KNOW Evidence?

Effects of Prosody on the Interpretation of 'Know'

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This paper explores three arguments in epistemology that employ 'know' under prosodic emphasis: 'KNOW' as a datum. Drawing on work by Horn (2015) and Stanton (2023), I claim that these arguments fail because they do not properly account for the semantic effects of prosodic emphasis. I conclude by suggesting that this small case study indicates that work on the interpretation of prosody should be drawn into the broader project of empirical study of linguistic patterns in knowledge ascription.

Over the past twenty years knowledge ascription has been extensively explored through empirically informed approaches in epistemology (Buckwalter (2010), Beebe, (2012), Sekhar & Stanley (2012), Schaffer & Szabo (2014), Machery et al (2015), Turri (2018), Machery, Barret & Stich (2021), Beebe (2023)). Some of these approaches evaluate proposals about the syntax and semantics of knowledge ascription against current linguistic theory (e.g. Schaffer & Szabo (2014)), whilst others operationalise empirical claims concerning the conditions under which knowledge will be ascribed. (e.g. Beebe, 2012, 2024, Machery, 2021)[1]. These explorations have aimed to contribute to the philosophical analysis of knowledge.

Thus far, empirical work on knowledge ascription has offered no systematic exploration of the impact of prosodic features (including intonation, stress, speech rhythm) on the interpretation of the knowledge predicate in cases of knowledge ascription.[2] This paper proposes a regular effect of prosodic emphasis on interpretation of 'know' with the broader goal of signalling that

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1 For overview of the kinds of questions explored in experimental epistemology see Beebe (2012).

2 The study of prosody encompasses a collection of aspects of suprasegmental sound structure, for fuller discussion see Ladd (2014). Prosody is considerably broader than its information-structural uses, e.g. prosodic focus, which have received some treatment (following Dretske (1972)).

24 prosody deserves closer attention.[3] I return to an underexplored datum that
25 featured in older literature: 'know' capitalised, to be read as under prosodic
26 emphasis ('*KNOW*') and reinterpret it in light of recent work concerning the
27 contribution of prosody by Horn (2015), (Stanton, 2023).
28   In Section (I) I present three passages that rely on very different interpreta-
29 tions of the meaning of '*KNOW*': (it makes literal meaning salient; it raises
30 epistemic standards). 'Know' under emphasis is used to prompt skeptical
31 intuitions, contextualist intuitions and to fuel speculations about non-factive
32 'know' respectively. Section (II) introduces work by Horn (2015) and Stanton
33 (2023) on the intensificational effects of prosody and extends it to each of
34 the cases discussed in (I). I suggest that this approach offers a more general
35 solution: the intuitions marshalled in (I) in fact have a unified explanation
36 and result from the more general contribution of a prosodic contour for which
37 there is independent evidence. The final Section concludes with a broader
38 message: though this paper is merely a preliminary step, making a theoretical
39 case for the influence of prosody on the interpretation of the knowledge pred-
40 icate in cases of knowledge ascription, I hope to have established prosody as
41 an interesting site for further exploration in future empirical work and one
42 that must at the very least be controlled for.

1 *KNOW* in Epistemology

44 In this Section I review three cases in which 'know' under emphasis has been
45 employed as a datum in epistemological argument.

1.1 KNOW *and Skepticism*

47 Peter Unger's two premise argument for Skepticism relies on the effect of
48 emphasis on 'know' (Unger 1978: 88-9):

49   1. In the case of every human being, there is at most hardly anything of
50   which he is certain.
51   2. As a matter of necessity, in the case of every human being, the person
52   knows something to be so only if he is certain of it.

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3 A reviewer notes that all of the empirical work on knowledge ascription cited here concerns
   knowledge-that. It is an open, interesting question whether and how the proposal would extend
   to knowledge-how, though not one I will treat here.

