

Licensing ellipsis in DP: the role of NP raising

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NP-ellipsis: pronominalization vs. silent pro-Ns The conditions that license the silent English NP pro-form, rather than the overt NP *one(s)* in (1) have been discussed since Postal (1966). The basic observation is that adjectives force the presence of *one*, whereas numerals without an adjective (with or without a definite) exclude it:

- (1) John bought one big pig and Mary bought{(the) two small *(ones) / (the) two (*ones)}

In previous proposals, the possibility of omitting an overt pro-NP has been linked to agreement features on the adjective (see Lobeck 1991, 1995; Kester 1996), or to the possibility of expressing the pro-NP in reduced form (Corver and van Koppen, 2011). Both these approaches have nothing to say on the basic case in (2), which shows no ϕ -features beyond plurality and no extra ‘nominal’ morpheme.

- (2) John bought one big pig and Mary, {two / at least four / several}. two = two pigs

Seeing *two* in (2) as a ‘pronominal form’ of the numeral clearly misses the point: almost any determiner would then have a second ‘pronominal’ entry, which would have to be freely modifiable (cf. [*exactly two/*them*] came), would have no reflexives (**twoselves*) and would be mostly island-bound (all complex numerals and all universals are). The obvious alternative is to say that *two*, *at least four* and *several* in (2) are followed by a silent pro-NP, indicated as ONE(S). The question is what licenses ONE(S).

Proposal: licensing ONE(S) We propose to explain the licensing of ONE(S) in terms of Borer’s (2004) approach to NP-raising and Cinque’s (2010) theory of DP-internal modifiers. Specifically, we propose that in English a silent plural or mass pro-NP is licensed only if it is (covertly) remerged as a sister to a DP with phonetic features ([Spec, D^{+pf}] in a frame that uses specifiers) (3).

- (3) [DP [FP/NP ONES]_i [DP the [NumP two [FP/NP ONES]_i]]]

Raising of plural/mass NPs to [Spec, D⁰] has been proposed for bare nominals in Borer (2004) (cf. Longobardi 1994 N-to-D). We extend the idea to cases where D is overt (though, semantically, we do not attribute to (3) all the semantic effects of Borer’s NP-to-D⁰). FP in (3) is a functional head that marks the edge of the domain containing Cinque’s (2010) *Direct modifiers*. Cinque shows that N moves beyond ‘indirect modifiers’ (e.g. PPs and relatives, which all end up being post-nominal), pied-piping the set of direct modifiers (4).

- (4) [DP **Det Num** [FP *Direct-modifiers* N]_i *Indirect-modifiers* t_i] Cinque (2010)

The fact that we never get the order N_i PPs/RCS *Direct-modifiers* t_i shows that N never strands FP, unless this layer contains no modifiers (in this case, we assume that it is just missing). Thus, raising/copying from a base structure such as (5a) yields (5b), not (5c). But (5b) cannot license a silent ONES: the upper copy of ONES is **not** a sister to a phonetically overt DP. As a result, ONES must be overtly realized as *one(s)* (6).

- (5) a. [DP The [NumP three [FP tall [NP ONES]]]]
 b. [DP [FP tall [NP ONES]]_i the [NumP three [FP tall [NP ONES]]_i]] ONES *not a sister to DP*
 c. *[DP [NP ONES]_i the [NumP three [FP tall [NP ONES]_i]]] *stranding “tall”*

- (6) [DP [FP tall [NP ones]]_i [DP the [NumP two [FP tall [NP ones]]_i]]]

In these examples, D is occupied by *the*. In (2), on the other hand, D is filled by a numeral head moving from a lower position. Evidence comes from the contrast between (7a), where *three* can go after Adj if D is overt, and (7b), when the lack of an overt D forces *three* to appear initially (Crisma 1991).

- (7) a. I spent those wonderful three weeks with you.
 b. I spent{three wonderful / wonderful (*three)} weeks with you.

On the other hand, we will show that *singular count* ONE, when possible, must be licensed in different way, more dependent on the presence of agreement markers (Bernstein 1993, Corver and van Koppen 2011)

Our analysis also makes predictions for the case of bare pro-NPs. Overt *one* can be part of a bare nominal and pick up another one (8a), but cannot *be* a bare noun (8b). Now after remerging ONES we get (9).

- (8) a. I like watching birds_i, particularly [large ones_i].
 b. *I like [large birds]_i, in fact I like [ones]_i regardless of size.

- (9) [DP [NP ONES]_i [DP D⁰ ... [NP ONES]_i]

Since D is null this time, a silent ONES is not licensed and must be expressed at spell-out. However, we can assume that the empty D still has a referential feature (e.g. PERSON in Longobardi 2006). When this feature is combined with the features of pro-NP ONES, the result is spelled out as the 3rd person pronoun *they/them* (Postal, 1966). Thus, (8b) is possible, but with *ones* expressed as *them*. On the other hand, if an adjective precedes *one*, as in (8a), the complex [*tall ones*] is remerged, but like in (5b) ONES is not in the right configuration to acquire D-features from D⁰ and be spelled out as *they/them*. As a result, it surfaces as *ones* in its base position.

On the other hand, we suggest that impersonal *one* (in e.g. *one needs to be careful with data*) is just the expression of a similar strategy, this time involving **heads**: the N-to-D raising plus spell-out of singular count ONE, an operation that forms proper names and other rigid designators according to Longobardi (1994).

Parametric variation The possibility of licensing ONE(S) in structures like (5) can be parameterized to account for some interesting language variation: German allows ONE(S) even in (5)b (*zwei rote* ‘two red’); Italian never allows ONE(S) in (5)b, and it allows silent NPs in (3) only when the overt pro-NP clitic *ne* cannot be used; English allows ONE(S) only in structures like (3). Moreover, languages vary in their ability to license **bare** overt pro-NPs (D⁰, no modifiers). For instance, Italian, unlike English *can* have an unmodified pro-NP clitic *ne*:

- (10) Uccelli, ne_i ho visti t_i
 Birds, ONES_{clit.i} I have seen t_i
 “Birds, I have seen them/some” *contrast with (8b)*

Our theory can derive this contrast from the independent fact that Italian does not obtain kind meaning by raising bare nouns to the edge of DP (Zamparelli, 2002). Therefore, the clitic *ne* on its way to V never find itself in the position to acquire the D-features that would make it surface as a 3rd-person personal pronoun.

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