

Gradability and Knowledge^{*}

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Abstract

Epistemic contextualism ('EC'), the view that the truth-values of knowledge attributions may vary with the context of ascription, has a variety of different linguistic implementations. On one of the implementations most popular in the early days of EC, the predicate'knows p' functions semantically similarly to gradable adjectives such as 'flat', 'tall', or 'empty'. In recent work Jason Stanley and John Hawthorne have presented powerful arguments against such implementations of EC. In this article I briefly systematize the contextualist analogy to gradable adjectives, present Stanley's argument against the analogy, and offer a contextualist response that abandons the analogy in favor of modeling the semantics of 'knows p' along the lines of quantifier expressions. I then present Hawthorne's objection to the views presented, and finally conclude by outlining an argument to the effect that 'knows p' is an automatic indexical and as such to be expected to function differently from many other indexicals that the term has been compared to in the literature. I finally point out that no analogy should be expected to be perfect, and that no harm is done by postulating some unique behavior of 'knows p'.

1 The Analogy to Gradable Adjectives

Jason Stanley has argued recently that the analogy between 'knows p' and gradable adjectives hypothesized by early contextualists breaks down on the syntactic side; 'knows p' doesn't behave like a gradable expression.¹ To get a better understanding of this objection let us take a brief look at the syntax and semantics of gradable adjectives.

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¹See (Stanley 2004; 2005, Ch. 2).

It is often held among semanticists that the contents of gradable adjectives have semantic links to scales measuring the gradable property associated with the adjective at issue. For instance, the content of 'tall' is taken to have a link to a scale of height, the content of 'flat' a link to a scale of flatness and the content of 'empty' a link to a scale of emptiness.² According to such scalar analyses of gradable adjectives, (1) is to be analyzed as in (2), where δ_F ' denotes a function mapping objects onto values of a scale of flatness and the variable ' v_{minFC} ' denotes a value on that scale separating the domain of 'flat' into its positive and negative extension in context C:³

- (1) A is flat.
- (2) $\geq (\delta_F(\mathbf{A}); v_{minFC}).$

More intuitively, (2) is to be read as follows:

(3) The value A takes on a scale of flatness is at least as great as the minimal value required for counting as satisfying 'flat' in context C.

According to the scalar analysis, positive 'flat'-ascriptions have a logical form similar to the logical form of comparative 'flat'-ascriptions. To see this, note that the scalar analysis assigns the logical form as depicted in (5) to the comparative statement (4):

- (4) A is flatter than B.
- (5) >($\delta_F(\mathbf{A}); \delta_F(\mathbf{B})$).

Again, more intuitively, (5) is to be read as in (6):

(6) The value A takes on a scale of flatness is greater than the value B takes on a scale of flatness.

According to the scalar analysis, at the level of logical form, positive 'flat'ascriptions comprise a contextually determined comparison value that is unarticulated at the level of surface structure.

Let us return to epistemic contextualism. Owing to their emphasis on the analogy to gradable adjectives, some early defenders of EC were tempted to take over the scalar analysis for their purposes and claim that 'knows p'

²See (Kennedy 1999) for such an account of gradable adjectives.

³There will probably be no definite cut-off point for any gradable adjective here, but rather an area where it is unclear whether the adjective applies or not, i.e. a penumbra. Gradable adjectives are vague. However, I take it that vagueness and context-sensitivity are two distinct semantic phenomena.

is to be modeled semantically analogously to 'flat': just as the content of 'flat' is semantically linked to a scale of flatness, the content of 'knows p' is semantically linked to a scale of *epistemic strength*, the degree of epistemic strength required for a belief to satisfy 'knows p' varying with context.⁴ According to this view, (7), which is to be read as in (8), gives the logical form of 'knowledge'-ascriptions:

- (7) $\geq (\delta_{ES}(\mathbf{b}_x); v_{minKC}).$
- (8) The value x's true belief b takes on a scale of epistemic strength is at least as great as the minimal value required for counting as satisfying 'know' in context C^{5}

Thus, according to the analogy between 'knows p' and gradable adjectives, 'knows p' is context-sensitive in virtue of having a semantic link to a scale of epistemic strength, which is modeled in a contextually variant way by postulating a hidden variable whose value is provided by the respective context of ascription. The analogy seems straightforward, is intuitively plausible, and it isn't further surprising that it has figured prominently in the early literature on EC.