3. In the case of every human being, there is at most hardly anything which the person knows to be so.

Unger's evidence for (P2) comes from cases like:

(1) ? He really *knows* it is raining but he isn't certain of it. (1978: 86)

He infers from the infelicity of such utterances that knowledge entails certainty (1978:86). Unger argues that this is a responsible inference to make because we have applied the 'Principle of Emphasis':

the emphasis of a word, by stress, italics, modifiers, or whatever, has the primary function of getting us to focus on that word, and generally its meaning(s) if it has at least one.[4] (1978: 76)

"[Emphasis is] a device to attract attention to a term [...] that does not affect the term's meaning" (ibid.); it focuses attention on literal meaning. When we evaluate (1) we are checking for contradictions whilst focusing on the literal meaning of 'know'. Apparent failures of entailment from knowledge to certainty must thus be the result of loose talk, which emphasis has tightened up.

KNOW *and Contextualism*

Keith DeRose offers the following anecdote:

ne of my introductory philosophy students, who, when presented with a sceptical argument involving the possibility of his being a brain in a vat, and then asked whether he knew after all that he was sitting in a philosophy class, responded, 'Well I know it, even though I don't *KNOW* it' (DeRose 1998: 71)

DeRose suggests that the 'know'/'*KNOW*' contrast in this case indicates that the contextually set standards for knowledge are being raised. In order to 'know' you must know according to ambient low standards, but in order to '*KNOW*', you must count as knowing even when high standards are in place. High standards will vary by context: here they are the ultra-demanding standards of the skeptic which perceptual evidence cannot satisfy, but the standards to *KNOW*' will be lower, admitting strong perceptual evidence, in the case, say, that someone wants to '*KNOW*' that the bank is open so that they can deposit an important check (as in Bank Case B, DeRose 1993, 912.)

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4 A reviewer points to the word 'generally' here: I believe that Unger means it to quantify over the object(s) over which emphasis typically operates, as: 'in general'.

85   For the Contextualist, the behaviour of 'know' under emphasis thus
86 seems to provide a favourable piece of ordinary language evidence. The
87 'know'/'*KNOW*' contrast is the intuitive datum, the Contextualist offers an
88 explanation that draws in standard-raising. From here one might apply the
89 standard battery of arguments from the context sensitivity of 'know' to the
90 context sensitivity of knowledge.

1.3 KNOW *and the Non-factivity of Knowledge*

92   Consider the following sentences:
93 (2) Mary *knew* that she wasn't going to survive. Fortunately, she was wrong.
94 (DeRose 2009:16)
95 (3) How could this have happened? I *knew* that Kerry was going to win.
96 (Stanley 2008:43)
97 And, where the Yankees lost not two years ago, but one year ago.
98 (4) I […] *knew* the Yankees were going to lose two years ago, but they took a
99 year longer than I expected. (Kvanvig CD)[5]
100 These uses are not obviously infelicitous.[6] But if '*KNOW*' is a guide to 'know',
101 either because emphasis directs us to the literal meaning as Unger has it,
102 or because the only semantic change is raise in standards then the result is
103 surprising and perhaps unpalatable: 'know' turns out to be non-factive or to
104 have non-factive uses.[7]

105   Stanley, DeRose and Schaffer want to reject cases like (2)-(4) but they do
106 not offer a clear story about how to do it (Stanley 2008: 43; DeRose 2009:
107 16; Schaffer CD). It is assumed that knowledge is factive and so the peculiar
108 behaviour of 'know' under emphasis must show "that there is some funny
109 business afoot"(Schaffer CD) and it needs to be funny business that renders
110 evidence using '*KNOW*' inadmissible. DeRose has tentatively suggested that
111 emphasis may signal that non-literal interpretation is at play, and Kvanvig has
112 suggested that it signals that the meaning of 'know' had been altered (DeRose
113 2009: 16fn11; Kvanvig CD).[8]

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5 CD = Posts by Jonathan Schaffer, Jonathan Kvanvig, and Keith DeRose on: ⏣http://certain-
   doubts.com/how-many-knowledge-relations-are-there/⏣. Accessed: 03/03/2018.
6 A reviewer points out that intuitions do vary in cases like these, citing Dahlman et al (2022).
7 Alternatively a semi-factive analysis may be available if projection behaviour matches that of
   other semi-factives.
8 A reviewer notes Hazlett (2010), in which non-emphasized uses of 'know' appear to motivate a
   non-factive analysis of knowledge, has yielded proposals about the non factive uses of 'know'

