On the Focus-Sensitivity of Factive Verbs in Hungarian

Intro  Factive verbs such as know, discover, regret are widely assumed to presuppose the content of their complement clause. (1) for example typically presupposes that it is raining:

(1)  I doubt that Peter knows that it is raining.

In Hungarian the situation is more complex. Verbs that select for a clausal complement might govern an anaphoric pronoun that refers to the clausal complement. Normally this pronoun is the demonstrative azt ‘it/that’, and it can remain unpronounced. In some cases, another anaphoric pronoun úgy ‘so’ is possible as well. Complements introduced with this anaphor are never entailed, not even in the case of factive verbs. Accordingly, in the examples below, only (2a) is factive.

(2)  a.  Péter (azt) tudja, hogy János elment a buliba
     Peter it knows that Janos went the party.Iness
     ‘Peter knows that John went to the party.’
   b.  Péter úgy tudja, hogy János elment a buliba
     Peter so knows that Janos went the party.Iness
     ‘Peter believes (based on some reasonable evidence) that John went to the party.’

Further, the presupposition can be suspended when the pronoun azt is focused, as shown in (3a). In contrast, when there is no focus or the focus is on the verb, we do not observe suspension:

     doubt.1sg that Peter that.acc knows that falls the rain
     ‘I doubt that what Peter knows is that it is raining.’
     doubt.1sg that Peter knows (that.acc) that falls the rain
     ‘I doubt that Peter [knows]F that it is raining.’

In the present paper we seek to give an explanation for the above facts.

Presupposition suspension  It has been noted since the seventies that the presuppositions of factives are easily suspendable in context, cf. Karttunen (1971), Stalnaker (1974), Gazdar (1979), Simons (2001), Simons et al. (2010), among others. This is illustrated by the classic example from Karttunen (1971):

(4)  If I discover/realize later that I have not told the truth, I will confess it to everyone.

It has been suggested however that a more careful look at the data casts doubt on analyzing presupposition suspension as a result of a clash between presuppositions and implicatures. Beaver (2004) in particular suggests that presupposition suspension is connected to the informational, focus structure of the sentence (cf. also Kadmon (2001)). Beaver also notes that focusing the verb in the classic examples such as (4) has the effect that either the presupposition projects, or the sentence is quite odd. Thus he concludes that focusing and information structure plays the crucial part in presupposition suspension.

Explaining the contrast in (3)  We propose to explain the contrast in (3) is based on the focus-sensitive mechanism of Abrusán (2011) for predicting the presuppositions of verbs. According to this theory entailments of a sentence S that are independent from the main point of S are presupposed. The default (grammatical) main point of a sentence S defined by grammar: it is
the set of entailments that are necessarily about the event time of the matrix predicate of S.\textsuperscript{1} Besides the default main point, a secondary, pragmatic main point can be derived as well by focus markers. Secondary main points concern the event time of the most direct proposition that answers the background question introduced by focus. The presupposition triggering mechanism looks both at the default (grammatical) and the secondary (pragmatic) main points and requires the presupposition to be independent from both of these. In (3a), focusing the embedded clause indicates that the background question is What does Peter know? The direct answer to this question is the proposition denoted by the embedded clause. The secondary main point thus concerns the information about the tense argument of the embedded clause. Therefore the information conveyed by the embedded clause is not independent from the secondary main point, and is not predicted to be presupposed. In (3b) focus on the matrix verb indicates that the background question is What is the attitude of Peter? The direct answer to this question is a proposition that restates the main clause of the antecedent of the conditional and therefore the pragmatic main point of the sentence concerns the main clause and the matrix tense. Since this is the same as the default (grammatical) main point, no presupposition suspension is observed: the truth of the embedded complement is independent from the main point (i.e. it is not about the matrix tense argument) and is presupposed. Thus the idea is that in the case of (3a) a presupposition is not even generated.

**Explaining the contrast in (2)** It has been observed in a number of languages that the linguistic form of the complement makes a difference with respect to factivity. For example in Catalan, some factive verbs can take complements both in the indicative and in the subjunctive (cf. (5)). Factive presuppositions only arise in the latter case (cf. Quer 2001). Similarly, in Greek, some verbs such as emotive factives allow embedded complements with both the complementizer oti and the complementizer pu (cf. (6)). The truth of the complement is only presupposed in the latter case (cf. Varlokosta 1994, Roussou 2010, Giannakidou 1999).

(5) Es queixava que li posessin/posaven males notes
REFL complain that her/him put.SUB/IND bad marks
‘S/he complained that they gave her/him bad marks.’

(6) O Janis paraponethike oti/pu ton ksexasa.
The John complained.3sg that.IND him forgot.1sg
‘John complained that I forgot him.’

In both Greek and Catalan, as well as in Hungarian, the complement is only presupposed when it is entailed as well. For example, Quer (2001) shows that (5) can only be felicitously continued with “but s/he wasn’t right: they always gave her/him reasonable marks” when the complement is in the indicative. In Hungarian, the anaphor úgy introduces a non-veridical complement. The approach in this paper for this data is the following: the grammatical differences mentioned above determine, for the given language, whether the complement is entailed or not. When it is entailed, the triggering mechanism in Abrusán (2011) kicks in, and flags the entailment as presupposed as well (modulo focus, as shown above). Non-entailments will not become presuppositions either.


\textsuperscript{1}The veridical entailment of John knows at t\textsubscript{1} that it is raining at t\textsubscript{1} is not necessarily about the matrix time t\textsubscript{1}, because this sentence has a well-formed temporal alternative John knows at t\textsubscript{1} that it was raining at t\textsubscript{2} where the veridical entailment is not about the matrix tense. See Abrusán 2011 for details.