2 Stanley's Objection

Even though the above view appears fairly natural at first glance, Jason Stanley objects to it on the basis of syntactic evidence. Here is Stanley:

If the semantic content of 'know' were sensitive to contextually salient standards, and hence linked to a scale of epistemic strength (as 'tall' is linked to a scale of height), then we should expect this link to be exploited in a host of different constructions. The fact that we do not see such behavior should make us at the very least suspicious of the claim of such a semantic link.⁶

Exactly what kind of syntactic constructions does Stanley have in mind? As previously indicated, Stanley claims that, as a matter of empirical fact,

⁴The versions of EC to be found in (DeRose 1995) and (Cohen 1988, 1999) can be read along these lines. DeRose gives the notion of epistemic strength an externalist reading, while Cohen interprets it along internalist lines.

⁵I ignore the fact that 'knows p' might not be linked to a linear scale of epistemic strength but rather to a partial ordering of belief-states. Note that many gradable adjectives are linked to partial orderings rather than to linear scales: 'interesting', 'justified' and 'easy' are obvious examples.

⁶(Stanley 2004, p. 130, 2005, p. 45).

expressions whose contents are semantically linked to scales are usually gradable. As he shows in great detail, however, 'knows p' is not gradable: it neither accepts standard degree modifiers such as 'very', 'quite' or 'extremely' nor comparative and superlative constructions with 'more' and 'most' or the degree morphemes '-er' and '-est'. Here are some exemplary constructions demonstrating this syntactic difference:

- (9) FLAT/EMPTY
 - x is very/quite/extremely flat/empty
 - x is flatter/emptier than y
 - x is the flattest/emptiest F
- (10) Know
 - x very much/quite/extremely knows that p
 - x knows that p more than y
 - x knows that $p \mod^7$

Let us recap Stanley's argument. In addition to the syntactic data in (10), Stanley's argument rests on what I shall call the *Gradability Constraint*:

Gradability Constraint

If a natural language expression e has an unarticulated semantic link to a scale s, then e is gradable along s.

From (GC) and the rather uncontroversial assumption that 'knows p' is not gradable, Stanley infers that the content of 'knows p' doesn't have a semantic link to a scale of epistemic strength. If the content of 'knows p' doesn't have such a link, however, then 'knows p' cannot be context-sensitive along the lines of gradable adjectives, for, according to the scalar analysis, such adjectives are context-sensitive precisely because their contents are linked to scales. Epistemic contextualism is implausible, the argument goes, since its analogy between 'knows p' and gradable adjectives breaks down on the syntactic side.⁸

I assume here that the contextualist has to grant Stanley that her analogy to gradable adjectives breaks down on the syntactic side: 'knows p' isn't

⁷As (Stanley 2005, pp. 39-40) points out, constructions such as 'knows better than anyone', etc. are idiomatic and therefore do not indicate the gradability of 'knows p'.

⁸Cohen (1999, p. 60) argues that 'knows p' needn't be gradable, since it is contextsensitive in virtue of entailing 'justified', which is gradable and, according to Cohen, context-sensitive. Stanley (2005, Ch. 4) objects to this maneuver on a variety of grounds, and I shall therefore refrain from addressing the issue. Let me mention, however, a further possible doubt one might have about Cohen's maneuver. Even though 'justified' is gradable, it might be disputed that it is indexical: 'justified', it might be argued, is more likely to be sensitive to the subject's rather than to the ascriber's context.

gradable. But should the contextualist accept (GC)? As a first attempt towards a rejection of (GC), it might be argued that 'knows p' behaves distributionally in a very different way from gradable adjectives because it is a verb. However, as Stanley points out, there are straightforwardly gradable verbs. Here is 'like':

(11) LIKE

x likes y very much/a lot

x likes y more than z

x likes y most

As Stanley admits, 'knows p' differs from 'like' in being factive and taking a sentential complement. The contextualist might thus be tempted to argue that we shouldn't expect 'knows p' to exploit its semantic link to a scale syntactically in the same way in which 'like' does. 'Knows p' might, after all, be non-gradable for purely syntactic reasons.

