Contents lists available at ScienceDirect

Language Sciences

Context and Information Structure constraints on factivity: the case of *know*

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ARTICLE INFO

ABSTRACT

Do factive-presuppositional interpretations of *know* emerge out of its semantic features, or are they the outcome of different structural patterns displayed by the sentence? The present work discusses the ambiguity of *know* and the reasons behind its fluctuating factive and non factive behavior looking at the role of Information Structure. Starting from views that account for the ambiguity of *know* as the result of its inherent semantic poly-semy and from the role played by the context of discourse, we suggest that *know*-sen-tences can receive factive or non factive interpretations also based on the distribution of Topic and Focus units. The view put forward suggests categorizing the interpretation of complement clauses governed by *know* as factive or non factive not only on the basis of the (un-)availability of the information they carry in the addressee's Long-Term Memory, but also in relation to how such information is activated in Short-Term Memory, and, therefore, to whether it fulfils the Topic or the Focus function within the utterance. Differently from previous contention, the present paper stresses the importance not just of the information status of *know* per se, but also of that of the complement clause.

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1. Introduction

In standard approaches to factivity (Kiparsky and Kiparsky, 1970; Karttunen, 1971), factive predicates are said to pre-suppose the truth of their complement clause. So, in the following sentences.

(1) Sarah knows that John went to the party
(2) Anna ignores that her husband is having an affair

The propositions that John went to the party and that Anna's husband is having an affair are assumed by the speaker to be believed to be true by the receiver due to the truth-entailments associated with the use of *know* and *ignore*.

Over the past few years, there has been growing interest in whether factivity is a semantic property of verbs traditionally characterized as factive (Kiparsky and Kiparsky, 1970; Karttunen, 1971), or a consequence of conversationally driven

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constraints on how these verbs are used in the sentence (Simons, 2007).[1] Although the problem holds for a number of predicates commonly conceived as projecting factive presuppositions, such as *ignore, realize, discover, regret*, etc., recent debates have been mainly concerned with the status of *know*, from both a theoretical and an empirical point of view (Hazlett, 2010; Turri, 2011; Colonna Dahlman, 2015, 2016). In their seminal paper, Kiparsky and Kiparsky (1970) presented *know* as a semantically presuppositional predicate, but, significantly, they already noticed that (along with *realize*) it does not share all syntactic features with "completely factive" predicates.[2] More recently, scholars such as Simons (2007), Hazlett (2010), Tsohatzidis (2012), Colonna Dahlman (2015, 2016) have speculated theoretically about what this fluctuant behavior might be put down to. The views advocated along these lines fall within either semantically- or pragmatically-based approaches, which will be discussed in the following sections.

In the present paper we intend to shed light on the role of utterance context and Information Structure (IS), with specific reference to the distribution of Topic-Focus units in the sentence, in the selection of factive vs. non-factive interpretations of *know*. Both the discussion of previous literature and the proposals we will advance will make clear that these factors exert great influence on the encoding and interpretation of factivity in a sentence.

The paper is organized as follows. In Section 2 some state-of-the-art literature on factivity will be discussed drawing upon current semantic and pragmatic proposals. Section 3 will discuss some recent information structural approaches to factivity and, particularly, the effects of focus marking on the projection of *know*-presuppositions. Section 4 outlines some crucial differences related to presupposing and topicalizing contents in discourse, which will provide the groundwork for the working hypotheses developed in Section 5, where the role of context and IS is more extensively described.

2. Theoretical background

2.1. Hazlett and the myth of factive verbs

In a paper entitled *The Myth of Factive Verbs*, Hazlett (2010, p. 501) seeks to challenge the factivity of *know* and other factive verbs by discussing examples such as (3), (4) and (5):

(3) Everyone *knew* that stress caused ulcers, before two Australian doctors in the early 80s proved that ulcers are actually caused by bacterial infection.[3]

(4) In school we *learned* that World War I was a war to "make the world safe for democracy", when it was really a war to make the world safe for the Western imperial powers.

(5) I had trouble breathing, sharp pains in my side, several broken ribs and a partially collapsed lung, and I was in the middle of nowhere without any real rescue assets. It was then that I *realized* I was going to die out there.

In all the above contexts, the truth of the clause embedded under the factive verb (*knew*, *learned* and *realized*) does not seem to be presupposed by the speaker.[4] Hazlett remarks that the overall acceptability of the sentence continuation (which contradicts the content of the dependent clause, as in the examples 3–4), demonstrates that *know*, *learn* and *realize* can be used in a non-factive sense. He points up that when *know* is non-factive in a given context, its meaning often parallels that of *think*, *believe*, *suppose*, or the like. He maintains that the association of factive verbs with non-factive meanings hangs on the "suspension" or "cancellation" of the presupposition they project in discourse.[5] However, regarding *know*, he brings up the point that its potentially non-factive uses can only be derived on cooperational grounds, that is, by assuming that the speaker must be using the verb appropriately; and so, when presented with uses such as (6) and (7) below, the interlocutor is induced to shift from a strongly factive to a weakly factive interpretation of *know* because he assumes that the speaker's conversational behavior adheres to cooperative rules (precisely, to the Gricean Maxim of Quality, according to which the speaker should not claim the truth of something he does not believe: cf. Grice, 1975). Expressly, the contradiction induced by the second part of the sentences in (6) and (7) leads to recasting the factivity of *know* as hinging on Mary and Jane's subjective belief, which the second clauses of both sentences report to be wrong.

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[1] In the previous literature, debates have also highlighted syntactic biases on the selection of factive vs. nonfactive meanings. Notably, Karttunen (1971) suggests that the structural complexity of the dependent clause is also a factor of stronger or weaker presuppositionality of a factive verb (see there the discussion on the comparison between *that*-clauses and possessive-*ing* clauses).

[2] Kiparsky and Kiparsky (1971, p. 348): "Verbs like *know*, *realize*, though semantically factive, are syntactically non-factive, so that we cannot say *I *know* the fact that John is here, *I *know* John's being here, whereas the propositional constructions are acceptable: I *know* him to be here".

[3] Hazlett's interpretation of non-factive readings of *know* in (3) has been challenged by Turri (2011) who points out that, even in the uses exemplified by Hazlett, *know* can still be factive and entail truth if one conceives universal operators such as *everyone* as referring only to *some* (and not all) people. Turri contends that taking *everyone* in its literal sense would make the entire statement clearly false (Turri, 2011 p. 146). On the contrary, if *everyone* is read as meaning only some people, the truth entailment associated with *know* in (3) is still preserved, with no need to appeal to non factive interpretations of the predicate.

[4] The assumption may be different for the source reported as knowing, but this will not be our concern here.

[5] Its cancellability leads many scholars (cf. Capone, 2000, 2013, 2016) to think that the presupposition of factive predicates is due to a conversational implicature.