

Embedded Infinitivals & Factivity Entailment

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There is no one canonical definition that has satisfactorily covered all the semantic and syntactic properties of factive verbs, especially in relation to infinitive complements. However, there are certain minimal features that a verb must have to be called factive, and these requirements hold under specific criteria (1) given by Kiparsky & Kiparsky (1968).

1. *Factivity is the preservation of entailment under negation, questioning and projection.*

In 'Believing and Intending' (1985) Jackendoff applies factivity to verbs allowing for or requiring non-finite complements. He describes types of verbs that can be complemented by a finite clause resulting in state / event meaning (2a) or infinitive resulting in action meaning (2b). Neither of these verbs is factive according to (1).

2. a) *B convinced A that the sky is green.* b) *B convinced A to give up linguistics.* (Jackendoff, 445)

Many linguists (Karttunen 1971, Givón 1973, Hooper 1975, Nicholas 1998) attempted to define factivity with all its shades by using various terms. For a better overview, we put all the labels into one table (that will be presented). The only embedded infinitival clauses with some implied truth value are the implicative and negative-implicative classes. In these cases, the truth values of complements are preserved, but the factivity property holds only if the main clause is either positive declarative (3) or negative (4).

3. *I managed / remembered to write him the letter.*

4. *I didn't forget / fail to lock the door.*

Some subject raising infinitivals also complement verbs that have some entailment, e.g.: *turn out* and *happen*. This is only apparent in a positive declarative sentence.

5. *Harry turns out to like the cake. Harry happens to like the cake.*

An unaddressed question is how *that* clauses, ordinarily +Realis, relate to raising infinitives. I propose they all derive from underlying infinitives and that matrix verbs inherently either are (6) +Realis or not:

6. *It happens that Harry likes the cake. It turns out that Harry likes the cake.*

Along these lines, I suppose that subject raising verbs and verbs complemented by embedded infinitivals in general have a single underlying frame: V +__[vP/ TP , -Realis]

In their syntax, there is a TP that is unspecified for any T, i.e. T is empty and can be transformed *after* the branch to PF into a +Realis surface T. But this Tense is only at PF, so that is why *seem* is not a factive (nor implicative) verb (it is -Realis in LF) no matter if complemented by a finite or non-finite clause.

7. *It seems that Harry likes the cake. Harry seems to like the cake.*

In general, non-finite complements never pass all factivity tests because infinitival complements are never bearers of truth value, and subject raising infinitives are -Realis in LF. Some main verbs (*turn out* or *happen*) impose +Realis on their complements, the complements themselves are, however, not +Realis.

References

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