Even though this response seems attractive initially, Stanley counters it convincingly by showing that a fairly straightforward distinction can be drawn between gradable and non-gradable verbs, which suggests that (GC) doesn't hold for adjectives only.⁹ In fact, Stanley even offers an example of a gradable factive verb taking sentential complements. Here is 'regrets p':¹⁰

(12) Regret

x very much regrets that p

x regrets that p more than y/more than that q

x regrets that p most

Since 'regrets p' is gradable, we may assume that its content has a semantic link to a scale measuring degrees of regret—that is, (13), which is to be read as in (14), gives the truth-conditions of 'regrets p'-ascriptions:

- (13) $\geq (\delta_R(x, p); v_{minRC}).$
- (14) The value x takes with regard to p on a scale of regret is at least as great as the minimal value required for counting as satisfying 'regret' in context C^{11}

⁹See (Stanley 2004, pp. 127-129, 2005, pp. 40-41).

¹⁰Further examples of gradable verbs are 'like', 'suspect', 'believe', 'hope', 'flatten', 'level' and 'empty'.

¹¹Note that the phrase 'in context C' does not necessarily signal indexicality here. The contextual variability with regard to what counts as satisfying 'regret' is minimal, possibly even null.

If 'knows p' were semantically linked to a scale of epistemic strength in the way in which 'regrets p' is linked to a scale of regret, then we should expect 'knows p' to be gradable, too. But since 'knows p' is clearly not gradable, it also doesn't have a semantic link to a scale of epistemic strength, and therefore isn't context-sensitive in the way gradable adjectives are.

Stanley's objection seems very strong indeed. If an expression has a semantic link to scale, it exploits that link syntactically in the form of grad-ability. The fact that 'knows p' isn't gradable is evidence in support of the view that 'knows p' doesn't have a semantic link to a scale and thus isn't context-sensitive along the lines outlined in (8).

3 Abandoning the Analogy: The Quantifier View

In light of Stanley's objection it is tempting to abandon the contextualist analogy to gradable adjectives in favor of an alternative model. To see what I have in mind, note that, as Stanley is well aware, the gradability objection puts at risk only some versions of epistemic contextualism—namely, precisely those that model the semantics of 'knows p' along the lines of scalar analyses such as the one proposed above in (8): the gradability objection is only an objection to those versions of contextualism that postulate a semantic link between 'knows p' and a scale of epistemic strength. Of course, Stanley is correct that, on the face of it, the syntactic data speak rather strongly against such scalar approaches to 'knows p—as have been defended, for instance, by DeRose and Cohen. However, it is important to note that David Lewis's versions of contextualism, for instance, doesn't rely on the scalar approach.

To illustrate this point further, note that according to David Lewis's approach to EC, the semantics of 'knows p' is modeled along the lines of (L):

(L) A subject S satisfies 'knows p' in context C iff S's evidence e eliminates every $\neg p$ -world, except for those that are properly ignored in C.

According to (L), 'knows p' is a modal quantifier whose domain of counterpossibilities is restricted by a context-dependent property—the property of being properly ignored in C. As Ichikawa puts it aptly, on Lewis's approach "knows' is a context-sensitive modal whose base is fixed by a series of rules."¹² Thus, the context-sensitivity of 'knows p' is, according to Lewis, modeled rather differently than on scalar approaches: according to (L), 'knowledge'-attributions do not comprise, at the level of logical form, reference to scales of any type.

¹²(Ichikawa 2011b, p. 392).

Lewis's account accordingly sidesteps the gradability objection, for the defender of (L) can simply grant Stanley that 'knows p' doesn't behave like a gradable expression, and explain this fact by noting that 'knows p' doesn't have a semantic link to a scale of epistemic strength. Moreover, note that the fact that the Lewisian contextualist can dispense entirely with other contextualists' talk of 'epistemic standards' as merely metaphorical. This presents a crucial advantage for the Lewisian contextualist, for it is talk about 'epistemic standards' that'—when taken literally—gives rise to the impression that 'knows p' should be linked to a scale of epistemic strength, justification, or evidential support, as explicated in (8).¹³

Predictably, the Lewisian idea that 'knows p' works more like a quantificational expression has become popular recently. The main defenders of the view are Blome-Tillmann (2009, 2014), Ichikawa (2011a, 2011b), and Schaffer and Szabo (2015), who argue that 'knows p' works similarly to the A-quantifier expression 'always'.¹⁴

4 Further Problems: Clarification Techniques

While Stanley's objection can be countered by the quantificational approach, this isn't so obvious for another powerful linguistic objection to the analogy to gradable adjectives that is due to John Hawthorne (2004). As Hawthorne points out, DeRose's and Cohen's analogy between 'knows p' and gradable adjectives is implausible for reasons that go beyond the problem of syntactic gradability. For, in addition to being syntactically gradable, adjectives such as 'flat' and 'empty' come, as Hawthorne observes, with a fine-grained system of modifiers that can be used to indicate or clarify the particular standards of flatness or emptiness that are prevalent at one's context. 'Knows p', however, doesn't seem to accept similar constructions.

