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The Possessor that Stayed Close to Home*

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Introduction

In the Minimalist framework of Chomsky 1993, feature checking and the principle of Greed plays an important role: an element can only move to satisfy some featural requirements of its own. In particular, it cannot move to satisfy the requirements of some other element, nor can it move to receive some particular interpretation. The checking theory is designed to be a restricted theory of landing sites for movement, on the grounds that the principle of Greed will rule out movements to inappropriate sites. In this paper I will show how the system works favourably to explain the behaviour of two types of possessive constructions in English. In addition to the regular possessive such as *John's book*, English also has a possessive which acts as an noun modifier, as in *men's clothing*. I will show that both kinds of possessives are syntactic, and their properties can be accounted for given an articulated syntax for the noun phrase (cf. Szabolcsi 1983, 1994, Abney 1987, Giorgi and Longobardi 1991, Kayne 1993 and others). In the regular possessive, the possessor moves to Spec DP while in the modificational possessive, the possessor 'stays close to home' or remains close to the possessed noun because it lacks the features to move higher.

The paper is organised as follows. Section 1 outlines the basic differences between the two types of possessives. Section 2 shows that the modificational possessive is syntactic and not a case of lexical compounding. Section 3 shows how the two structures can be derived syntactically and develops a feature system that predicts their various syntactic differences. Finally, section 4 presents some observations on the larger implications of the analysis with respect to deriving all cases of movement using Greed and feature checking.

1 Two types of possessives

English has (at least) 2 kinds of possessive constructions which involve the possessive marker *-s*, as shown in (1) and (2). I will call (1) a *regular possessive* (RP), and (2) a *modificational possessive* (MP).[1]

(1) a. Mary's school
b. Bill's shoes

(2) a. a girl's school
b. men's shoes

There are a number of properties that superficially distinguish the two type of possessives. First consider the ambiguity of (3):

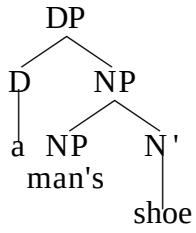
(3) A man's shoe is on the counter

(3) can either mean that a shoe of the type worn by men is on the counter, or the shoe belonging to some man is on the counter. The ambiguity is clearly structural, as it disappears under *one* substitution, as in (4):

(4) a. This man's shoe and that one ≠ shoe belonging to that man
b. This man's shoe and that one's ≠ shoe worn by men

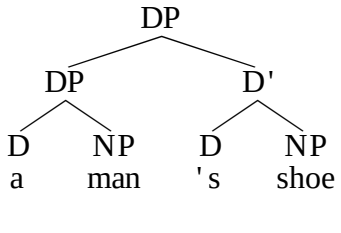
Under a simple DP analysis (e.g. Abney 1987), *one* substitutes for NP, thus *man's shoe* in (3) forms a constituent (say NP) under the MP reading but does not form a constituent under the RP reading. Without elaborating the structure excessively for the moment, we can capture the constituency facts shown in (3) and (4) by positing the following structures for (3):

(5) a.



modificational possessive

b.



regular possessive

The structures in (5) immediately account for the ambiguity of (3), and the contrast in *one* substitution shown in (4). In (5a) *man's shoe* may be substituted for but in (5b) it may not. *Man* in (5b), on the other hand, may be substituted for yielding (4b), while *man* in (5a) may not be substituted for by *one*.

The structures in (5) also account for the fact that the possessor in an RP is a full DP, as evidenced by the possibility of overt determiners, proper names and pronominal forms, relative clauses and adjectival modifiers. The possessor of a MP, however, may not be a DP, but rather seems to be limited to NPs. Thus the examples in (6) can only be interpreted as RPs rather than MPs.

(6) a. The large dog's bone
b. Bill's shoes
c. his shoes
d. the man that I like's hat

While most examples of MPs use single nouns as the modifier, it is possible to have phrasal MPs as the examples in (7) show.[2] Although adjectival modifiers might be interpreted as compounds (as in *tall man* (which often receives compound stress in English)), the presence of *very* in (7b) rules out this possibility. The difference between the compound reading and the phrasal reading can be seen in the contrast between (8a), (8b) and (8c).

