

Squibs and Discussion

A NOTE ON CONTRACTION
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1 Contraction

The phenomenon of *to-* or *wanna-*contraction (1)–(2) has attracted a fair amount of attention in the generative literature (see, e.g., Chomsky and Lasnik 1977, Pesetsky 1982, and more recently, Bošković 1997, Nunes 1995; see also Postal and Pullum 1982 for review of the proposals in the 1970s, some of which will be discussed below). However, this phenomenon still awaits an explanation.

- (1) I'm going to stay. → I'm gonna stay.
- (2) Who do you want to stay? → *Who do you wanna stay?

Lightfoot (1976) was the first to observe that *wh*-traces block *to*-contraction, whereas NP-traces do not.¹

- (3) *Who_i do you wan- *t_i* -na stay?
- (4) I_i'm gon- *t_i* -na stay.

This led Jaeggli (1980) to claim that only Case-marked traces block contraction. Having no Case features, NP-traces do not block contraction and examples like (4) are fine.

Even though there is little doubt that the contraction facts just mentioned should be expressed in terms of A- (NP-) versus \bar{A} - (*wh*-) movement, it is not obvious why Case should matter for what seems to be an essentially PF phenomenon. True, the Case Filter was originally conceived of as a constraint on ‘overt’ elements, but that ‘PF’ characteristic was soon given up in the Government-Binding era, when Case became a factor distinguishing some empty categories from others. Case indeed was taken to be what differentiates A- from \bar{A} -traces,

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¹ Postal and Pullum (1982) note that some speakers accept contraction in \bar{A} -movement contexts (*Who do you wanna stay?*). One might say that for those speakers the infinitival complement is a bare VP and that *wh*-movement takes place in one fell swoop from the VP-internal position, thus leaving no offending intermediary trace/copy. On variation with respect to the categorial status of infinitivals, see Bošković 1997.

but capitalizing on that difference uncontroversially remains stipulative in the case of a morphophonological process.

Another well-known context in which contraction is possible is control.

(5) I want PRO to stay. → I wanna stay.

In frameworks assuming the PRO Theorem, according to which PRO is ungoverned, hence Caseless, (5) follows naturally from Jaeggli's analysis. But recent advances in the Minimalist Program have provided ample evidence against the PRO Theorem, favoring an account under which PRO receives (null) Case (see Chomsky and Lasnik 1993, Martin 1996). This account renders Jaeggli's view virtually untenable (unless one is willing to grant an exception, adding a further stipulation): at least one Case-marked element does not block contraction. But that means we are left with no explanation for contraction. I will show that two refinements of the Minimalist Program in the domains of A-movement and control straightforwardly explain these facts. Let me start with A-movement.

2 A-Traces

Chomsky (1993:38) notes that A- and \bar{A} -movements differ in that only the latter seem to exhibit reconstruction effects,² a phenomenon that crucially involves traces, or, rather, "copies" (see Chomsky 1993).

An immediate explanation for this asymmetry would consist in saying that since traces/copies are what makes reconstruction possibilities available, only \bar{A} -movement leaves a trace/a copy.³ This is indeed the position taken by Lasnik (1998a,b, 1999). Lasnik observes that the trace/copy left by \bar{A} -movement follows from virtual conceptual necessity (operator-variable chain formation). Traces resulting from A-movement, by contrast, do not seem to follow from anything conceptually necessary if we adopt the view that θ -roles are features to be checked in the course of the derivation (contra Hale and Keyser 1993, Chomsky 1995, 1998, where some implicit concept of D-Structure (pure representation of GF- θ ; Chomsky 1981) is maintained). The view that θ -roles are features has now been defended in various guises in numerous works. I will not discuss the matter any further here (see especially Hornstein 1999, Lasnik 1998b, Boeckx 1999c, and references therein), assuming its essential validity: taken together, the above-mentioned studies show that besides its conceptual oddity, the Projection Principle (residue) lacks empirical substance.