To illustrate this issue further, suppose I say 'That meadow is flat' and you challenge my assertion by pointing out that there are some molehills in it. In such a situation, there are—as Hawthorne observes—three different strategies available to me:

(i) *Concession*: I concede that my earlier belief was wrong and try to find new common ground: 'I guess you are right and I was wrong. It's not

¹³It should be noted, however, that Stanley's objection is a valid objection against accounts such as DeRose's, which takes talk of epistemic strength literally and at face value. (DeRose (1995) defines epistemic strength in terms of how far throughout modal space one's beliefs are true). With respect to Stanley's gradability objection, Lewis's account has a clear advantage over DeRose's and over other versions of EC that measure epistemic strength in terms of degrees of justification (see (Cohen 2001) for such a view).

 $^{^{14}\}mathrm{See}$ ch. 26.

really flat. But let's agree that . . .'

- (ii) Stick to one's guns: I claim that the challenge does not undermine what I said. I say ['That meadow is flat']. You point out some small bumps. I say: 'Well, that doesn't mean it isn't flat'.
- (iii) *Clarification*: I clarify my earlier claim and then protest that your challenge betrays a misunderstanding of what I believe and what I was claiming. There are various sorts of 'hedge' words that can be invoked in aid of this kind of response.¹⁵

Hawthorne then focuses on the third type of strategy—the clarification strategy and gives three examples of how it can be implemented:

Example 1:Assertion: 'The glass is empty'.Challenge: 'Well, it's got some air in it'.Reply: 'All I was claiming is that it is empty of vodka'.

Example 2:Assertion: 'The field is flat'.Challenge: 'Well, it's got a few small holes in it'.Reply: 'All I was claiming is that it is flat for a football field'.(Or: 'All I was claiming is that it is roughly flat'.)

Example 3: Assertion: 'He'll come at 3pm'. Challenge: 'He's more likely to come a few seconds earlier or later'. Reply: 'All I meant is that he'll come at approximately 3pm'.¹⁶

As these examples demonstrate, we have a rich repertoire of natural language devices for implementing the clarification technique when it comes to 'flat' and 'empty'. We can use prepositional phrases ('PPs') such as 'for a football field' and 'of vodka' or adverbial phrases ('AdvPs') such as 'enough to play golf' and 'enough to refill' to clarify sensitivity to particular standards of flatness and emptiness respectively.

Interestingly, however, there are no natural language expressions that we can use to clarify sensitivity to so-called 'epistemic standards': gradable adjectives come with a rather rich system of modifiers that is unavailable with

 $^{^{15}}$ (Hawthorne 2004, p. 104).

 $^{^{16}}$ (Hawthorne 2004, p. 104).

regard to 'knows p'.¹⁷ As Hawthorne emphasizes, it is due to the unavailability of such constructions that we usually react to epistemic challenges by either conceding that we were mistaken (strategy (i)) or by sticking to our guns (strategy (ii)).¹⁸ But why is it that 'knows p' doesn't accept 'for'-PPs, 'of'-PPs, 'enough to'-AdvPs or similar constructions clarifying sensitivity to particular 'epistemic standards'?

One might be tempted to think that, given our considerations from the previous section, the answer is fairly obvious: since 'knows p' isn't contextsensitive in virtue of having a semantic link to a scale of epistemic strength, it's not further surprising that it doesn't accept the same types of modifier phrases as gradable adjectives. As we have already seen in the previous sections, the syntax of 'knows p' is rather different from the syntax of gradable adjectives, and we already admitted there that this is so because the semantics of 'knows p' is plausibly rather different from the semantics of gradable adjectives—namely, quantificational.

Such a response to the worry at hand, however, can quickly be shown to be unsatisfactory. For even though Hawthorne addresses the standard contextualists' analogy between 'knows p' and gradable adjectives only, an analogous objection can be made with respect to the Lewisian quantificational account. Consider the example of quantified noun phrases ('QNPs'): we can usually clarify the intended domains of QNPs quite straightforwardly—namely, by appending prepositional phrases or often by simply adding predicates:

(15) A: Tom drank all the beer.

