and fallibilism; another concerns the relationship between CKAs, which involve expressions of epistemic possibility, and sentences like (5) and (6), which arguably do not; a third question concerns the fact that CKAs are infelicitous but are (arguably) true according to fallibilism, whereas (5) is felicitous yet false according to moderate invariantism. We would need answers to these question if we were to fully assess whether fallibilist solutions might also help the moderate invariantist respond to the above cases. But this much can be said. There are two main strands of fallibilist solutions. According to one, due to Stanley (2005), CKAs are infelicitous because they are false, but this isn't a problem for fallibilism because CKAs don't express the fallibilist position. This solution only provides the moderate invariantist with an account of (5) if it can equally be shown that moderate invariantism does not entail the problematic falsity of (5). According to the other strand, due to Rysiew (2001) and Dougherty and Rysiew (2009), CKAs are true but their infelicity is explained via a pragmatic implicature carried by 'it's possible that q.' Whether this solution is successful or not, it's not an attractive option for the norm-driven WAMmer for responding to (5): if an explanation of (5)'s felicity required a pragmatic implicature, then presumably implicatures could also explain the data that motivated norm-driven WAMs — norm-driven WAMs would become an idle wheel.

sentence. Consider the following conditional and comparative construction:

(7)     [Context: The addressee is looking at Cem]
        If you can't tell whether it's Cem or his identical-looking twin brother Erol, you don't
        know that you're looking at Cem.

(8)     [Context: The addressee is about to bet a large sum on the person in front of him
        being Cem.]
        It would be better to know that it's Cem that you're looking at than to merely rely on
        the visual input you get.

(7) and (8) also have natural, intuitively true readings; yet again, they're semantically false
according to moderate invariantism. In the case of (7), however, it's not as clear that the full
sentence doesn't carry the presupposition of embedded 'know''s complement phrase. There
is a reading on which (7) does presuppose that the addressee is looking at Cem.[13] And since
the felicity of an assertion depends on the acceptability of the presupposition, the felicity
of the whole assertion of (7) partly depends on the acceptability of 'know''s complement.
Again, however, this is of no help to norm-driven WAMers who need to explain why the
conditional and comparative sentences are felicitous even if false. If anything, we might expect
the standards for asserting 'you're looking at Cem' to be raised with the explicit mention of
the possibility that it's not Cem but the identical-looking twin brother that is being looked
at.

A second kind of case can be developed from material familiar from DeRose's bank cases
(DeRose, 2009, 1-2). Consider these adaptations of DeRose's cases.

> Low. DeRose and his wife are driving home on a Friday afternoon. They
> intend to stop at the bank to deposit their paychecks. As they drive past the
> bank, they notice the long lines inside. It's not especially important to them that
> they deposit their paychecks right away, so DeRose suggests that they deposit
> their paychecks Saturday morning. His wife says, 'Maybe the bank won't be
> open tomorrow. Lots of banks are closed on Saturdays.' DeRose replies, 'I was
> there just two weeks ago on a Saturday. It was open until noon. So if the bank
> is open tomorrow, we know it is.'

> High. DeRose and his wife are driving home on a Friday afternoon, intend
> to stop at the bank to deposit their paychecks, and notice the long lines inside,
> as in Low. DeRose again suggests that they deposit their paychecks Saturday
> morning, explaining that he was there on Saturday morning two weeks ago and
> discovered that the bank was open. In this case, however, they have just written
> a very large and very important check that must be deposited into their account
> before Monday morning, or else it will bounce, leaving them in a very bad
> situation. Of course, the bank is not open on Sunday. DeRose's wife reminds

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[13] For an explanation of why (7) carries this presupposition, see below on the notion of a filter.

him of these facts and says, 'Banks do change their hours, you know.' DeRose replies, 'That's right. But if the bank is open tomorrow, we know it is.'

It seems safe enough to say that DeRose's assertion of

(9) If the bank is open tomorrow, we know it is.

seems true, or felicitous, in Low but false, or infelicitous, in High. This variation in judgments, however, cannot be explained by appeal to the variation in the degree of warrant required by the norm(s) of assertion between Low and High. The conditional's consequent, 'we know it is [open tomorrow],' is not itself asserted, and the embedded 'it is [open tomorrow]' is neither asserted nor presupposed. So the difference in proper assertability of (9) between Low and High cannot be due to any difference in the proper assertability of 'we know it is [open tomorrow]' or 'it is [open tomorrow]'.

Wait, why isn't the 'it is [open tomorrow]', embedded under 'know that' in the consequent, presupposed? 'If then' is, in Karttunen's (1973) words, a filter. Filters cancel, under certain circumstances, some of the presupposition of expressions embedded in their scope. When the antecedent of a conditional sentence entails a presupposition of the consequent, that presupposition doesn't become a presupposition of the whole conditional sentence. In (9), 'if then' prevents the projection of its consequent's presupposition 'it is [open tomorrow]' to the level of the whole conditional, because this presupposition is entailed by the conditional's antecedent, 'the bank is open tomorrow.' The conditional in (9) as a whole does not presuppose that the bank will be open the next day. Compare:

(10) If Sid was lying to Cem, Cem will find out that he was.

