Polysemy of Italian altro 'other' between alternativity and incrementality

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- 1. Natural languages present a vast array of phenomena lying at the interface between grammar and logic. Linguists have shown that many interpretational phenomena rest on an implicit system of natural logic (Chierchia 2013). A large part of these phenomena belongs to pragmatics, in particular the domain of scalar reasoning (Fox 2007). Another area that deserves careful study is the rich domain of functional items. The modern enterprise of formal semantics has flourished in the fruitful attempt to analyze a core component of this functional domain, namely, that part of the vocabulary that consists of quantificational determiners and adverbs (Frege 1892, Russell 1905, Montague 1973). Less studied within this tradition are words that exhibit a clear logical meaning in some core uses, while showing a more diversified syntactic distribution and, correlatively, a variation in their semantic behavior, from the type of purely functional (logic-based) items to that of more contentful lexical items. The study of such words provides an interesting window on the interface between language and logic, as it shows, often in insightful ways, how logical meaning interacts with linguistic structure.
- **2.** We consider one such word in Italian, *altro* ('other'), and examine its syntactic distribution and semantic properties. *Altro* is encountered in at least four different syntactic contexts, typical of various grammatical classes, which can be ordered from the most functional to the most lexical ones (all examples are from the CORIS corpus, Rossini Favretti *et al.* 2002):

Quantificational (quantifier) and WH-word modifier

- (1) a. Il cosiddetto problema ontologico, come ogni altro problema metafisico, è insolubile 'The so-called ontological problem, like any other metaphysical problem, is insoluble'
 - b. oltre allo spirito di sacrificio, esiste un'altra condizione fondamentale 'beyond the spirit of sacrifice, there is another fundamental condition'
- (2) a. Dimmi chi altro si preoccuperà di te se non io?
 - 'Tell me who else will care about you, if not me?'
 - b. Chi altri sa di me e di quella foto?'Who else knows about me and that photo?'

Pronominal (pronoun)

- (3) a. Nietzsche è forse il filosofo che più di ogni altro è riuscito a mettere in luce l'alterità tra le virtù aristocratiche fondate sulla volontà di potenza
 - 'Nietzsche is perhaps the philosopher who more than anyone else managed to highlight alterity among the aristocratic virtues based on the will to power'
 - b. si deve avere riguardo alla dimensione dell'impresa, al tipo di organizzazione tecnico produttiva, alla natura e all'importanza del lavoro svolto dal lavoratore detenuto, alla durata prevedibile della carcerazione, alla possibilità di sostituzione, e altro.
 - 'one has to consider the size of the enterprise, the type of technical and productive organization, the nature and the importance of the detainee's work, the expected duration of imprisonment, the possibility of replacement, and other.'

Qualificational (adjective)

- (4) la sinistra di allora era altra da quella di oggi
 - 'left-wing politics of that time was qualitatively different from today's'

Referential (noun)

- (5) Amando e rispettando se stessi, si ama e si rispetta l'altro.
 - 'By loving and respecting ourselves, we love and respect the others (lit. the other).'

Semantically, *altro* varies from an adjective-like meaning, roughly corresponding to 'qualitatively different', as in (4), and the generic referential meaning of 'person different from the self', as in (5), to a two-sided logical meaning: (i) negation of identity (*different*-interpretation; e.g. *non questo libro*, *un altro* 'not this book, another one'), as in (1a-3a), and (ii) increment along a scale (*more*-interpretation; e.g. *vorrei* (*ancora*) *un altro caffé* 'I'd like to have one more coffee'), as in (1b-3b).

- 3. We focus on the two-sided logical meaning of *altro*, which has been the subject of recent studies. Syntax-based studies (Cinque 2015, Kayne 2021), mostly focused on cardinal noun phrases, have shown that there is a correlation between the two logical values of *altro* and different syntactic positions that this word occupies within the NP's extended projection: a lower position, close to the noun head and associated with kind/type-level entities, would select the *different*-interpretation (*altra persona* = 'other kind of person'), whereas a higher position, close to the cardinal phrase and associated with token-level entities, would select the *more*-interpretation (*altre due persone* = 'two more tokens of the kind PERSON'). Other accounts, based on corpora and paying more attention to inter-sentential relations, claim that *altro* is lexically ambiguous between 'different' and 'more': the *different*-interpretation would be triggered by the discourse relation of contrast, while the *more*-interpretation by an additive discourse relation (Gianollo & Mauri 2020).
- **4.** We analyze the issue whether the two logical meanings of *altro* are irreducible to one another, or whether one of them is to be taken as basic, with the other one being derived via pragmatic inference. Based on extensive corpus data, we argue that the different-interpretation is the semantic core of *altro*, since it is demonstrably (even though sometimes only trivially) present in the semantic representation of all sentences containing *altro*, while the *more*-interpretation is the result of the interaction between the core non-identity meaning and features of the larger discourse context. Among the latter, Gianollo and Mauri's additive and contrastive relations play a major role. On the one hand, our proposal differs from Cinque's (2015) account in that the core non-identity meaning posited by our theory is introduced in the sentence's semantic representation no matter what the syntactic position of altro is, while discourse context contributes to determining the relevant ontological level at which non-identity is to be evaluated. On the other hand, we depart from Gianollo & Mauri's (2020) account in that we provide a unified semantics for altro and neatly separate its core non-identity meaning from other components to be ascribed to discourse structure. Our analysis is cast in Asher & Lascarides' (2003) Segmented Discourse Representation Theory, a flexible framework allowing a modular representation of the separate contributions of *altro* and discourse structure. It contributes to our understanding of the interactions between logic and linguistic structure from the perspective of a polysemous word.

References. Asher, N. and A. Lascarides (2005). Logics of Conversation. Cambridge University Press. Chierchia, G. (2013). Logic in Grammar. Oxford University Press. Cinque, G. (2015). A note on 'other'. In E. Brandner, A. Czypionka, C. Freitag & A. Trotzke (eds.), Webschrift for Josef Bayer. Fox, D. 2007. Free choice and the theory of scalar implicatures. In U. Sauerland & P. Stateva (eds.), Presupposition and Implicature in Compositional Semantics. Palgrave. Frege, G. (1892). Über Sinn und Bedeutung. Zeitschrift für Philosophie und philosophische Kritik, NF 100, 25-50. Gianollo, C. and C. Mauri (2020). Uno, l'altro e un altro ancora: ambiguità dell'alterità tra sincronia e diacronia. In E. Magni & Y. Martari (eds.), L'ambiguità nelle e tra le lingue [special issue of «Quaderni di Semantica» (2020)]. Kayne, R. (2021). A Short Note on 'other' and the Tension between Cartography and Antihomophony, with Special Reference to Silent Nouns. Manuscript. New York University. Montague, R. (1973). The proper treatment of quantification in ordinary English. In Hintikka, J., Moravçsik, J., & Suppes, P. (eds.), Approaches to Natural Language, 221-242. Reidel. Rossini Favretti, R., Tamburini, F. and C. De Santis (2002). CORIS/CODIS: A corpus of written Italian based on a defined and a dynamic model. In: Wilson, A., Rayson, P., McEnery, T. (eds.), A Rainbow of Corpora: Corpus Linguistics and the Languages of the World, 27-38. LincomEuropa, Munich. Russell, B. (1905). On Denoting. Mind, 14.4, 479-493.