'I just know it': Intensification as evidence for non-presuppositional factivity

Overview. This paper addresses the paradoxical phenomenon whereby intensification of know suspends its usual factive inference. This is most clear when know is modified with just.

(1) a. I just know that it's going to rain. b. She just knew that Hillary was going to win.

Just's dual behavior of both exclusive and intensifier has been observed (Beltrama, 2016); however, the implications for the semantics of know have not been examined. Even under the hypothesis that just is an intensifier, it is puzzling that

I argue that *just* serves as a pragmatic restrictor to a core semantic value of the predicate it modifies. In cases like (1), *just* excludes 'usual inferences' of know, which results in a lack of factivity. This indicates that truth is not part of the lexical entry of know, but is better analyzed as a strong conventional implicature.

Previous observations. Know has generally been analyzed as factive, i.e., presupposing the truth of its complement (Kiparsky & Kiparsky, 1970). However, know has been observed to lose its factivity in certain contexts (Karttunen, 1971; Abusch, 2002, 2009; Simons et al., 2016). For example, Simons et al. (2016) discuss the role of focus in presupposition projection. However, this presupposition-canceling usually coincides with negation/contrast with alternative intensions.

(2) John suspects Mary is having an affair. He doesn't know she is. (Abusch, 2002, 2) (Note: contrastive focus on *know* required for nonfactivity; ordinary clause-final stress ⇒ factivity)

- (3) A: Putin is a straightforward, trustworthy guy.
 - B: Why do you say that?
 - A: George Bush said so.
 - B: Yes, but Bush didn't KNOW he was a straightforward, trustworthy guy...
 - He just BELIEVED it, or maybe HOPED he was.

intensification of know results in nonfactivity, a logically weaker alternative.

(Simons et al., 2016)

Because of the negation, this cancellation of factivity is less unexpected than in the intensification cases in (1). Likewise for cases like (4), where a change of information licenses past tense know even when the complement is now deemed false.

(4) Everyone knew that stress caused ulcers, before two Australian doctors in the early 80s proved that ulcers are actually caused by bacterial infection. (Hazlett, 2010)

More evidence. Cross-linguistic support for this phenomenon includes Serbian, where the modification of *znam* 'know' with 'simply' results in a parallel inference of certainty without sufficient evidence.

(5) Prosto znam da će Marko doći na vreme. (6) Prosto znam da će večeras padati kiša. Simply know.1.s comp will Marko come on time Simply know.1.s comp will tonight fall rain

'I just know that Marko will show up on time.' 'I just know that it will rain tonight.'

(Note: these readings also work with jednostavno 'simply' substituted for prosto)

According to speaker judgments, these can be paraphrased with 'I am certain that... but don't ask me for any evidence,' and lack a factive inference. Intensification without just can also result in nonfactive readings of know: when under 'emphatic'/sarcastic intonation, know loses its presupposition.

- (7) Andrew knows that Faith took the bagel. #But she didn't. Dawn did.
- (8) Andrew KNOWS that Faith took the bagel. But she didn't. Dawn did.

Contribution of just & implications for know. As an exclusive operator on proposition ϕ , just yields " ϕ and no more than ϕ ." I argue that even in these intensification uses, just maintains this general schema of exclusivity; specifically, it constrains the asserted content to the literal meaning of its predicate, negating conventional implicatures. This exclusion occurs in the pragmatics, but it nonetheless requires access to a core value for the semantics of know sans factivity. I place factivity in the CIs (9b), calculated and bound alongside asserted content (9a).

- (9) a. $[\![know]\!] = \lambda p \lambda x \lambda w [\forall w'. w' \in Dox(w, x) \to w' \in p]$ b. CI(know): $\{w \in p, x \text{ has evidence for } p, \dots\}$
- (10) Exhaustification rule for CIs: $ASSERT(\phi) \Rightarrow ASSERT(\beta)$, $\forall \beta \in CI(\phi)$ (Only applies at matrix level/spell-out, i.e., does not apply in the case of just)
- (11) $\llbracket \text{just}(\text{ASSERT}(\phi)) \rrbracket = \text{ASSERT}(\phi) \land \forall \beta \in \text{CI}(\phi).\text{ASSERT}(\beta) \to \phi \subseteq \beta$

I analyze intensifying *just* as an operator at the speech act level, which has accessible a set of conventional implicatures calculated with the ordinary semantic value.

Remaining issues. The pure intonational emphasis in (8) will need a similar story. The link between exclusivity and intonational prominence is widespread: aside from the obvious focus/exclusive connection, just exhibits a similar effect to prosodic emphasis when it intensifies any.

(12) Bill can't eat anything $(\forall \neg)$ (13) Bill can't eat just anything $(\neg \forall)(14)$ Bill can't eat ANYthing $(\neg \forall)$ Unifying these uses of *just* will likely involve broadening the availability of pragmatic objects in the quantification of *just*. Know's factive inference is demonstrably not as strong as ordinary presuppositions, and analyzing it as a CI provides insight into how *just* can intensify and weaken simultaneously.

ABBREVIATED REFERENCES

** Abusch 2002. Lexical alternatives as a source of pragmatic presuppositions. ** Abusch 2009. Presupposition triggering from alternatives. ** Beltrama. 2016. Exploring metalinguistic intensification. ** Hazlett 2010. The myth of factive verbs. ** Karttunen 1971. Some observations on factivity. ** Kiparsky & Kiparsky 1970. Fact. ** Simons, Beaver, Roberts, & Tonhauser 2016. The best question: Explaining the projection behavior of factives.