Clearing up the 'Facts' on Complementation

Carlos de Cuba (Stony Brook University) and Barbara Ürögdi (HAS: RIL)

In this paper we aim to challenge what we see as two misconceptions in much of the literature on sentential embedding. The first, due to Kiparsky & Kiparsky (1971), posits that complements of factive verbs are structurally more complex than complements of non-factive verbs, an idea that has been challenged in a number of recent papers (de Cuba, 2007, Haegeman 2006, McCloskey 2005, a.o.). The second is the idea that factivity is a concept that is active in syntax, and that it determines structural properties of the embedded clause. The latter misconception is also fairly widely recognized (Hooper & Thompson 1973, Cattell 1978, Hegarty 1992, a.o.), but there is no clear consensus on the way forward. Attempts have been connected to 'novelty' vs. 'givenness', and also to prosodic prominence. These concepts, while clearly important for various modules, are arguably not part of narrow syntax. We argue that the distinction between "more complex" and "less complex" embedded clauses comes down to referentiality, a core property of syntactic phrases.

Kallulli (2006, to appear), who follows a Kiparskian line of analysis, argues that the [+presupposed] or [+given] status of an embedded CP must be marked by an extra functional projection in the syntax. The head of this projection must either be realized by an expletive element of some sort (a pronoun, modal, or clitic), or by destressing or deaccentuation of the embedded CP in a probe-goal relationship with the head. For example, Kallulli claims that factivity can be 'triggered' in a clause embedded under a non-factive verb like *believe* if an expletive pronoun (1b) or a modal (1c,d) is present. However, this triggering of factivity does not seem to be very productive. It seems that *can* is the only modal that triggers factivity - will, would, could, may, should, etc. don't have the same effect in sentences like (1c). In addition, it is difficult to think of another non-factive verb that allows this construction (indeed, all of Kallulli's examples are with believe) (2). This construction is, on the other hand, prevalent with factives (3a,b) and semifactives (3c). The contribution of it in the sentences in (3) is curious under Kallulli's analysis, since the embedded clauses in (3) are all [+presupposed], whether the it is present or not. The contribution of it instead seems to be [+given], as illustrated in (4). While (4a) could be uttered out of the blue (with no expectation that the listener knows what Max's travel itinerary was), (4b) assumes that the listener knows that Max went to Moscow. Thus factivity does not seem to be the relevant notion, since both complements in (4) get a factive interpretation. It seems clear then that givenness and presupposition (factivity) is not the same thing. These problems with Kallulli's analysis (along with others we will discuss involving 'prosodic prominence') lead us to seek another alternative. Our analysis, which is compatible with the patterns observed, predicts a large number of patterns that are syntactic in nature. We tie the syntactic size of the complement not to the factivity of the selecting predicate, but to the referential status of the complement clause itself. We give the following characterization, with nonreferential *cP* syntactically more complex than referential *CP* (see McCloskey 2005):

CP: [V [CP]]: a referential entity that denotes a proposition without illocutionary force. **cP:** [V [cP [CP]]]: a non-referential semantic object denoting a speech act, which adds a new proposition or an open question to the context.

Interestingly, Hungarian has a pattern that is, at first glance, the opposite of the one presented by Kallulli for *it* with *believe* in English. In the unmarked case (the absence of contrastive focus or negation), the Hungarian pronominal *azt*, unlike the English pronominal *it*, appears in *cP* contexts only (5). As Kallulli notes, in Albanian, clitics associate with referential elements only (like CP in our terms). This gives strong evidence that an analysis based on referentiality is correct. In addition, *azt* is optional under non-factives (6). What is important to note about the difference in interpretation between the sentences in (6) is that it is not factivity – both CPs are interpreted non-factively. The difference lies in the role played by the embedded clause in the complex sentence's information structure – in (6a) the embedded clause is the information focus of the sentence (it is a speech act), while in (6b) the embedded CP is non-factive, but [+referential] in the context. Note that the distinction also does not correlate with novelty vs. givenness: (6b) is fine even if the complement is mentioned for the first time. This pattern is not isolated to one verb in Hungarian – a large number of non-factive verbs participate (it doesn't appear to be a special case). We

will also show that the believe + it and regret + it cases discussed above are fully compatible with our system, with the it in these cases being a referential DP.

Examples

- (1) (a) I believed that John left (but in fact he didn't).
 - (b) I didn't believe **it** that John left. *In fact he didn't.
 - (c) I can believe that John left (*but in fact he didn't).
 - (d) Can you believe that John left? *In fact, he didn't (Kallulli 2006:212)
- (2) (a) *I thought it that John left.
 - (b) *I asserted it that John left.
 - (c) *I said it that John left.
- (3) (a) I regretted (it) that John left.
 - (b) I resented (it) that John left.
 - (c) I noticed (it) that John left.
- (4) I was talking to our agents in Russia yesterday...
 - (a) and they noticed that Max went to Moscow last week.
 - (b) and they noticed it that Max went to Moscow last week. (Hegarty 1992:6)
- (5) (a) Péter (*azt) sajnálja hogy havazik.

 **Peter Dem-ACC regrets C snows

 "Peter is sorry that it's snowing."
 - (b) Péter **azt** mondta (hogy) havazik.

 Peter Dem-ACC said C snows

"Peter said that it's snowing."

- (6) Context: Marinak hirtelen rengeteg pénze lett, de senki nem tudta, honnan. "All of a sudden, Mary ended up with a lot of money but nobody knew how."
 - (a) János azt állította, (hogy) Mari megnyerte a lottót. *John Dem-Acc claimed Comp Mary won the lottery-Acc*"John claimed that Mary won the lottery."
 - (b) János állította, hogy Mari megnyerte a lottót. *John claimed Comp Mary won the lottery-Acc*"John claimed that Mary won the lottery."

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