Split Constituents within NP in the History of English: Commentary on Allen[1]

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Allen's paper explores the connection between the loss of case marking and several changes that took place within the possessive noun phrase in English. Allen focuses on discontinuous possessive constructions, where the possessive is split around the head noun, as shown in the abstract structure in (1). In these comments I will focus on the question of how such structures are derived and the role of Morphological Blocking in Allen's analysis of such structures.

(1) Poss1 N Poss2

1 Deriving Split Possessives

Some instantiations of the abstract structure in (1) are given in (2)-(3). As illustrated in (2), in Old English (OE) both Poss1 and Poss2 are marked for genitive case. On the other hand, in Middle English (ME) it is possible to inflect only Poss1 for genitive, leaving Poss2 caseless (3).[2]

(2) a. Edwines dohtor cyninges (Old English)
Edward(G) daughter king(G)
'King Edward's daughter'

b. Inwæres broþur ond Healfdenes

Inwær(G) brother and Healfden(G)

'Inwær's and Healfden's brother'

(3) þe kinges moder henri (Middle English)

the king(G) mother Henry

'King Henry's mother

Lightfoot (1999) proposes that OE split genitive constructions have the structure in (4), where Poss2 is the nominal complement and the noun Case-marks and θ-marks both Poss1 and Poss2. The postnominal genitive in (2) is thus treated in the same way as the postnominal genitive in (5). Lightfoot correlates the change from (2) to (3) with the loss of case.

(4) $[_{DP}$ Poss1 D $[_{NP}$ N Poss2]]

(5) fram frymþe middangeardes (Old English)

from beginning world(G)

In her paper, Allen argues against Lightfoot's analysis. She demonstrates that split genitives and "common" postnominal genitives had a different distribution, the former being more permissive, and that they left the language at different times. Furthermore, she provides evidence that Poss2 does not have to be θ-related to the head noun. Allen proposes that Poss2 is an adjunct within the NP and that it is Case-marked through agreement. The loss of inflected Poss2 is correlated with

the loss of agreement. A question that I would like to address in this paper is how Poss1 and Poss2 are composed together. Poss1 and Poss2 obviously form a semantic unit. However, in the surface structure in constructions like (2) and (3) they do not form a unit. One way of dealing with the semantic unit problem would be to assume that Poss1 and Poss2 are generated together, and that either Poss1 or Poss2 then undergoes overt movement. An appeal to reconstruction, however the operation is instantiated, would then suffice to assemble the Poss1 and Poss2 as a unit in LF, allowing us to interpret them as a semantic unit. However, instantiating the overt movement analysis is quite tricky. Consider, for example, (2b). If we analyze (2b) by assuming that it involves leftward movement of Poss1, we end up with a Coordinate Structure Constraint violation. On the other hand, if we assume that the construction involves rightward movement of the element following the head noun, we appear to end up affecting by movement an element that is neither a head nor a phrasal constituent. Notice also that possessive splits are not obligatory. Non-split possessives are also possible. In fact, it appears that constructions involving possessive split and their counterparts that do not involve possessive split do not differ semantically. In other words, the split operation, however it is to be instantiated formally, is semantically vacuous. Given this, Chomsky's (1995:359) suggestion that the external systems dedicated to language are impoverished, hence forms that reach LF should be unique, leads us to assume that the abstract surface structure in (6a), which involves a possessive split, and (6b), which does not involve a possessive split, should end up having the same LF.

(6) a. Poss1 N Poss2

b. Poss1 Poss2 N

A significant fact concerning the possessive split is that it is not NP-specific. In other words, as illustrated in (7), parts of the split element do not have to occur within the same NP, which I interpret as indicating that the proper analysis of (2)-(3) should not relate the split too tightly to the structure of NP.

(7) a. Com se cyning to him Godrum.
'The king Godrum came to him.'
b. Wearþ Sidroc eaorl ofslægen se aldra.
'Earl Sidroc the elder was slain'
c. Ond he hine miclum ond his geferan mid feo weorðude.
'And he much honored him and his companions with money.'