θ -roles being features, the thematic information becomes part of the moving element (and, irrelevantly for present purposes, of the

² See Boeckx 1999b and Lasnik 1998b for alternatives to apparent cases of A-movement reconstruction like Quantifier Lowering.

³ See Chomsky 1993, 1995, and Fox 1999 for more technical and less straightforward explanations.

predicate), not of the trace/copy it might leave. As a result, no trace/copy would be needed in the case of A-movement.

With this much as background, we can return to the contraction facts. If we assume that A-movement does not leave a trace/copy, whereas \bar{A} -movement does, all that needs to be said to account for (1)–(2), repeated here as (6)–(7), is that a trace/copy (lack of adjacency between V and *to*) blocks contraction.

(6) I'm going \emptyset to stay. \rightarrow I'm gonna stay.

(7) Who_i do you want t_i to stay? \rightarrow *Who do you wanna stay?

The adjacency requirement is very natural if one regards contraction as a morphophonological process, affecting the shape of words, turning *want to* into *wanna*. Under most frameworks, the morphological component precedes linearization and encodes constituent structure (including traces/copies), which is what is needed, given that contraction is sensitive to constituency, as shown in (8) (from Postal and Pullum 1982).

(8) I don't want [[to undress oneself in public] to become standard practice]. \rightarrow *I don't wanna undress oneself in public to become standard practice.

Having explained the A/ \bar{A} distinction away, I now turn to control contexts.

3 Hornstein's PRO Proposal

Hornstein (1999) (see also O'Neil 1997)⁴ argues against the traditional distinction between raising and control, and in favor of the null hypothesis: that control is raising (binding of a trace/copy) from the controlled to the controller position, thereby readily accounting for the interpretive common ground between obligatory control and binding noted at various points in the literature.⁵ As Hornstein notes, what prevented

⁴ I concentrate on Hornstein 1999 because O'Neil explicitly assumes that θ -roles are not features and is therefore forced to resort to defined notions like θ -domains. Martin (1996) also subsumes (obligatory) control under movement, but differs from Hornstein and O'Neil in maintaining the existence of null Case and in construing movement not as raising from the controllee to the controller, but as an instance of (LF) anaphor movement. I am not sure that the account I am about to give for contraction in control contexts would be available under Martin's approach given Bošković's (in preparation) powerful argument in favor of leaving copies in the case of clitics (as a result of 'mixed' X^0/X^{\max} movement, I suggest) (Martin, following Chomsky 1986, explicitly relates anaphor movement to cliticization).

⁵ To be sure, many issues remain to be addressed for the raising view of control: What about languages like Icelandic where controller and controllee seem to bear/check different Cases (see Sigurðsson 1991)? What about the French/English control-raising (exceptional Case-marking) issue (see Bošković 1997)? What about some interpretive differences between control and binding discussed in Lasnik 1992, and what about *John_i is likely/*illegal t_i to park here?* See Boeckx 1999c for possible answers.

researchers from putting forward that hypothesis in the Extended Standard Theory era was the existence of D-Structure, or, more precisely, one major principle holding at that level: the θ -Criterion, which banned movement into θ -position. But since such movement seems to be well motivated (see, especially, Bošković 1994, Watanabe 1998, and the above discussion of θ -features), nothing prevents one from viewing PRO as an NP-trace/copy, the residue of a movement operation, which, among other things, immediately accounts for why PRO is phonetically null.

I will now show that the contraction data offer an empirical argument in favor of viewing control as a subcase of raising. Let me emphasize that, for reasons mentioned above, I crucially depart from Hornstein 1999 in assuming that A-movement (raising) leaves no trace/copy. If control really is raising, and PRO is just an NP-trace (i.e., no trace), then (9) reduces to (10).

(9) I want \emptyset to leave. \rightarrow I wanna leave.

(10) I'm going \emptyset to leave. \rightarrow I'm gonna leave.