1.3.1 Summary

In each of the three cases above emphasis receives a distinct treatment: Unger says that emphasis directs attention to literal meaning, DeRose offers the conflicting claim that it raises contextual standards for the applicability of the predicate and in the cases that seem non-factive, Kvanvig and DeRose imply that it is involved in non-literal interpretation, and possibly in meaning-modulation (i.e. contextually local reinterpretation). In the next Section I will offer an account that unifies all three effects under a recent proposal for the semantic contribution of the relevant variety of emphasis.

2 Meanings Under Stress

So far I have been talking, somewhat loosely, about 'know' under prosodic emphasis. It is time to be a little more specific. Prosodic contours are con-figurations of (predominantly) suprasegmental features including *inter alia* tone, pitch, duration, amplitude and word junctures.[9] In this Section I will suggest that the realisation of the emphasis on 'know' is plausibly a contour characterised signally by high pitch tone and a strong boundary tone.[10] The semantic and pragmatic effects of this contour have been studied in Geurts (2010); Geurts and Van Tiel; (2014); Horn (2015) and Stanton (2023). In what follows I apply the analysis in Stanton (2023) to the knowledge predicate, but a note of caution is needed before proceeding. It is well recognized that prosody is often overcrowded – a single contour can realise multiple pragmatic func-tions; equally, the typographical realisation of emphasis is too coarse-grained to uniquely determine its intended phonological realisation. A clarification about my aim in applying this analysis is therefore needed. My goal is not to demonstrate that emphasis on 'know' *must* receive exactly this treatment — though I believe that it does makes sense of the interpretative variation observed. Instead, my goal is to show that proper attention to the contribution

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that may extend into the emphasized cases. Buckwalter (2014) offers an account in terms of *protagonist projection* according to which 'know' retains its usual semantics but in these non-factive cases is interpreted from the perspective of the individual to whom the knowledge state is ascribed. This constitutes a more developed form of the 'non-literal' approach (cf. Buckwalter 2014 p.395.) noted by DeRose; I respond to non-literal interpretations in Section 2.

9 'Suprasegmental' here refers to units larger than a prosodic 'segment', which can be loosely thought of as an individual speech sound, like a consonant. There is no fully settled definition of 'prosody', but for a historical characterisation, see Ladd (2014).

10 This characterisation follows Horn (2015) and Stanton (2023).

of prosody is required in order to evaluate arguments that employ 'know' under emphasis ('*KNOW*').

Before offering the analysis a preliminary note is needed. In the broader linguistics literature prosody has received much attention for its ability to mark information structural focus: this is an aspect of information-packaging that renders a constituent prominent (for an overview see Beaver & Clark (2008)). In English, prosodic focus is often typographically rendered by modes of emphasis including capitalisation and itallicisation. It may thus be natural to think that the cases above should be subsumed under a focus-based analysis.[11] The reason that I do not pursue a focus-based analysis is that focus alone cannot account for the semantic contribution of emphasis in the cases that I will discuss.[12] Focal prosody is typically treated as supplementing the meaning of the focus-marked constituent at a context by evoking contextually salient alternatives, as when:

Q) What does Ede want?

A) Ede wants [coffee]$_F$

Contrasts 'coffee' with the set of other things that Ede might want to drink (cf. Rooth, 1995).[13] This can lead to truth-conditional change only in the presence of scope-bearing 'focus-sensitive' operators such as quantifiers. In the absence of such elements focus does not make a truth-conditional contribution; the cases of 'know' under emphasis that I will treat fall into this category and so an approach that treats emphasis as alternative-evoking focus will be insufficient. As I will show below, this paper concerns the interpretation of a particular prosodic contour that has been associated instead with meaning modulation (contextually local modification of the interpretation of an expression); following Horn (2015) and Stanton (2023), it has not been treated as merely contributing contrastive focus.[14]

To introduce the contour in question and the flavour of the analysis, note that the behaviour of 'know' under emphasis is neither strange nor unique. Recall DeRose's student who uttered:

(5) I know it, even though I don't *KNOW* it.