(10) does not presuppose that Sid was lying to Cem (the presupposition of the factive verb 'find out'), since the antecedent entails this presupposition of the consequent. Contrast this case with (11):

(11) If Cem talks to his friends, he will find out that Sid was lying to him

In (11), the conditional as a whole presupposes that Sid was lying to Cem, as Cem's talking to his friends does not entail that Sid was lying to him.

Norm-driven WAMers might object that the variable warranted assertability of the conditional in (9) is due to the varying standards affecting the warrant the speaker is required to have regarding the asserted *connection* between the bank's being open (the antecedent) and the couple's knowledge thereof (the consequent). Given different background assumptions about their evidence and about error possibilities in High, more warrant is required for the move from the assumption of the bank's being open to their knowing that it will be open.

The problem with this response is that it is self-defeating for the norm-driven WAMer. Contrast the variability of the conditional in (9) containing 'know' with the following two conditionals, containing different epistemic notions in its place:

(12) If the bank is open tomorrow, we can be certain that it'll be open.

(13)    If the bank is open tomorrow, we have some evidence that it'll be open.

Note that (12) seems infelicitous in both Low and High, whereas (13) seems felicitous in both. How could the invariability be explained, given that the epistemic standards for asserting a connection between the antecedent and the consequent can again be assumed to be raised from Low to High? The only plausible explanation is that the difference between the variability of the conditional with 'know' and the invariability of the conditionals with 'be certain' and 'have some evidence' is that it's these very notions that make the difference: the given background assumptions about evidence and error possibilities affect the move from fact to knowledge of that fact but do not affect the move from fact to certainty, or possession of some evidence, of that fact. This explanation, however, finds the linchpin for variation in the lexical item 'know' and favours a contextualist or otherwise semantically context-sensitive account of 'know.'

The second kind of case had the following structure. A conditional with '$S$ knows that $p$' in the consequent is (i) felicitously assertable in Low-type contexts and (ii) not felicitously assertable in High-type contexts, but (iii) neither '$S$ knows that $p$' nor '$p$' are asserted or presupposed. Cases with this structure are not limited to conditionals embedding knowledge sentences. They can also be found with disjunctions and 'believe' sentences that embed knowledge sentences.[14]

The lesson from these kinds of cases is that the contextual variability we can observe with uses of '$S$ knows that $p$' cannot be explained by norm-driven WAMs. Even granted contextual variability in the degree of warrant required for proper assertion by some epistemic norm(s) of assertion, as well as the generality observation, norm-driven WAMs cannot explain the variation found with many *embedded* occurrences of knowledge sentences. Norm-driven WAMs do not provide a *general* explanation for the patterns of contextual variability found with 'know'.


## 4   Conclusion

Judgments about the truth/falsity, or felicity/infelicity, of occurrences of '$S$ knows that $p$' embedded in larger constructions exhibit contextual variability similar to judgments about bare, unembedded occurrences. WAMers who appeal to contextual variability in the degree of warrant required for epistemically proper assertion by the norm(s) of assertion cannot explain this variation by appeal to the warranted assertability of '$S$ knows that $p$' or '$p$', since in the relevant cases, neither of these clauses is asserted (or presupposed). But neither do they have a plausible, non *ad hoc* story for the warranted asertability of the embedding sentence as a whole. Thus, norm-driven WAMs do not have a general explanation of the contextual

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[14]The case of 'believe' carries some complications, though, since there is no consensus among linguists whether '$B$ believes that $\Phi$', where '$\Phi$' has the presupposition that $\Psi$, entails (i) only that $B$ believes that $\Psi$, (ii) that $\Psi$, or (iii) both that $B$ believes that $\Psi$ and that $\Psi$ (cf. Beaver and Geurts, 2012). If we consider a variation between a Low-type and a High-type case in which DeRose asserts 'I believe that I know that the bank will be open tomorrow', these different views will make a difference to whether or not norm-driven WAMs have an explanation.

variability found with knowledge sentences. The other prominent way to WAM, which appeals to pragmatic implicatures, suffers from its very own problems.[15] We can conclude, then: there is no way to WAM.

# References

Beaver, D. (2010). Have you noticed that your belly button lint colour is related to the colour of your clothing? In R. Bauerle, U. Reyle, and T. Zimmermann (Eds.), *Presuppositions and Discourse: Essays offered to Hans Kamp*, pp. 65–99. Oxford: Elsevier.

Beaver, D. and B. Geurts (2012). Presupposition. In C. Maienborn, K. von Heusinger, and P. Portner (Eds.), *Semantics: An International Handbook of Natural Language Meaning*, Volume 3, pp. 2432–2459. Berlin: De Gruyter Mouton.