To summarize, a successful analysis of the possessive split construction should capture the following properties of the construction:

-discontinuous constituency of the elements involved in the split
-the fact that the elements involved in the split are interpreted as a semantic unit
-semantic vacuity of the split
-the fact that the split is not NP-specific

I take Hale's (1983) observation that discontinuous constituency is a property of scrambling languages as a clue where to look for a solution to the problem at hand. More

precisely, I suggest that the split involves scrambling. I will adopt the Bošković and Takahashi's (1998) analysis of scrambling. The analysis accomplishes discontinuous constituency by base-generating the elements in a "scrambling" relation separately. However, it puts them together in LF for θ-licensing. I will illustrate how the analysis works with respect to Japanese since Bošković and Takahashi develop their analysis of scrambling with respect to this language.

It has been standard since Saito (1985) to analyze (8a) as being derived from (8b) by an optional overt movement operation not motivated by feature-checking.

(8) a. [$_{IP}$ Sono hon-o$_i$ [$_{IP}$ John-ga [$_{CP}$ [$_{IP}$ Mary-ga [$_{VP}$[$_{V}$ t$_i$ katta]]] to] omotteiru]]

that book-ACC John-NOM Mary-NOM bought that thinks

'That book, John thinks that Mary bought'

b. [$_{IP}$ John-ga [$_{CP}$[$_{IP}$ Mary-ga [$_{VP}$ sono hon-o katta]]] to] omotteiru]

Bošković and Takahashi depart from this view of scrambling. They propose that scrambled phrases are directly base-generated in their surface positions and undergo LF movement to the positions where they receive θ-roles. Under this analysis, the embedded clause object in (8a) is directly introduced into the matrix clause by Merge and remains there on the PF side of the derivation. The sentence would be anomalous if the object stayed "in situ" at LF, since it would not receive a θ-role. Therefore, in the LF component, the object lowers to the embedded VP complement position to be θ-marked by the embedded verb, thus ensuring the grammaticality of the construction.[3]

(9) a. SS: [$_{IP}$ Sono hon-o [$_{IP}$ John-ga [$_{CP}$ [$_{IP}$ Mary-ga [$_{VP}$[$_{V}$ katta]]] to] omotteiru]]

that book-ACC John-NOM Mary-NOM bought that thinks

b. LF: [$_{IP}$ John-ga [$_{CP}$[$_{IP}$ Mary-ga [$_{VP}$ sono hon-o [$_{V}$ katta]]] to] omotteiru]

This analysis replaces the optional overt movement that does not conform to the Last Resort Condition of the standard analysis of scrambling by an obligatory LF movement that conforms with the Last Resort Condition, thus solving the Last Resort problem that arises under the standard analysis. Bošković and Takahashi's analysis also explains the otherwise mysterious Saito (1989) observation that scrambling can be undone in LF. Consider (10):

(10) a. [Mary-ga nani-o katta to] John-ga [Bill-ga *e* itta ka] sitteiru.

Mary-NOM what-ACC bought that John-NOM Bill-NOM said Q knows

'John knows what Bill said that Mary bought'

b. *[That picture of who]$_1$ I know who$_2$ t_2 bought t_1?

(10a) involves scrambling of the most embedded clause, which contains a wh-phrase, to the matrix clause. (The positions where "scrambled" elements are interpreted are indicated by *e*.) The wh-phrase takes scope in the intermediate CP, the only interrogative clause in the sentence. (Japanese interrogative clauses are marked by the question markers *ka* and *no*.) Scrambling differs in the relevant respect from topicalization, which cannot take a wh-phrase outside of its scope. This is illustrated by the sharp ungrammaticality of (10b). (The construction is much worse than simple Wh-Island Constraint violations.) Based on the data in (10), Saito (1989)