In both cases there is no trace/copy, and contraction can proceed unhindered. Nothing more needs to be said, clearly the optimal result under minimalist assumptions. In other words, by adopting Lasnik's (1998a,b, 1999) proposal that A-movement does not leave a trace/copy, we can *explain* why contraction is not blocked in (9)–(10), something Hornstein's proposal cannot do.

4 A Potential Counterargument

In this section I would like to address a problem raised by Željko Bošković (personal communication), who notes the following contraction fact discussed by Bresnan (1971) and Schachter (1984), among others:

(11) What do you think's happening there tomorrow?

Here, a *wh*-trace does not block contraction (*What_t do you think t_i is happening there tomorrow?*). Apparently problematic for my account, (11) is easily explained away once we adopt Bresnan's (1971) proposal that tensed *be*-contraction is an instance of procliticization, not encliticization, and that orthographic convention misleads us into thinking that the finite form of *be* is contracted onto *think*. Bresnan's argument is based on the following ellipsis facts (contraction depends on the material following the contracted form, unlike *to*-contraction, which is a clear case of encliticization).⁶

⁶ Bresnan's account has been criticized by (among others) Kaisse (1983). Space limitations prevent me from addressing the issues Kaisse raises. They do not seem to me overly compelling. Note, as does Chomsky (1998:48, fn. 100) in a different context, that Bresnan's results fall into place more directly in a multiple Spell-Out model (see section 5) than in the Extended Standard Theory model.

There are a few other problems with M&R's analysis that seem to support my approach, which, more than Hornstein's, is to be seen as an alternative to M&R's, given that it deals not only with control, but also with the properties of A-movement in general. Though space limitations prevent me from fully developing my views, I believe that the following remarks are in order. First, in M&R's study the status of \bar{A} -movement is left vague. Presumably, it is a case of category movement (it cannot be mere base generation and feature attraction, given the detectable reconstruction effects in this case), but then one wonders when the decision to merge an element in a θ -position is made, and whether this does not induce look-ahead and, with it, computational complexity.

Second, many studies decompose \bar{A} -movement into two steps, the first one consisting of A-movement to some (Case-related) position. It is unclear to me whether M&R would merge the element in its θ -position, or in the Case-related position. Choosing one option over the other might have consequences for contraction (could it be obviated by 'late' merger of the \bar{A} -element?).

Third, where is the raised subject *Jean* merged in a French sentence like (16)?

- (16) Jean me semble [____ être heureux].
 Jean to-me seems be happy
 'Jean seems to me to be happy.'

If it is merged directly in its surface position, how can it attract the θ -feature of the embedded predicate with the experiencer present (blocking/Relativized Minimality effect)? Under a derivational account, movement of *Jean* past the clitic is unproblematic (clitics being heads), but this is not the case if A-movement is feature movement, given that feature movement reduces to head movement (Chomsky 1995, Bošković 1998).⁷

Fourth, it is unclear to me how M&R's account predicts binding in cases like (17).

- (17) [Pictures of himself_i] seem to John_i [____ to be on sale].

M&R address this problem and advocate a logophoric treatment of the anaphor. However, the absence of an explicit theory of logophoricity makes their claim hard to test. In addition, it leaves the licensing of a negative polarity item in the same context unexplained (logophoricity not being at issue here).

- (18) [Pictures of anyone/*someone] did not seem [____ to be available].

As we can see, the representational and derivational accounts

⁷ Generating *Jean* in the subject position of the embedded predicate seems to me to undermine M&R's approach. In addition, it begs the question of what is left in this instance of A-movement.

seem to make different predictions, which on the whole seem to favor the derivational view.⁸ One might even go further and show that the present account is compatible with the strong derivational view (Epstein et al. 1998, Uriagereka 1999), according to which there are no interface *levels*, but only interface *components*, to which information is shunted as the derivation proceeds by multiple Spell-Out. As (19)–(20) make clear, in \bar{A} -cases the verb and *to* are separated by an occurrence of the *wh*-element in each ‘‘Spell-Out unit,’’ whereas in the A-raising/control cases, there are certain ‘‘Spell-Out units’’ where the verb and *to* are adjacent (here I assume Uriagereka’s strict multiple Spell-Out, not Chomsky’s (1998) phase hypothesis; note that Spell-Out should not be equated with actual PF realization). (Parentheses indicate Spell-Out points.)

