

Expletive negation is not expletive: Evidence from aspect in Spanish

The problem. Spanish sentences (1a)-(2a) have traditionally been treated as identical in meaning to (1b)-(2b), respectively. The latter have been described as containing an ‘expletive’ negation in the *hasta*-clause, ‘until’, i.e. a vacuous negation that does not change the meaning of the sentence (Van der Wouden 1994; Espinal 2000). I show that the negation in the *hasta*-clause does in fact contribute to the meaning calculation. The novelty of my proposal is the comparison of the aspect (specifically, the durativity component) of the eventualities expressed in the *hasta*-clause, which supports the claim that the truth conditions for each pair of sentences are similar but not identical.

(1) Non-durative eventuality (achievement) in the *hasta*-clause

a. Ana no se irá [hasta que María llegue a casa]
 Ana NEG CL will.go until that Maria arrives.SUBJ to house
 ‘Ana won’t leave until Maria arrives home’

b. Ana no se irá [hasta que María **no** llegue a casa]
 Ana NEG CL will.go until that Maria NEG arrives.SUBJ to house
 ‘Ana won’t leave until Maria arrives home’

(2) Durative eventuality (accomplishment) in the *hasta*-clause

a. Ana no se irá [hasta que María cante el himno nacional]
 Ana NEG CL will.go until that Maria sings.SUBJ the anthem national
 ‘Ana won’t leave until Maria sings the national anthem’

b. Ana no se irá [hasta que María **no** cante el himno nacional]
 Ana NEG CL will.go until that Maria NEG sings.SUBJ the anthem national
 ‘Ana won’t leave until Maria sings the national anthem’

Interpreting the *hasta*-clause. The *hasta*-clause in (1)-(2) is interpreted as punctual: it does not express the length of a durative eventuality but locates punctual eventualities in time (Karttunen 1974; Giannakidou 2002; Condoravdi 2002). The sentences in (1)-(2) are inconsistent with Ana not leaving at all, so punctual *hasta* triggers the factivity inference that the eventuality in the main clause must hold. The time expressed in the *hasta*-clause is at the very beginning of the stretch in which the eventuality in the main clause is expected to hold. Accordingly, sentence (1a) asserts that Ana’s leaving does not hold at time interval ending when Maria arrives home, generates the factivity inference that Ana will leave at some subinterval in the interval beginning when Maria arrives home, and scalarly means that Ana will leave when Maria arrives home (or shortly thereafter) (see FIGURE 1). *Mutatis mutandis*, this also applies for (2a), although it is worth noting that, since the *hasta*-clause in (2a) denotes an accomplishment (which is durative), the scalar meaning points to the interval in which Mary is singing (see FIGURE 2). This will turn out to be relevant for the interpretation of the so-called ‘expletive’ negation.

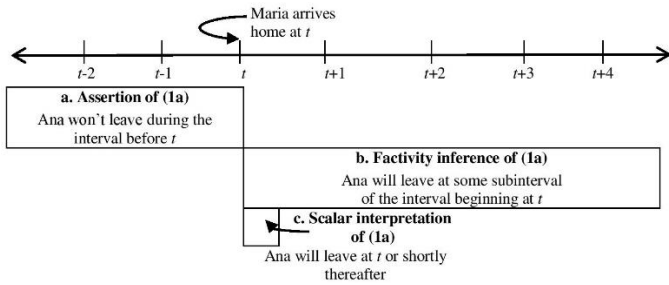


FIGURE 1. Interpretation of (1a)

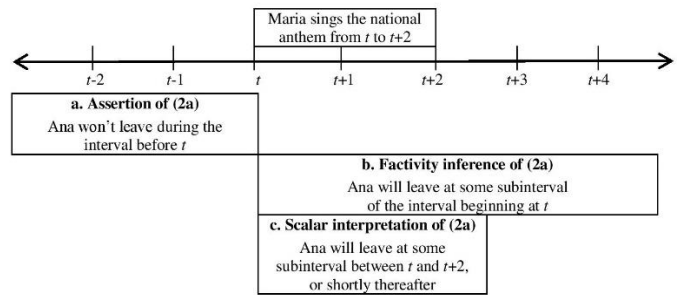


FIGURE 2. Interpretation of (2a)

Let us assume P and Q are the predicates in the main clause and the *hasta*-clause, respectively; t is a variable for a time interval, and t' for a contextually-determined interval; $<$ and $>$ express ‘precedes’ and ‘succeeds’, respectively. The semantics for punctual *hasta* appears in (3):

(3) Semantics for punctual *hasta*

- | | |
|---------------------------|---|
| a. Assertion: | $\exists t \exists e [Q(t) \wedge P(e) \wedge \neg \exists t' [t' < t \wedge P(t')]]$ |
| b. Factivity inference: | $\exists t \exists e [Q(t) \wedge P(e) \wedge \exists t' [t' \succ t \wedge P(t')]]$ |
| c. Scalar interpretation: | $\exists t \exists e [Q(t) \wedge P(e) \wedge \exists t' [t' = t \wedge P(t')]]$ |

The negation in the *hasta*-clause. Let us recall that both sentences in (2) contain a durative eventuality (an accomplishment) in the *hasta*-clause. Consider the following context. Ana wants to leave exactly when Maria starts singing the national anthem or while she is singing the first verses at most. In this context, sentence (2a) is true, but sentence (2b) is false. This is so because by uttering (2b) the speaker is assuming that Ana will make sure Maria

sings the *whole* national anthem and that she will leave once Maria finishes singing the whole national anthem. This suggests that the so-called ‘expletive’ negation is indeed playing a role: it negates that the eventuality in the main clause holds during the interval explicitly denoted in the *hasta*-clause, and restricts the factivity inference to the complement of said interval. The result is that the eventuality in the main clause is expected to hold *after* the eventuality in the *hasta*-clause is finished, i.e. for (2b), once the duration of the accomplishment is over (see FIGURE 4). This effect is not so evident in (1b), where the lack of durativity of the achievement in the *hasta*-clause and the extremely fine level of granularity of its temporal trace (Krifka 1998) creates the illusion of expletiveness and hides the difference (see FIGURE 3, where granularity has been added).

