Ellipsis in DPs: Covert Partitives vs. Covert Proportions

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1. Partitives vs. Proportions in Italian

Post-V numerals: the NP pro-form *ne* (1) is obligatory inserted; the ambiguity seen with pre-V numerals (I) persists.

(1) (Oggi) \mathbf{ne}_i ho sentite [tre t_i]. **DL / NDL** with "today" (Today) \mathbf{ne}_i I have heard [three t_i] 'I heard three'

Pre-V proportions: (2) obligatory DL reading \neq numerals (I).

(2) [La metà] $_{i\subset j}$ sono esplose oggi. **DL** (so, odd) the half are exploded $_{PI.Fem.}$ today.

Post-V proportions: (3) the pro-form *ne* (3) is obligatory inserted; either reading is possible (with *ne*)

(3) (Oggi) **ne** ho sentite [la metà]. **DL / NDL** with "today" (Today) **ne** I have heard $_{PI.Fem.}$ [the half].

Experiment: judgments confirmed with a pool of 24 native speakers. Pre-V position: there is a **strong difference in the possibility of DL between numerals and proportions**.

Post-V position: the non-DL reading of *la metà* is acceptable with plural verb agreement.

2. Proposal: Ellipsis in Numerals and in Proportions

- Non-DL readings contain an NP, elided in pre-V (I), or picked up by the pro-NP *ne* in post-V position (1).
- (4) $[_{DP} 3 [_{NP} bombs]]$
- **DL** readings are partitives (5a), where [of the bombs] is the complex NP shown in the tree on the side, with the semantics in (5b); this complex NP is elided pre-V ((I), (2)) and picked-up by the pro-NP ne in Italian post-V (1).
- (5) a. $[DP \ 3 \ [NPj \ of \ the \ bombs]]$ see \rightarrow b. $[of \ the \ bombs] = Pl([bomb])-Max(Pl([bomb]))$ 'the plural denotation of bomb+s, minus its maximal element'
- *metà* is an alternative to the abstract partitive head part, internal to NP_j (see tree). For this reason *la metà* in pre-V position has only the DL reading (6).
- (6) La metà {*bombe / *di bombe / delle bombe} the half {*bombs / *of bombs / of_the bombs}

Note, however, that in post-V position (still with ne) la metà has the possibility of NDL readings (3) (see §4).





Problem: which is the source of referentially dependent - aka D-linked (DL) - interpretations?

- (I) [Ten bombs]; exploded yesterday in this town.
 - a. [Three] $_{i\subset i}$ were cluster bombs. D-Linked
 - b. [Three] exploded today. Non DL, other bombs