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11 Thanks to an anonymous reviewer for pressing this question.

12 Whether focus plays some role in the full account is contentious but not required for our purposes. For the claim that it is involved see Horn (2015); for an account that does without it Stanton (2023).

13 For varieties of contrastive focus see Beaver & Clark (2008). Contrastive focal phenomena are typically treated with a Hamblin-style alternative semantics and embedded in a Roberts-style QUD model (cf. Roberts, 1996/2012).

14 For comparison of semantic vs pragmatic approaches to the contour, see Stanton (2023).

¹⁷² If '*KNOW*' retains its usual meaning, this should be a contradiction. Now
¹⁷³ consider the following cases:
¹⁷⁴ (6) This table is flat, but it's not *FLAT*.
¹⁷⁵ (7) This guy is tall, but that guy is *TALL*.
¹⁷⁶ (8) It's not that I must but that I *MUST* finish this paper today.
¹⁷⁷ (9) I ate all the biscuits... well not *ALL* the biscuits.
¹⁷⁸ Absent further context (6) means something like: the table counts as flat, even
¹⁷⁹ though it isn't perfectly flat; (7) means that the first guy is tall but the second is
¹⁸⁰ very tall, in (8), '*MUST*' signals that the relevant obligation is very strong, and
¹⁸¹ in (9) whilst you might have eaten all the biscuits around here, you haven't
¹⁸² eaten totally all the biscuits in a further contextually expanded domain (say:
¹⁸³ all the biscuits in the house but not the city). And to return to (5), in which
¹⁸⁴ the student claims to know but not *KNOW*, what he says might be glossed as
¹⁸⁵ follows: he knows but he doesn't really know it. There are many ways to fail
¹⁸⁶ to count as 'really knowing': perhaps his knowledge is not deep, or thorough
¹⁸⁷ or perhaps it is not stable.¹⁵ In DeRose's case, the student contrasts knowing
¹⁸⁸ in a way sufficient to live his everyday life with knowing in a stronger, better,
¹⁸⁹ deeper way — one that would be sufficient to defeat the skeptic.

¹⁹⁰   In all of the glosses that I offered above the emphasis is replaced by an
¹⁹¹ *intensifier*: an expression that says that a certain property is possessed *to a high*
¹⁹² *degree*. Intensifiers in English include: 'very', 'really', 'seriously', 'absolutely',
¹⁹³ 'totally'. Intensifiers are predicate modifiers that are commonly understood to
¹⁹⁴ have the following semantic function: they restrict the extension of the expres-
¹⁹⁵ sion that they modify to only those members that satisfy a contextually-set
¹⁹⁶ high standard for falling under that predicate. There is thus nothing contradic-
¹⁹⁷ tory about saying that someone is tall but not very tall, or that a table is flat but
¹⁹⁸ not perfectly flat, even that prior to becoming an F1 driver Louis Hamilton
¹⁹⁹ knew how to drive, but now he really knows.¹⁶ Both Horn (2015) and Stanton
²⁰⁰ (2023) argue that in cases like (7)-(9) the prosodic emphasis brings about

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15 A reviewer suggests that 'I know but I don't really know' strikes them as contradictory. I believe
this is only so when 'really' is read as hedging (as in: 'I don't really think so'). 'Really know' where
'really' is an intensifier meaning: to a high degree, should not induce contradiction, as in: 'when I
was a student I knew the Slingshot argument, but now that I've been teaching it for years I really
know it.'.

16 Lexical intensifiers are typically grammatically restricted to modify adjectives and adverbs, but
can also modify both nominal and verbal meanings by a process called 'coercion' (cf. Gonzálvez-
García (2020)). The Corpus of Contemporary American English has 96 hits for 'absolutely know',
86 for 'totally know' and 8946 hits for 'really know', though these cases are split between the
hedge and the intensifier sense. See Stanton (2023) for the case that the contour under discussion

semantic intensification. My claim here is that semantic intensification is also what is happening in (5).