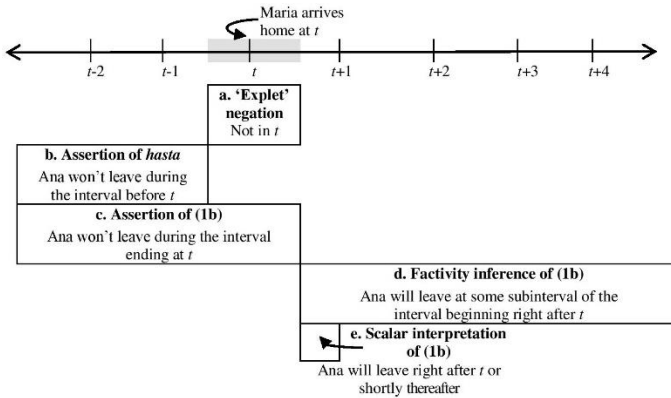


FIGURE 3. Interpretation of (1b)

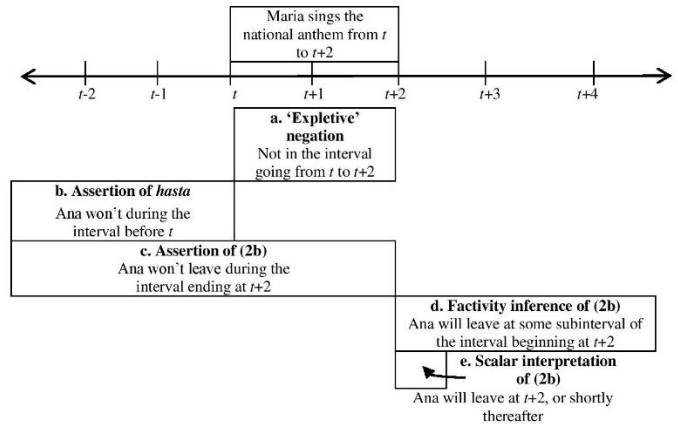


FIGURE 4. Interpretation of (2b)

If the eventuality in the main clause will not hold in the interval denoted in the *hasta*-clause, the assertion is different from (3a). This is expressed in (4a), where the contribution of the ‘expletive’ negation is underlined. Consequently, the factivity inference (4b) and the scalar interpretation (4c) are also different, the latter being that the eventuality will hold immediately after (\succ_i) the eventuality in the *hasta*-clause is finished (or shortly thereafter).

(4) Semantics for punctual *hasta* + ‘expletive’ negation

- a. Assertion + ‘expletive’ negation: $\exists t \exists e [Q(t) \wedge P(e) \wedge \underline{\neg P(t)} \wedge \neg \exists t' [t' < t \wedge P(t')]]$
 $= \exists t \exists e [Q(t) \wedge P(e) \wedge \neg \exists t' [t' \leq t \wedge P(t')]]$
- b. Factivity inference: $\exists t \exists e [Q(t) \wedge P(e) \wedge \exists t' [t' > t \wedge P(t')]]$
- c. Scalar interpretation: $\exists t \exists e [Q(t) \wedge P(e) \wedge \exists t' [t' \succ_i t \wedge P(t')]]$

Further issues. Let us recall that the sentences in (1)-(2) are inconsistent with Ana not leaving after the eventuality expressed in the *hasta*-clause. I argue that the so-called ‘expletive’ negation is licensed in the punctual *hasta*-clause because it is sensitive to the change of state expressed by punctual *hasta* (the factivity inference). This is the reason why the ‘expletive’ negation is not allowed in durative *hasta*-clauses (i.e. the ones that are compatible with atelic predicates in the main clause, Karttunen 1974). In a very similar way, the so-called ‘expletive’ negation does play a role in the delimitation of the interval expressed in temporal adverbial clauses in other languages (e.g. German *bevor*-clauses ‘before’ (Krifka 2010), Korean *-ci*-clauses ‘since’ (Yoon 2011), a.o.).

Conclusions. I have shown that the so-called ‘expletive’ negation in Spanish *hasta*-clauses is not semantically vacuous, but does contribute to the meaning of the sentence. The assertion of a sentence with ‘expletive’ negation in the *hasta*-clause entails the one of a sentence without it, but the opposite is not true. Consequently, their truth conditions are similar but not identical, and it is safe to say that the ‘expletive’ negation is not expletive after all.

References. || Condoravdi, C. 2002. Punctual *until* as a scalar NPI || Espinal, M.T. 2000. Expletive negation, negative concord and feature checking || Giannakidou, A. 2002. UNTIL, aspect, and negation: A novel argument for two *Untils* || Karttunen, L. 1974. Until || Krifka, M. 2010. How to interpret “expletive” negation under *bevor* in German || Krifka, M. 1998. The origins of telicity || van der Wouden, T. 1994. Polarity and ‘illogical negation’ || Yoon, S. 2011. ‘Not’ in the mood. The syntax, semantics and pragmatics of evaluative negation ||