

When syntax transforms a function word: the case of negation

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Abstract: Function words are commonly considered to be a small and closed class in which each element is associated to a specific and fixed logical meaning (Chierchia 2013 and the references therein), such as *and*, *or*, *if*, etc. I will provide empirical arguments to show that in fact the syntactic derivation of a sentence can weaken this assumption by discussing the cases of Italian negative exclamative and “surprise” clauses.

Relevant data. Negatives exclamatives (Delfitto & Fiorin 2014) are ambiguous between two types: one in which the propositional meaning is negative and one in which it is affirmative. Consider, for example, the following sentence:

- (1) Che cosa non ha mangiato Gianni!
what neg has eaten John
a. ‘What John did not eat!’ (= John has not eaten something)
b. ‘What John ate!’ (= John has eaten everything)

With the reading in (1a) the speaker highlights that John did not eat something and negation reverses the true-value conditions of the sentence; with the reading in (1b) the speaker communicates that John ate everything and negation is somehow empty since it does not change the polarity of the sentence. This represents the first piece of the puzzle: the same negative marker *non* can be a real negation or an empty one (technically speaking, an instance of what is called expletive negation; cfr. Horn 1989; Yoon 2011; Makri 2013). I will call the reading in (1a) “Negative Exclamative” (NE) and the one in (1b) “Expletive Negative Exclamative” (ENE) (Greco 2019)

Crucially, the two structures differ grammatically. According to Grimshaw (1979) and Zanuttini & Portner (2003), exclamatives are factive and, therefore, they can only be embedded under factive predicates (2a); however, focusing on a specific sub-class of factive predicates, *to know*-verbs, we find that only the NE interpretation is possible, ENE’s one is not (2b):

- (2) a. È *incredibile* [che cosa non abbia mangiato Gianni]!
is incredible what neg had.3rdsing.Subj eaten John
. ‘It is incredible what John did not eat!’ (NE)
. ‘It is incredible what John ate!’ (ENE)
- b. Luca *sa* [che cosa non ha mangiato Gianni]!
Luke knows what neg has eaten. John
. ‘Luke knows what John did not eat!’ (NE)
. ‘#Luke knows what John ate!’ (#ENE)

The expletive reading of negation is completely rejected in (2b) whereas the standard one is preserved. The immediate question is why it happens since there are no apparent reasons to do so: the morphological material setting up the sentence does not change, neither the semantic relations between the different parts of the sentence.

Such a fact is mirrored by cases in which the real status of negation is completely ruled out in favor of the expletive one: the “Surprise negation Sentences” (Snegs). According to Greco (2018, 2019), Snegs are limited to a specific context in which speakers are struck by an unexpected fact showing a marked intonation blending acoustic features of questions and exclamatives (hence the ?/ diacritics):

- (3) E *non* mi è scesa dal treno Maria?!
 and neg Cl.to me is got off-the train Mary
 . ‘Mary got off the train!’
 . ‘#Mary did not get off the train’

Such sentences cannot be negative at all regardless of the negative marker “*non*” (not) and negation seems to have lost its function rule, representing the second piece of the puzzle.

To sum up, we saw cases in which negation is ambiguous between the negative and the expletive reading (1) and cases in which negation should be ambiguous but it is not, ruling out either the expletive reading (2b) or the standard one (3). *Prima facie*, it is possible to propose that there are three negative function words (homophones in Italian) but this is far-fetched because function words fall into a very small and closed class. Let us consider an alternative.

A possible solution. The three negations can be reduced to a single one assuming that the syntactic derivation of the sentence causes the different interpretation of the only function word corresponding to *not*. I will combine some crucial assumptions of the cartographic project (Cinque & Rizzi 2010) and of the minimalist program (Chomsky 2008, 2013) to show that this is not only possible, but also desirable. More specifically, I will propose that the same Italian negative marker *not* can receive both the standard and the expletive interpretations depending on its syntactic derivation: when it is merged in the TP-area (*a là* Belletti 1990; Zanuttini 1997) during the v*P-phase, it reverses the truth-value conditions of the sentence like in the case of NEs; when it is merged in the CP domain and the v*P-phase is already closed, it gives the expletive interpretation seen in ENEs and Snegs, since the propositional meaning of the sentence has already been elaborated in the v*P phase (Chomsky 2008). In other words, there is only one function word for *not* but its meaning changes depending on the syntactic context in which it is introduced (in the following schema I will underscore the phases):

- (4) a. [CP ... [v*P[X°non] ...] (NE)
 b. [CP ... [X°non] ... [v*P ...] (ENE/Snegs)

From this point of view, the expletive reading of negation turns out to be just a reflex of the syntactic context in which the negative marker *not* is merged, suggesting, among other things, that standard and expletive negations are different instances of a unique function word.

References: BELLETTI A. (1990), *Generalized Verb Movement*, Rosenberg & Sellier, Torino. CHIERCHIA, G. (2013). *Logic in grammar*. Oxford University Press, Oxford, England. CHOMSKY N. (2008), *On phases*, in Freidin, Otero & Zubizarreta (Eds.), *Foundational Issues in Linguistic Theory*, MIT Press, Cambridge (MA), pp. 133 -166. CHOMSKY N. (2013). *Problems of projection*, «Lingua» 130, 33–49. CINQUE G & RIZZI L. (2010), *The Cartography of Syntactic Structures*, in Heine & Narrog (Eds.), *The Oxford Handbook of Linguistic Analysis*, Oxford University Press, Oxford & New York, pp. 51 - 65. DELFITTO D. & FIORIN G. (2014), *Negation in exclamatives*, «Studia Lingüística», 68(3): 284 - 327; GRECO M. (2018), *A Twofold Classification of Expletive Negation*. Proceedings of the 35th West Coast Conference on Formal Linguistics, forthcoming. GRECO M. (2019), *Is expletive negation a unitary phenomenon?* «Lingue e Linguaggio» forthcoming. GRIMSHAW J. (1979), *Complement selection and the lexicon*, «Linguistic Inquiry», 10(2): 279 – 326. HORN L. (1989), *A Natural History of Negation*, University of Chicago Press, Chicago. MAKRI M. M. (2013), *Expletive Negation beyond Romance. Clausal Complementation and Epistemic Modality*, MA thesis, University of York. YOON (2011), *‘Not’ in the Mood: The Syntax, Semantics and Pragmatics of Evaluative Negation*, Ph.D. Thesis, University of Chicago. ZANUTTINI R. (1997), *Negation and Clausal Structure. A comparative study of Romance Languages*, Oxford University Press, Oxford & New York. ZANUTTINI R. & PORTNER P. (2003), *Exclamative clauses at the syntax–semantics interface*, «Language» 79(1): 39 – 81.