To get a grip on how an intensifier works, first think about what it intensifies. Intensifiers apply to gradable expressions, these are expressions that denote properties that come in degrees; you can be more or less cold or strange or happy. There are a range of proposals about the semantic treatment of gradables, but here I will recruit the popular degree-semantic treatment of Kennedy & McNally (2005a,b), following Stanton (2023). On this account gradable adjectives map their argument onto degrees, which are points or intervals along a dimension; sets of ordered degrees form scales (cf. Kennedy & McNally (2005: 349). There may be just one scale associated with the meaning of the gradable, like the height scale for 'tall'. In the case of so-called 'multidimensional' adjectives there are many such scales — one can be more or less 'strange' along many different dimensions. For gradable adjectives in the positive form (e.g 'is happy'), in the absence of overt degree morphology, Kennedy and McNally (2005) posit a null degree morpheme, *pos*, that encodes the relation **stnd**. The **stnd** relation holds of a degree just in case it meets a standard of comparison for an adjective relative to a comparison class (cf. 2005a: 350, 2005b:182). What this means is that **stnd** provides a context-sensitive threshold for falling under the predicate; there is no context-independent standard for counting as 'tall': an individual may be tall for a toddler but not a basketball player.

An intensifier interacts with scalar structure by adjusting the **stnd** function, so that the threshold degree is boosted. For our purposes it should be noted that intensifiers typically apply to gradable expressions and exploit scalar structure that is part of the denotation of the expression to which they apply, as when applying 'very' to 'tall' boosts us up the height scale. But it can also apply to expressions that are usually non-gradable but whose meaning has been locally adapted to scalarity, in a process called 'scalar coercion'.[17] Scalar coercion involves converting the semantic structure of a non-gradable expression to that of a gradable and involves organising its extension into an *ad hoc* scale, structured around a comparison class that is locally salient.[18] Scalar coercion can be triggered by applying an intensifier to a range of non-

is not integrated into the grammar and so it not grammatically restricted in the way that an adverbial intensifier is.

17 Asher (2011) surveys semantic approaches to coercion, cf. Sawada & Grano (2011) for scalar coercion in particular.

18 For more on *ad hoc* scales see see Hirschberg & Ward, (2007).

234 gradable, 'absolute' adjectives. Leffel, Xiang and Kennedy (2017) list 'straight',
235 'empty', 'open' and 'flat' among the absolute adjectives, but the Corpus of
236 Contemporary American English (COCA) shows that each of these is used
237 widely under intensification ('very straight' (299); 'very empty' (87); 'very
238 open'(942); 'very flat' (137)).[19] There are a range of ways to build an *ad hoc*
239 scale; we need simply identify a property or properties associated with the
240 meaning of the word and rate cases in relation to them. A 'really flat table'
241 exceeds a high threshold for flatness that may be settled relative to the way
242 that one measures or estimates (e.g. spirit level vs. eyeballing). Similarly, a
243 'really empty bowl' is one that is empty according to a contextually scrupulous
244 standard for measuring emptiness (not a single morsel left even when one
245 looks closely/touches the inside).

246   The heart of my proposal is this: Horn (2015) and Stanton (2023) have
247 argued that prosodic emphasis can bring about intensification, triggering
248 scalar coercion when needed; I propose that this can happen when prosodic
249 emphasis is applied to the knowledge predicate.[20] I claim that the application
250 of prosodic emphasis may temporarily convert 'know' to gradable-'know' by
251 triggering the construction of a *knowledge scale* at the context of utterance: this
252 is an *ad hoc* scale whose threshold expresses the local standards for knowing
253 (more on that below). Though work on scalar coercion has typically focused
254 on adjectival meaning, Stanton (2019; 2023) argues that scalar coercion is
255 also available in verbs and that composing many verbs with intensifiers yields
256 scalar denotations for those verbs. I believe that 'know' can be thus converted:
257 COCA demonstrates widely attested usage of 'know' composed with an inten-
258 sifier ('really know' has 8943 hits; 'totally know' has 86 and 'absolutely know'
259 has 96 hits).[21] If 'know' can be converted to gradable under intensification
260 and prosodic emphasis can intensify then in any of the cases above the inter-
261 pretation of 'know' under emphasis could be the product of an *ad hoc* and
262 contextually flexible meaning adjustment. If so then the evidential relevance
263 of interpreting of 'know' under emphasis is placed in question because it

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19 This is a sample with 'very'. Intensified readings are available on COCA for a range of intensifiers,
including 'really', 'extremely', 'totally' etc.