B: No, he didn't. There's still some in the basement.

A: I didn't mean all the beer *in the house*; I meant all the beer *in the fridge*.

(16) A: All the leaves are brown.

B: No, they aren't. Look, the ones of your indoor bonsai are still green. A: I didn't mean the leaves of my indoor plants; I meant the leaves of the trees outside.

The italicized phrases in (15) and (16) serve to clarify the intended domain of the quantified noun phrases. Moreover, note that the context-sensitivity of yet further context-sensitive expressions that we might compare 'knows p' to can be indicated or clarified straightforwardly by means of natural language clarifying devices: the intended content of 'left' and 'right', for instance, can be made obvious by adding the phrases 'from my perspective' or 'from

¹⁷However, see (Ludlow 2005) for examples of expressions that might be used to indicate epistemic standards.

 $^{^{18}}$ (Hawthorne 2004, p. 105).

Hannah's perspective', while the hemisphere-sensitivity of season expressions can be made explicit by appending 'in the northern hemisphere' or 'in the southern hemisphere'. Finally, note that the sensitivity of 'local' and 'nearby' to a subject's perspective can be made explicit by adding phrases such as 'to me', 'to you', or 'to Tom'. Here are a few examples illustrating this point:

(17) I meant local/near to you.

- (18) I meant right/left from my point of view/from my perspective.
- (19) I meant spring/autumn in the northern/southern hemisphere.

Given that all of the mentioned context-sensitive expressions come with clarificatory devices, the question arises as to why 'knows p' doesn't seem to allow for similar constructions. If 'knows p' were in fact context-sensitive, shouldn't we expect it to be modifiable in a similar way?

5 'Knowledge' as an Automatic Indexical

Note in response to the above challenge that the absence of clarifactory devices for 'knows p' is by no means surprising. In fact, there is a large number of indexicals the context-sensitivity of which cannot be clarified or made explicit by appending additional linguistic material. In particular, note that clarification strategies never work for so-called *automatic indexicals*—that is, for indexicals whose contents are fixed independently of the speaker's intentions. To see in more detail what I have in mind, let us take a brief look at the distinction between *automatic* and *intentional* indexicals.

As David Kaplan (1989) has pointed out, these two types of indexical— Kaplan prefers the terminology of 'pure indexicals' and 'true demonstratives' differ in how their contents are fixed on a given occasion of use. While the content of a tokening of a true demonstrative such as 'he', 'she', 'this' and 'that' is always to some extent determined by the speaker's intentions or accompanying actions, this is not the case for pure indexicals such as 'I', 'today' and 'tomorrow'. For instance, the content of a tokening of 'that' is always partly determined by a more or less explicit manifestation of the speaker's intention to refer to a given object, such as accompanying pointing gestures or the provision of other contextual clues. Pure indexicals, however, are—as Perry (2001) puts it—*automatic* in the sense that their contents are fixed *independently* of the speaker's intentions or manifestations thereof.

A tokening of 'I', for instance, always has as its content the speaker of the context, regardless of whether the speaker actually intends to refer to herself or points at somebody else while speaking. Assuming that indexicals usually have a descriptive character, the crucial point with regard to Kaplan's and Perry's distinction is that the descriptive character of pure indexicals doesn't contain intentional concepts, whereas the descriptive character of impure indexicals does. The conditions fixing the content of pure or automatic indexicals at a context C do not place restrictions on the speaker's intentions, whereas the conditions fixing the content of true demonstratives or intentional indexicals at a context C do.¹⁹

Next, note that automatic indexicals do not accept modifier phrases clarifying the factors that they are sensitive to. Consider the examples of 'I', 'here', and 'today'. Expressions that aim at shifting the reference of these expressions should—given their automaticity—be expected to be rather awkward or even nonsensical, for they are attempting to do something that is linguistically impossible. The following examples confirm exactly this prediction:

- (20) # Given that you are the speaker, I'm hungry.
- (21) # Relative to you as speaker, I'm hungry.
- (22) # Relative to tomorrow, it is raining today.
- (23) # Given that it is tomorrow, it is raining today.
- (24) # Relative to Moscow as place of utterance, it's cold here.