Black, T. (2005). Classic invariantism, relevance and warranted assertability manœvres. *The Philosophical Quarterly 55*(219), 328–36.

Blome-Tillmann, M. (2013). Knowledge and implicatures. *Synthese 190*(18), 4293–4319.

Brown, J. (2005). Adapt or die: the death of invariantism? *The Philosophical Quarterly 55*(219), 263–85.

Brown, J. (2006). Contextualism and warranted assertibility manoeuvres. *Philosophical Studies 130*(3), 407–435.

Brown, J. (2010). Knowledge and assertion. *Philosophy and Phenomenological Research 81*(3), 549–66.

Buckwalter, W. (2017). Epistemic contextualism and linguistic behavior. In J. J. Ichikawa (Ed.), *The Routledge Handbook of Epistemic Contextualism*, pp. 44–56. London: Routledge.

Chierchia, G. and S. McConnell-Ginet (2000). *Meaning and Grammar. An Introduction to Semantics* (2nd ed.). Cambridge, MA: MIT Press.

Cohen, S. (1999). Contextualism, skepticism, and the structure of reasons. *Noûs 33*, 57–89.

DeRose, K. (2002). Assertion, knowledge, and context. *Philosophical Review 111*(2), 167–203.

DeRose, K. (2009). *The Case for Contextualism: Knowledge, Skepticism, and Context*. Oxford: Oxford University Press.

Dimmock, P. and T. Huvenes (2014). Knowledge, conservatism, and pragmatics. *Synthese 191*(14), 3239–69.

Dinges, A. (2018). Knowledge, intuition and implicature. *Synthese 195*(6), 2821–2843.

Dougherty, T. and P. Rysiew (2009). Fallibilism, epistemic possibility, and concessive knowledge attributions. *Philosophy and Phenomenological Research 78*(1), 123–32.

Gerken, M. (2012). Discursive justification and skepticism. *Synthese 189*(2), 373–94.

Gerken, M. (2017). *On Folk Epistemology. How We Think and Talk About Knowledge*. Oxford: Oxford: Oxford University Press.

Goldberg, S. C. (2015). *Assertion. On the Philosophical Significance of Assertoric Speech*. Oxford: Oxford University Press.

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[15]See footnote 4

Greenough, P. (2011). Truth-relativism, norm-relativism, and assertion. In J. Brown and H. Cappelen (Eds.), *Assertion*, pp. 197–231. Oxford: Oxford University Press.

Hazlett, A. (2009). Knowledge and conversation. *Philosophy and Phenomenological Research 78*(3), 591–620.

Iacono, L. (2008). Warranted assertability maneuvers and the rules of assertion. *Pacific Philosophical Quarterly 89*(4), 460–69.

Karttunen, L. (1971). Some observations on factivity. *Paper in Linguistics 4*(1), 55–69.

Karttunen, L. (1973). Presuppositions of compound sentences. *Linguistic Inquiry 4*(2), 169–93.

Kindermann, D. (2016). Knowledge, pragmatics, and error. *Grazer Philosophische Studien 93*, 429–57.

Kiparski, P. and C. Kiparski (1970). Fact. In M. Bierwisch and K. Heidolph (Eds.), *Progress in Linguistics*, pp. 143–73. The Hague: Mouton.

Levin, J. (2008). Assertion, practical reason, and pragmatic theories of knowledge. *Philosophy and Phenomenological Research 76*(2), 359–84.

Locke, D. (2017). Implicature and non-local pragmatic encroachment. *Synthese 194*(2), 631–54.

Lutz, M. (2014). The pragmatics of pragmatic encroachment. *Synthese 191*(8), 1717–1740.

McKinnon, R. (2013). The supportive reasons norm of assertion. *American Philosophical Quarterly 50*(2), 121–35.

Pritchard, D. (2010). Contextualism, skepticism, and warranted assertability maneuvres. In J. Keim-Campbell, M. O'Rourke, and H. Silverstein (Eds.), *Knowledge and Skepticism*, pp. 85–104. Cambridge, MA: MIT Press.

Rescorla, M. (2009). Assertion and its constitutive norms. *Philosophy and Phenomenological Research 79*(1), 98–130.

Rysiew, P. (2001). The context-sensitivity of knowledge attributions. *Noûs 35*(4), 477–514.

Rysiew, P. (2007). Speaking of knowing. *Noûs 41*(4), 627–62.

Simion, M. (2016). *Assertion: The Context Sensitivity Dilemma*. Ph. D. thesis, Katholieke Universiteit Leuven and University of St Andrews, Leuven & St Andrews.

Stanley, J. (2005). Fallibilism and concessive knowledge attributions. *Analysis 65*(2), 126–31.

Stone, J. (2007). Contextualism and warranted assertion. *Pacific Philosophical Quarterly 88*(1), 92–113.

Vogel, J. (1990). Are there counterexamples to the closure principle? In M. Roth and G. Ross (Eds.), *Doubting: Contemporary Perspectives on Skepticism*. Doredrecht: Kluwer.