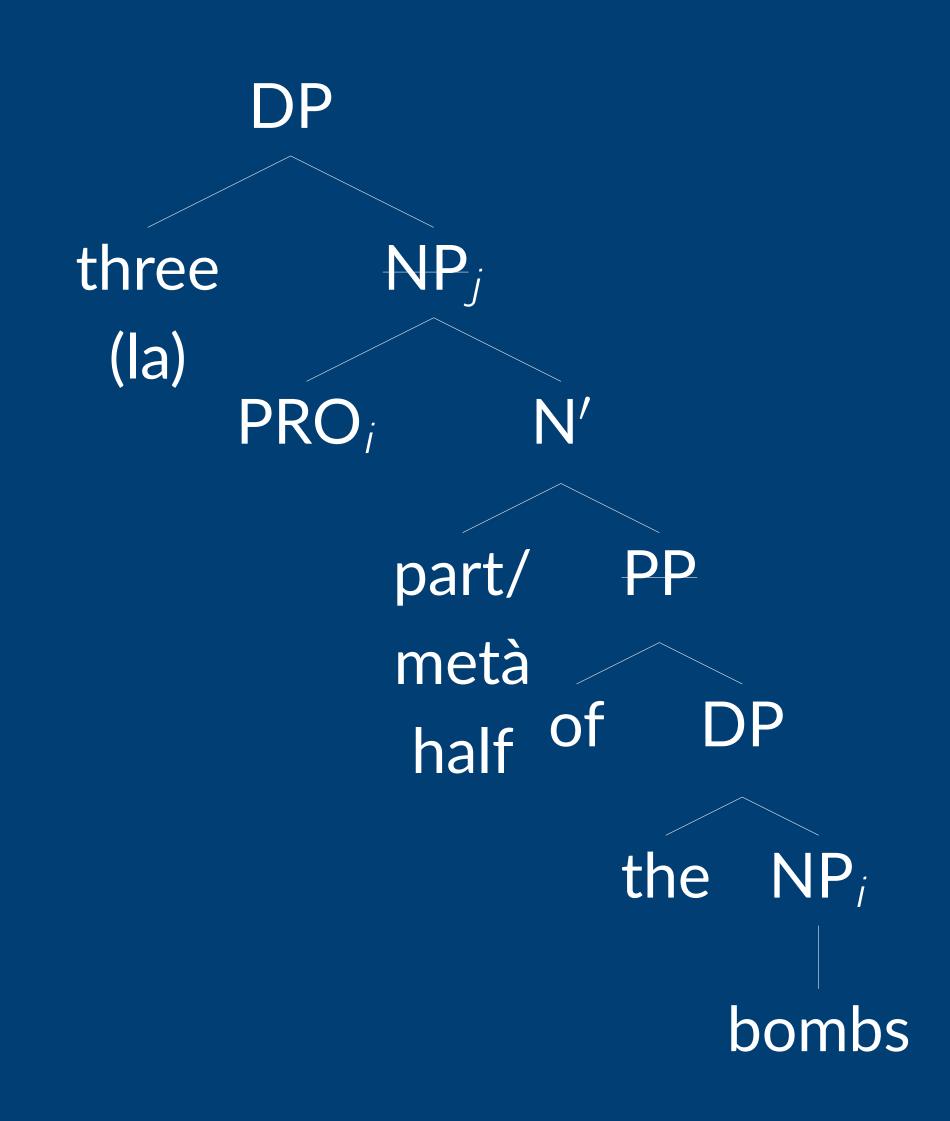
Variables considered

- Type of det: numeral vs. quantifier vs. proportion.
- Position: pre-V vs. post-V.
- Language: Italian vs. English.

Proposal: ellipsis in DPs

- The DL reading is due to the presence of an elided,
 NP-based partitive structure.
- Quantifiers that do not allow overt PPs (e.g. Eng: someone, Ita: nulla 'nothing') do not allow DL.
- Quantifiers that only allow partitive complements (Ita: *la metà* 'half') only allow DL readings (modulo elided bare plural objects).

DL Structure (Falco and Zamparelli 2019):



Selected reference
Falco, M. and R. Zamparelli (2019). Partitives and partitivity. Glossa: a journal of general linguistics 4(1), 1–49.



3. Ellipsis in Quantifiers: $DL \neq Quantifier Restrictions$

(7) Everybody came to my party!

Quantifiers undergo *domain restrictions*: in (7) *everybody* refers to every person in a contextually restricted set (e.g. my friends). This suggests an **alternative account**: DL/NDL could be both based on (4) (+N ellipsis), but **in DL readings N would be restricted to contextually relevant objects** (e.g. the 10 bombs that exploded yesterday).

All quantifiers can have domain restrictions, but not all can support overt partitives (non-part det).

language	part-det	non part-det
English	some (of the people)	somebody (*of the)
	each (of the people)	everybody (*of the)
	none (of the people)	nobody (*of the)
	•••	nothing (*of the)
Italian	nessuno 'no/no-one'(√+part)	nulla 'nothing' (*+part)
	qualcuno 'some/someone' (√+part)	niente 'nothing' (*+part)
		entrambi 'both' (*+part)

Experiment: given a context like (8), 24 native speakers judged if the sentences with part-dets (8a) and non part-dets (8b) meant "det person in the courtyard pred" vs. "det girl pred".

- (8) Three boys were waiting in the courtyard when five girls arrived.
 - a. [Some / None] {had a colorful hat / spoke for a while}. part det
 - b. [Someone / Everybody / Nobody] {had a colorful hat / spoke for a while}.

 non-part det

Result: **the non-partitive determiners** in (8b) **cover the whole group** (the persons, not just the girls). Analogous results in tests on inanimates (e.g. with Italian *nulla* 'nothing').

4. The Sources of ne and NDL in Proportions

Italian has (at least) two *ne-s* (Cordin 1988). **1.** a pro-NP (cf. Eng. 'one(s)'), found only after D_{Indef} in non-predicative position (9);

- (9) Amici, **ne** {ho 3 / *ho ognuno / *sono 3} friends, **ones** {I_have 3 / have every-one / are 3}
- 2. a pro-PP found after relational nouns, which can move over strong Qs and out of predicates (10).
- (10) Quel quadro? Ugo **ne** {è l'autore / conosce ogni dettaglio} That painting? Ugo **of_it** {is the author / knows each detail}
- 1. La metà + pro-NP ne → NDL reading. Problem: pro-NP ne cannot be part of the DP containing la metà; reason: selection properties of la metà: only 'la metà+PP' is possible (see (6)). Proposal: a) ne corresponds to a Bare Plural object (i.e. 'bombs' in (11)), hence the obligatory plural agreement; b) la metà is a VP modifier (cf. leri ho dormito 8 ore, oggi, la metà 'yesterday I slept 8 hours, today, the half').
- (11) Ho sentito bombe, la metà. I have heard bombs, the half.
- 2. La metà + pro-PP $ne \rightarrow$ partitive-based DL reading ((3) ne = 'of the bombs'): *la metà* is a relational noun, so it can license pro-PP ne in our DL tree and permit its extraction, also out of predicates (12).
- (12) Vedi quello spago? Questo pezzo **ne** è la metà esatta. See that string? This piece **of_it** is the half exact

