THE SEMANTICS OF NONFINITE COMPLEMENTATION (1)

The Factive vs. Nonfactive Contrast
The factive vs. nonfactive contrast

Propositions

(1) a. The chalkboard in this room is green.
   b. The chalkboard in this room is not green.
   c. Is the chalkboard in this room green?

(2) a. The present king of France is bald.
   b. The present king of France is not bald.
   c. Is the present king of France bald?

(3) There is a chalkboard in this room.

(4) There is a person such that he is the king of France.

(1–4) express propositions.
### Propositions and their truth values

<table>
<thead>
<tr>
<th>PROPOSITIONS</th>
<th>TRUTH VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1a) The chalkboard in this room is green.</td>
<td>T</td>
</tr>
<tr>
<td>(1b) The chalkboard in this room is not green.</td>
<td>F</td>
</tr>
<tr>
<td>(3) There is a chalkboard in this room.</td>
<td>T</td>
</tr>
<tr>
<td>(2a) The present king of France is bald.</td>
<td>0</td>
</tr>
<tr>
<td>(2b) The present king of France is not bald.</td>
<td>0</td>
</tr>
<tr>
<td>(4) There is a person such that he is the king of France.</td>
<td>F</td>
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</table>

T = True; F = False; 0 = Neither true nor false.
(1a) is true; (1b) is false; (3) is true; (4) is false; (2a—b) are neither true nor false.
Presupposition

Relation between (1a—c) and (3); between (2a—c) and (4): (1a—c) equally presuppose (3); and (2a—c) equally presuppose (4). If (1a) or (1b) is asserted, then (3) must also be asserted, and (3) must be true. If (3) is false, then (1a—b) are neither true nor false.

A presupposition (P’) is a non-stated proposition associated with a proposition (P) such that P’ must be true in order for P to be true or false. If a presupposition associated with a proposition does not hold, then that proposition is neither true nor false.

Let P' be a presupposition associated with the proposition P. Then the following relations hold between P' and P.

a. If P is true, then P' is also true.
b. If P is false, then P' is true.
c. If P' is false, then P is neither true nor false.
Two kinds of presupposition

Existential presuppositions (EP)

(3) is an EP associated with (1a—c); (4) is an EP associated with (2a—c). An existential presupposition is a proposition about the existence of something.

(3) There is a chalkboard in this room. (repeated)
(1) a. The chalkboard in this room is green. (repeated)
    b. The chalkboard in this room is not green. (repeated)
    c. Is the chalkboard in this room green? (repeated)

(4) There is a person such that he is the king of France. (repeated)
(2) a. The present king of France is bald. (repeated)
    b. The present king of France is not bald. (repeated)
    c. Is the present king of France bald? (repeated)
Factive presuppositions (FP)

A **factive presupposition** is a semantic relation between a matrix predicate and its complement sentence such that the proposition expressed in the complement sentence is true.

Factive presuppositions (like all types of presuppositions) are constant under negation and questioning. Both (5) and (6) equally presuppose (7).

(5) I regret having agreed to the proposal. (factive)
(6) I don't regret having agreed to the proposal. (factive)
(7) I agreed to the proposal. (Presupposition)
Factive vs. nonfactive predicates

A predicate is **factive** (f) if its complement sentence expresses a true proposition. Otherwise a predicate is nonfactive (nf).

(5)  I regret having agreed to the proposal. (f)

(7)  I agreed to the proposal. (P')

(8)  He believes Bacon to be the real author. (nf)

(9)  Bacon is the real author.

The verb *regret* in (5) is factive, because its complement sentence (the -*ing* clause) is understood to express a true proposition (cf. P' in (7)). The verb *believe* in (8) is nonfactive, because for the semantic well-formedness of (8) the truth of (9) is not presupposed. Nonfactive *believe* does not *induce* the kind of factive presupposition associated with *regret*. 
Subclassification of factive and nonfactive predicates:

Interaction of factivity and syntactic structure

Predicates (verbs & adjectives) that take sentential subjects

Only nonfactives allow Subject-to-Subject Raising:

(10) a. It is likely that he will accomplish even more.
    b. He is likely to accomplish even more. (nf)

(11) a. It is odd that he has accomplished so much. (f)
    b. *He is odd to have accomplished so much.

Extraposition is optional for factives, but it is obligatory for nonfactives:

(12) a. That there are porcupines in our basement makes sense to me.
    b. It makes sense to me that there are porcupines in our basement.
       (factive)

(13) a. *That there are porcupines in our basement seems to me.
    b. It seems to me that there are porcupines in our basement.
       (nonfactive)
The Factive vs. Nonfactive Contrast

**Factive predicates**: significant, odd, tragic, exciting, relevant, matter, count, make sense, suffice, amuse, bother.

**Nonfactive predicates**: likely, sure, possible, true, false, seem, appear, happen, chance, turn out.
Predicates (verbs) that take sentential objects

Gerunds can be objects of factive predicates, but not freely of nonfactive predicates:

(14) a. Everyone ignored Joan's being completely drunk. (f)
    b. *Everyone supposed Joan's being completely drunk. (nf)

Only nonfactives allow the 'accusative with the infinitive' construction (Subject-to-Object Raising applies only to nonfactive complements):

(15) a. I believe Mary to have been the one who did it. (nf)
    b. *I resent Mary to have been the one who did it. (f)

Factive predicates: regret, be aware (of), grasp, comprehend, take into consideration, take into account, bear in mind, ignore, make clear, mind, forget (about), deplore, resent, care (about).

Nonfactive predicates: suppose, assert, allege, assume, claim, charge, maintain, believe, conclude, conjecture, intimate, deem, fancy, figure.
Predicates that take both factive and nonfactive complements

Predicates unmarked for factivity: anticipate, acknowledge, suspect, report, remember, emphasize, announce, admit, deduce.

(16)  a. They reported the enemy to have suffered a decisive defeat.  
     (nonfactive, S-to-O Raising)
   b. They reported the enemy's having suffered a decisive defeat.  
     (factive)

(17)  a. I remembered him to be bald.  (nonfactive, Raising)
   b. I remembered his being bald.  (factive)

Note that forget is factive, while remember is unmarked for factivity:

(18)  a. I forgot that he was bald.
   b. I forgot his being bald.
   c. *I forgot him to be bald.  (S-to-O Raising)
In general, both factive and nonfactive complement clauses are pronominalized by *it*, but only nonfactive complements are pronominalized by *so*:

(19) a. John supposed that Bill had done it, and Mary supposed it, too. 
    (nonfactive) 
    b. John regretted that Bill had done it, and Mary regretted it, too. 
    (factive) 

(20) a. John supposed that Bill had done it, and Mary supposed so, too. 
    (nonfactive) 
    b. *John regretted that Bill had done it, and Mary regretted so, too. 
    (factive)