concludes that in contrast to topicalization, scrambling has no semantic import, i.e. it does not establish an operator-variable relation, and therefore can be undone in LF, so that the wh-phrase is within its scope at the LF of (10a). The Bošković and Takahashi analysis straightforwardly derives the undoing property of scrambling since under their analysis the scrambled clause in (10a) is base-generated in its surface position but must lower in LF to the position where it receives its θ-role. In fact, under the Bošković and Takahashi analysis scrambling not only can be, but must be undone. That this is indeed the case is indicated by the fact that the scrambled quantifier in (11) cannot take scope over the matrix subject (see also Saito 1992 and Tada 1993).

(10) Daremo-ni dareka-ga [Mary-ga *e* atta to] omotteiru.
everyone-DAT someone-NOM Mary-NOM met that thinks ∃ > ∀; *∀ > ∃
'Everyone, someone thinks that Mary met.'

The Bošković and Takahashi analysis also explains Miyara's (1982) and Saito's (1985) observation that adverbials cannot undergo long-distance scrambling.

(11) a. Mary-ga [John-ga riyuu-mo naku sono setu-o sinziteiru to] omotteiru.
Mary-NOM John-NOM reason-even without that theory-ACC believes that thinks
'Mary thinks that John believes in that theory without any reason'
b. *Riyuu-mo naku Mary-ga [John-ga *e* sono setu-o sinziteiru to] omotteiru.

Under the Bošković and Takahashi analysis, the adjunct in (11b) is base-generated in its surface position and has to be lowered in LF to the embedded clause in order to modify the embedded predicate. However, assuming that adjuncts are licensed through adjunction, the adjunct is already licensed in its SS position. Also, in contrast to the scrambled elements in (8)-(10), the adjunct in (11b) has neither a Case-feature nor a θ-role that could drive its LF movement. As a result, the Last Resort Condition prevents the adjunct from moving to the embedded clause in LF.

Interestingly, long-distance scrambling of an adjunct is allowed when the adjunct has a reason to undergo LF movement, as in (12) (see Boeckx and Sugisaki 1999 for additional examples of this type).

(12) ?Naze Mary-ga [$_{CP}$ *e* John-ga sono setu-o sinziteiru ka] sitteiru.
why Mary-NOM John-NOM that theory-ACC believes Q knows
'Mary knows why John believes in that theory.'

The adjunct in (12) has a feature which is not licensed in its SS position, namely the +wh-feature, and therefore can motivate its LF movement. The adjunct moves in LF to the specifier of the embedded clause, the only clause specified as interrogative in (12), to check its +wh-feature and ends up modifying it.

Let us now see how the Bošković and Takahashi analysis can be applied to the possessive split in OE and ME. Under the Bošković and Takahashi analysis, constructions like (1) would have the SS and LF in (13).

(13) SS: Poss1 N Poss2

LF: Poss1 Poss2 N

The LFs of (2a-b) would then be (14).

(14) a. Edwines cyninges dohtor

b. Inwæres ond Healfdenes broþur

Under this analysis, the discontinuous constituency of the constructions and the fact that the split elements are interpreted as a semantic unit are easily captured. The same holds for the semantic vacuity of the split, i.e. the fact that split possessives do not differ semantically from unsplit possessives. This is accomplished by providing a unique LF for split and unsplit possessives, which is desirable, as discussed above. Since there is nothing in the analysis that is NP-specific, the analysis also accounts for the fact that the split is not NP-specific. The driving force for the LF movement of Poss2 could be the licensing of the appositive/coordination relation (θ-licensing may also be involved) and/or the licensing of agreement. As for the status of the post N-position (i.e. Poss2), it could be either a complement or an adjunct. The exact choice between the two does not really matter under the current analysis. However, regardless of which option is taken, the post-N element would not receive a θ-role in the post-N position, which Allen shows is desirable. Finally, under this analysis, the morphology of Poss2 is licensed through agreement after LF movement. In fact, it is licensed in essentially the same way as in unsplit constructions.[4]

The analysis is readily extendable to constructions like (15), common in ME, where the

element following the head noun is θ-marked by the possessive.