- (19) Who do you want t'_i to t_i leave?
 a. (who leave)
 b. (to (who leave))
 c. (who (to (who leave)))
 d. (*want* (*who* (*to* (who leave))))
 e. (you (want (who (to (who leave))))))
 f. (do (you (want (who (to (who leave))))))
 g. (who (do (you (want (who (to (who leave))))))
- (20) John wants \emptyset to \emptyset leave.
 a. (John leave)
 b. (to (John leave))
 c. (John (to (\emptyset leave)))
 d. (wants (John (to (\emptyset leave))))
 e. (John (*wants* (\emptyset (*to* (\emptyset leave))))

6 Conclusion

I have shown that the conceptually appealing view that control reduces to raising (Hornstein 1999) allows for a straightforward account of contraction data, once we adopt Lasnik’s (1998a,b, 1999) proposal that A-movement does not leave a trace/copy: contraction is blocked only in those cases where a copy intervenes (i.e., with \bar{A} -movement).

The present account thus supports the long-standing intuition (which had nonetheless proven difficult to formulate adequately) that contraction provides crucial evidence for the nature of movement (in particular, trace/copy theory)—in the present case, for Lasnik’s construal of movement. Finally, I have also shown that the present derivational account is superior to representational ones that claim to account for the same facts.

⁸ For a derivational analysis of (17)–(18), see Boeckx 1999a. There I argue that anaphor/negative polarity item licensing in those cases is done ‘‘on-line’’ (prior to raising to subject position) (**Himself seems to be a genius*/**Anyone did not seem to be present* are shown to be ruled out independently).

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STRUCTURAL RESTRICTIONS ON
COMITATIVE COORDINATION
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Comitative constructions with coordination-like properties have been described for several languages (Spanish, Schwartz 1987a,b, Camacho 1996; Tzotzil, Aissen 1989; Navajo, Hale 1975; Polish, Dylą 1988; Russian, McNally 1993; Catalan, Rigau 1989a, 1990; and Turkish, Kornfilt 1990). Several peninsular and Latin American dialects of Spanish also have this construction (see Kany 1969). These dialects are unique among the above-mentioned languages in restricting comitatives to subject position only. I will show that this restriction can be related to another semantic restriction on comitatives in Spanish: they must be collective.¹ I will claim that there is a subject/nonsubject asymmetry regarding collectivity: purely collective readings are a property of subjects only; apparent collectivity in objects is derived from secondary predication.

1 Comitative Coordination in Spanish

Spanish exhibits a comitative construction with properties of coordination (see Schwartz 1987b, Camacho 1996; also see McNally 1993 for similar properties in Russian), as illustrated in (1):² in its coordination-like reading, (1) involves two participants, Juan and I, just like a coordination. Additionally, the construction shows plural agreement and controls plural anaphors and infinitival subjects (see (2)).

- (1) Con Juan vamos al cine.
with Juan go(1PL) to-the movies
'Juan and I are going to the movies.'

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¹ The term *collective* will be used to mean joint participation in an event, as in (i), not spatial collectivity or temporal collectivity, illustrated in (ii) and (iii), respectively. The three readings are independent, although they are related (see Lasersohn 1991). They all require plural subjects. ((i) and (ii) are from Lasersohn 1995.)

- (i) The workers assembled this car.
(ii) Joseph and Barry sat together.
(iii) Barbara and Janet arrived together.

² There are two types of comitative coordination in Spanish, one with a lexical NP and one with *pro*. Although both are attested, the latter is much more widespread and natural. The relevant judgments are the same for both.