As these examples demonstrate, there seem to be no modifiers or operators that can shift the content of automatic indexicals in ways in which this is possible for expressions such as gradable adjectives or season expressions.

Is 'knows p' an automatic or an intentional indexical? According to some contextualists, it is an automatic indexical. Blome-Tillmann (2014), for instance, defends *Presuppositional Epistemic Contextualism* (PEC), according to which the semantic content of 'knows p' at a context is partly fixed by what is pragmatically presupposed at the context. Thus, on Blome-Tillmann's account, speaker intentions do not play a direct role in fixing the content of 'knows p'. However, let us leave aside PEC for the moment, and consider the question of whether what speakers intend to express by their use of the

¹⁹What is the descriptive character of the demonstratives 'this' or 'that'? Even though their character might initially seem to be unanalysable, it can be explicated as 'the object the speaker intends to perceptually or cognitively focus on in context C' or as 'the object the speaker intends to refer to in context C'. These explications of the character of 'this' or 'that' provide us with a reasonably systematic and informative account of the interaction between context on the one hand and the content of 'this' or 'that' on the other.

word 'knows p' at a context C can intuitively make a difference as to what 'know p' expresses at C. The answer to this question is that this seems impossible; if we want to change the content of 'knows p' we have to change the context (which amounts, according to PEC, to changing what we pragmatically presuppose). In other words, 'knows p' receives its content at a context C independently of what content the speaker intends to express by tokening 'knows p' in C; the content of 'knows p' is, at a given context, fixed independently of the speaker's intentions.²⁰ 'Knows p' is accordingly a pure indexical, and as such—in Perry's words—automatic.

Next, note that 'knows p' is in this respect crucially different from 'spring', 'autumn', 'left', 'right' and even from gradable adjectives such as 'tall' and 'empty' and QNPs. Clearly, speaker intentions can determine the hemisphere, the perspective, or the relevant comparison class or standard of tallness or emptiness respectively. That is why we have at our disposal phrases to implement the clarification technique for those expressions—sometimes our intentions aren't readily accessible or obvious to our hearers, and in those cases we need linguistic devices such as those in (15)-(19) to make explicit our intentions. With respect to automatic indexicals, however, such expressions have no linguistic purpose: since automatic indexicals receive their Kaplan content automatically and invariably from the context of utterance, there can never be any uncertainty about what content the speaker could have meant to express (unless one is ignorant about the context).

The characterization of 'knows p' as an automatic indexical helps resolve another linguistic objection to standard contextualism that is also due to Jason Stanley. As Stanley points out, the standards governing the semantics of gradable adjectives and quantified noun phrases can sometimes shift midsentence. Here are three of Stanley's examples illustrating the phenomenon:²¹

- (25) That butterfly is large, but that elephant is not large.
- (26) If you have a car, Detroit is nearby, but if you are on foot, it is not nearby.
- (27) Every sailor waved to every sailor.²²

²⁰Of course, the speaker's intentions can influence the content of 'knows p' at the speaker's context, but only insofar as the speaker's intentions influence her pragmatic presuppositions: if speaker intentions partly determine what a speaker pragmatically presupposes, then they may also partly (and indirectly) determine the content of 'know'. However, they do not directly determine the content of 'know', as they do in cases of intentional indexicals such as 'this' and 'that'.

²¹See (Stanley 2004, pp. 135-136, 2005, p. 60).

 $^{^{22}}$ (Ichikawa 2011a) points out that quantifier shifts are not always obvious, as in 'All

As is obvious from Stanley's examples, gradable adjectives as well as quantified noun phrases can shift their content mid-sentence. But, as Stanley observes, this is not possible with respect to 'knowledge'-ascriptions.

While this is surely worrying news for contextualists who model the semantics of 'knows p' on the basis of the scalar approach presented in the previous section, it should be clear by now that this is not a problem for views according to which 'knows p' is an automatic indexical (such as PEC). As can be demonstrated easily, the automatic indexicals 'I', 'today', and 'tomorrow', for instance, do not shift their contents mid-sentence:

- (28) # I am hungry, but I am not hungry.
- (29) # Tomorrow will be the 18th of October 2011, but tomorrow will not be the 18th of October 2011.
- (30) # Today is my birthday, but today is not my birthday.