(15) for ðes biscopes luuen of Særesbyrig
for the(G) bishop(G) love of Salisbury
'for the love of the bishop of Salisbury'

The split phrase *the bishop of Salisbury* can be assembled in LF in the same way as the split possessives in (2)-(3). Lightfoot (1999) observes an interesting restriction on the split under consideration. In particular, he observes that the post-nominal element always has a thematic role of Locative/Source. Forms like (16), where the post-nominal element is a Theme, are not found.

(16) The portrait's painter of Saskia (=the portrait of Saskia's painter)

This type of θ-restriction can be easily captured under the current analysis, where θ-licensing is involved in motivating the LF movement of the post-nominal element. In particular, if, in contrast to the Locative/Source θ-role feature, the Theme θ-role feature assigned in this type of construction is strong, (16) would be underivable under the current analysis. (Under the Bošković and Takahashi analysis, a prerequisite for scrambling is that the θ-role feature of the scrambled element is weak.)

2 Morphological Blocking

Returning now to Allen's paper, Allen appeals to Aronoff's (1976) (see also Andrews 1990) Morphological Blocking to prevent the use of a form when a more highly specified form is available to do the same job. However, she accounts for the loss of morphological case by assuming that Morphological Blocking can be relaxed in certain cases, where whether Morphological Blocking holds or not depends on the lexical entry of relevant elements. Consider OE (17)-(18).

(17) þæt ge beon eoweres fæder cild
that you(NP1) are(P1) your(GMSg) father(G) children
'that you are your father's children.'

(18) gif ðonne eower godes miht þa halgan cyrcan towurpan ne mæg
if then your(U) God(G) power the holy church cast-down not may
'Then, if your God's power cannot cast down the holy church.'

The *eoweres* (masculine singular genitive)-*eower* (uninflected) alternation in constructions like (17) and (18) is analyzed by relaxing Morphological Blocking for speakers who would use both forms. An alternative analysis is to say that the agreement rule is optional, which Allen also assumes to be a possibility. A question that arises is whether the two analyses can be teased apart empirically. Anyway, regardless of the answer to the question, there is a massive redundancy between a relaxation of Morphological Blocking and an optional application of an agreement rule, which means that it would probably be better to have only one of the two mechanisms.

Another question that arises is what it means to relax a "deep" principle like

Morphological Blocking? Something like this does not have a natural place in the Minimalist framework. To be able to do this we really need violable constraints (actually, optionally violable constraints (equal ranking)), that is, Optimality Theory.

There is, however, an alternative analysis along the lines of Distributive Morphology, which was suggested to me by Klaus Abels (personal communication). In the Distributive Morphology framework certain features of a lexical item can sometimes be deleted if they do not match the slot in the tree into which lexical insertion is to take place. We might be dealing here with an opposite case: features of a terminal node in the tree are deleted in order to allow a broader kind of lexical insertion (that is, insertion of the unmarked form).

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Notes

1.For helpful discussion and comments, I thank Klaus Abels and David Lightfoot.

2.All the Old English and Middle English data below are taken from Allen's paper (pre- and post-conference versions) and Lightfoot (1999: 117-125). See these works for sources of the data.

3.The analysis involves movement into a θ-position, which is in principle possible in a framework that dispenses with D-structure, such as Minimalism. See Bošković and Takahashi for discussion of technical aspects of the analysis, including general discussion of movement into θ-positions and lowering. For additional examples of movement into θ-positions, see Bošković (1994, 1997), Hornstein (1999), and Watanabe (1998), among others.

4.The analysis might also give us an insight into the loss of case agreement in split possessives since agreement relations that are licensed in LF are generally less likely to have overt morphological manifestation (see Chomsky 1995: 277).