20 For debate on the balance of semantic to pragmatic labour, see Stanton (2023).

21 'Damn know', with intensificational 'damn' is also attested: 'I damn know I agree with
it' (⟨http://www.redstate.com/ironchapman/2012/05/21/on-this-natural-born-citizen-issue-part-
i-from-alexander-hamilton-to-lynch-v-clarke/⟩ as is 'very know' e.g.: "you very know a lot" (though
this strikes me as ungrammatical) ⟨ http://matadornetwork.com/abroad/10-japanese-customs-
you-must-know-before-a-trip-to-japan/⟩. Interestingly 'know' with the mitigator 'at all', which
says that no degree of the relevant property is possessed, is also heavily attested (140).

could be merely the result of a local meaning adjustment. The meaning of '*KNOW*' cannot straightforwardly be used to tell us about the meaning of 'know' because of the possible meaning-restructuring effect of emphasis.

Let us return to Unger. Recall that Unger and his opponents both agree that the sentences he chooses, such as:

(1) ? He really *knows* it is raining but he isn't certain of it.

are infelicitous.[22] Unger believes that the infelicity of (1) will secure him the conclusion that certainty is a necessary condition on falling under the knowledge predicate. But in light of the proposal above this is not the only possibility and so he is not entitled to the conclusion. It is also possible that non-scalar 'know' is converted under stress into an *ad hoc* knowledge scale that places superlative knowers at the top and stratifies the rest by proximity to these cases. If the paradigm cases we have in mind are those that are certain knowledge then under intensification the non-paradigm cases will be sloughed off leaving only the certain paradigm cases. The effects on the felicity of asserting (1) would be just as if certainty *were* a necessary condition on falling under the knowledge predicate.[23]

What of the Contextualist? Instead of constructing a scale from paradigm cases of knowledge, perhaps she constructs it from salient standards for knowledge, with the highest standards for a belief to count as knowledge at the top. Once the threshold is boosted only beliefs that satisfy the higher standards will count as knowledge. Context will determine what those higher standards are. When we hear (5) and we have just been frightened by the skeptic then those high standards require sufficient justification to dismiss sceptical scenarios. But when driving to the bank the salient paradigm cases of knowing are those where our justification will soothe bank timetable-related nerves.

The Contextualist must reject the competing hypothesis: 'know' itself is not scalar; instead we have built an *ad hoc* knowledge scale and boosted its threshold. This reinterpretation significantly complicates what we can infer about the semantic structure of unemphasised 'know' without further argu-

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22 A reviewer points out that it is interesting that Unger uses both emphasis and an overt intensifier. Stanton (2019) points out that chaining of intensificational elements (use of both prosodic and overt intensifiers) is common when attempting to bring about a conversion to scalarity.

23 Not all cases of knowledge are so: The strangeness of (1)-type utterances can be diffused by filling in the background so that our local paradigm tracks other features of knowledge. E.g. we prioritize concept mastery over occurrent certainty when we say that the nervous student *KNOW*s the answer. As a review points out, paradigm cases of perceptual knowledge may also lack certainty.

ment. Just as Unger was not entitled to claim *KNOW* as a datum supporting his account of 'know', neither is the Contextualist.