Since automatic indexicals such as the above ones do not change their content mid-sentence, we shouldn't (on the assumption that 'knows p' is an automatic indexical)—pace Stanley—expect 'knows p' to do so.²³

6 Concluding Remarks

With respect to the syntax of 'knowledge'-ascriptions, we can admit that 'knows p' differs significantly from gradable adjectives without risking the credibility of EC. Contextualists are not committed to the view that 'knows p' is semantically linked to a scale of epistemic strength. 'Knows p', therefore, shouldn't be expected to display the same syntactic features as gradable adjectives. In this paper we also countered the clarification technique objection by drawing attention to the fact that 'knows p' is most likely—and in any case according to *Presuppositional Epistemic Contextualism*—an automatic indexical and that no automatic indexicals can be modified in ways

of the bottles are on the table, but some of the bottles are in the fridge'. But note that there is still a disanalogy here, for the alleged quantifier shifts in the case of 'knowledge'ascriptions are never obvious, not only sometimes. Moreover, note that the intended domains in a sentence such as the one just mentioned can be made obvious by adding additional linguistic material ('beer bottles' vs. 'soda bottles'), which is not possible with respect to 'knowledge'-attributions.

²³I have argued elsewhere that the unavailability of the clarification strategy and, accordingly, of constructions such as 'for'-PPs and 'enough to'-AdvPs offers an explanation of Cohen's observation that the context-sensitivity of 'knows' is a little less obvious than that of gradable adjectives. See (Blome-Tillmann 2014).

that are exploited by the clarification technique objection. The contextualist may thus happily retreat to the view that 'knows p' is linguistically exceptional in a fairly harmless sense: 'knows p' is—as far as I can see—the only expression that has a quantificational structure, is sensitive to what is pragmatically presupposed at the context of ascription, and is thus an automatic indexical. This combination of properties is unique and we should therefore not expect 'knows p' to function in each and every linguistic respect exactly like other non-obviously context-sensitive expressions or like recognized indexicals—whether gradable adjectives, QNPs, or core indexicals. In summary, the uniqueness of 'knows p' shouldn't worry us too much, as long as a coherent, illuminating, and systematic account of this uniqueness can be given.

References

- Blome-Tillmann, M. (2008). "The Indexicality of 'Knowledge'." *Philosophical Studies* 138(1): 29-53.
- [2] Blome-Tillmann, M. (2014). Knowledge and Presuppositions. Oxford, Oxford University Press.
- [3] Cohen, S. (1988). "How to Be a Fallibilist." *Philosophical Perspectives* 2: 91-123.
- [4] Cohen, S. (1999). "Contextualism, Skepticism, and the Structure of Reasons." *Philosophical Perspectives* 13: 57-89.
- [5] Cohen, S. (2001). "Contextualism Defended: Comments on Richard Feldman's Skeptical Problems, Contextualist Solutions." *Philosophical Studies* 103: 87-98.
- [6] Davis, W. A. (2007). "Knowledge Claims and Context: Loose Use." *Philosophical Studies* 132: 395-438.
- [7] DeRose, K. (1995). "Solving the Skeptical Problem." The Philosophical Review 104: 1-52.
- [8] Hawthorne, J. (2004). Knowledge and Lotteries. Oxford, OUP.
- [9] Ichikawa, J. (2011a). "Quantifiers and epistemic contextualism." *Philosophical Studies* 155(3): 383-398.
- [10] Ichikawa, J. (2011b). "Quantifiers, Knowledge, and Counterfactuals." *Philosophy and Phenomenological Research* 82(2): 287-313.

- [11] Kaplan, D. (1989). Demonstratives. *Themes from Kaplan*. J. Almog, J. Perry and H. Wettstein. Oxford/New York, OUP: 481-563.
- [12] Kennedy, C. (1999). Projecting the Adjective: The Syntax and Semantics of Gradability and Comparison. New York, Garland.
- [13] Ludlow, P. (2005). Contextualism and the New Linguistic Turn in Epistemology. *Contextualism in Philosophy - Knowledge, Meaning and Truth.* G. Preyer and G. Peter. Oxford, OUP: 11-50.
- [14] Perry, J. (2001). Reference and Reflexivity. Stanford, CSLI Publications.
- [15] Stanley, J. (2004). "On the Linguistic Basis for Contextualism." Philosophical Studies 119: 119-146.
- [16] Stanley, J. (2005). Knowledge and Practical Interests. Oxford, OUP.