Finally, what is to be made of those cases in Section 2.3, in which '*KNOW*' appears to be non-factive? Well, we should first notice that many factive verbs are judged acceptable with non-factive readings (cf. Beaver, 2002).[24] Other factive and semi-factive verbs also exhibit non-factivity under emphasis:

(10) I *remember* putting my keys in the drawer! So why are they in the fridge?! [*said whilst staring at the set of keys on the fridge shelf.*]

(11) But yesterday I had *noticed* that you were wearing a blue tie! I was surprised to find out that it was actually green — perhaps the lighting was off.

(12) That night I had been *aware* of the spirits around me... so when I found out later that they were just balls of swamp gas I was disappointed.

In each case the usual factive reading for the verb disappears in favour of a reading that foregrounds an associated perceptual or phenomenological experience: the availability of a visual memory in (10) and (11) and the phenomenology of awareness in (12).[25] I propose that in these cases emphasis has brought about a semantic shift from the usual interpretation of the verb that may require the truth of the complement to one that prioritizes an experiential association carried by the epistemic verb. It does this by inducing the construction of an *ad hoc* scale that privileges the associated perceptual or phenomenological experience, ranking cases of 'remembering', 'noticing' etc with respect to availability and/or strength of these experiences. Thus, to '*remember*' in (10) is to have a strong visual memory; to '*notice*' is to strongly recall remarking on some detail and to be '*aware*' is to have a strong phenomenological experience of a state.[26] I propose that this is also what is happening in the case of 'know'; as Schaffer points out, uses of '*know*' like those in (2)-(4) 'seem to express felt certainty' [cd]. The result of scalar intensification is that to '*know*' — like to *remember* — means to have the relevant phenomenology to a high degree, though need not entail the truth of the complement.

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24 For issues delimiting the class of factives at all, see: Degen and Tonhouser (2022).

25 This sense is even clearer when modified by 'distinctly': I distinctly remember, distinctly noticed, was distinctly aware.

26 In each case reinterpretation is induced to make sense of contrast: e.g. the keys are in fact in the fridge so the speaker must not be reporting factive memory.

3 Conclusion

I have argued that 'know' under emphasis, '*KNOW*', cannot form part of an argument about the semantics of the knowledge predicate unless the effects of prosody are further explored. In particular I have suggested that '*KNOW*' as a datum cannot reveal whether 'know' is non-factive, or context sensitive or requires certainty, but something much weaker: that it can, in the right context and under emphasis, be reinterpreted as such.

This is a very small step in a broader tradition of inserting linguistic theory between intuition and epistemology. Larger steps are being taken by work that applies experimental and theoretical linguistic methodology to the analysis of the kinds of linguistic data used by epistemologists (e.g. Beebe (2012), Buckwalter (2014), Machery et al (2015), Machery, Barrett & Stich (2021); Dahlman & Weijer (2022), Porter et al (2024)). This is crucial work insofar as epistemology employs intuitions concerning language and its use — for example concerning the truth conditions of epistemic state attributions or intuitions about the meanings or entailments of particular expressions.

My aim in this paper has been merely to signal that prosody is a worthwhile site for further exploration as it has heretofore seen little of the theoretical and experimental work that has been devoted to epistemic vocabulary and work on knowledge ascription. I have extended a proposal about the interpretation of prosody to demonstrate that it can bring about truth conditional change to the knowledge predicate but much more remains to be done. I have, for example, remained agnostic concerning conceptual structure and its interface with prosodic information. It may be, for example, that 'know' latches on to a dual character concept and prosodic information ('know'/'*KNOW*') can direct us to the abstract dimension (cf. Knobe, Prasada & Newman (2013)). If so then the contribution of prosody may yet have something to tell us about the concept of knowledge. Another potential avenue of exploration concerns the role that prosody may play in driving participant responses in extant survey-based research; in such work the intended prosodic realisation of knowledge ascriptions in vignettes is underspecified and so the contribution of prosody is not controlled for. If I am correct that prosody can have a systematic effect on meaning then it has the potential to act as a confound.[27] This suggests that

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27 Though this paper has focused on typographically marked prosody, the intended prosodic re-
    alisation of written text is largely underspecified outside of syntactic contexts that encourage
    particular prosodic structure.

it may be informative to replicate such studies with audio material in which
prosody can be controlled.*

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