(7) a. A tall man's coat
b. A very tall man's coat

(8) a. A [black bird]'s feather (feather from a black bird)
b. A [blackbird]'s feather (feather from a blackbird)
c. A black [bird]'s feather (black feather from a bird)

In (8a) (spoken with roughly equal stress on *black*, *bird's* and *feather*), the intended interpretation is a feather from a black bird (say a crow or a starling) rather from the

species *blackbird* (as in (8b) (which is spoken with compound stress on stress on *black*). The contrast between (8c) (with stress on *bird*) and (8a) shows that *black* in (8a) is modifying *bird* and not simply the modificational possessive *bird's feather*, since (8c) could be a black feather from a bird that is largely another colour. For example, the Black Capped Chickadee has black feathers on its head; we could describe one such feather as (8c) but not (8a).

The fact that regular possessors can be DPs but modificational possessors can only be NPs leads to a major interpretive difference between the two constructions: the possessor in an MP acts adjectivally, and is never referential; instead it receives a 'type' interpretation. A *man's shoe* is of the type worn by men; *man* does not refer to any specific man at all. If determiners are the locus of referentiality in noun phrases, as is commonly thought, then this distinction follows naturally if the MP is never a DP.

2 Against a compounding analysis

As far as I am aware, there is almost no discussion of modificational possessives in the literature. Because of their apparent bare noun restriction, (which as we have seen above, does not really exist) Barker 1991 claims that MPs are compounds, and gives as evidence the single example *men's room*, which has an idiomatic interpretation and receives compound stress. Other similar examples can also be found, such as *bull's eye* (centre of a target) and *cat's eye* (reflectors embedded in the roadway to mark lanes). Although these examples are probably compounds, there are substantial reasons to believe that non-idiomatic MPs cannot be, in addition to the presence of NPs inside a compound, which in itself is problematic for a compounding analysis. First, MPs are productive and receive a uniform interpretation; second, MPs show agreement, while compounds do not. This second property also distinguishes them from regular possessives, as we shall see below.

The first observation is straightforward: not all MPs are lexically idiosyncratic. Beside *men's room* we have *men's clothing, men's pants, men's shoes* etc. which are all transparent in their meaning, so I will take it that there is a productive set of MPs which are not necessarily compounds. This does not show that MPs are not compounds, but the fact that some are idiosyncratic in meaning is not sufficient evidence that all MPs are compounds.

Perhaps the most striking property that distinguishes MPs from other types of possessives (and compounds) is the fact that the possessor in an MP agrees with the noun it modifies. This is most clearly shown using irregular plurals, since a sequence of the regular plural and the possessive morpheme seems to be independently ruled out on (morpho-)phonological grounds (Zwicky 1987).

Beside the idiomatic *men's room*, we find the MP in (9).

(9) This is a real man's room

A *man's room* is one which is typically "male-ish"; the prototypical 'den' with its dark panelling, pictures of hunting scenes, old sailing ships and the like. Upon entering such a room, one might declare it to be a real man's room, without there being any man to whom it belongs. In this case, the agreement pattern shows up clearly.

If there were two such rooms in the house, we would say (10a) not (10b). Thus, although *men's room*, which does not show agreement, receives only an

idiomatic interpretation, and contrasts minimally with *man's room*, *men's rooms* is ambiguous between being the plural of *man's room* and the plural of *men's room*. The plural of *man's room*, then, is not (10b).

(10) a. There are two men's rooms in this house (ambiguous)
b. *There are two man's rooms in this house

The data are not always entirely clear, but a safe generalisation seems to be that if the possessed noun is plural, then the possessor must also be plural. If the possessed noun is singular, the preference is for a singular possessor, although plural possessors seem marginally acceptable in some cases but not others. Consider the data in (11).

(11) a. *These are man's rooms/shoes
b. This is a man's room/shoe
c. ??This is a men's shoe
d. *This is a men's room ≠male-ish room
e. These are men's rooms (ambiguous)

Examples such as (11c) are marginal for most speakers. To the extent that speakers accept them, it is possible that they have, in fact, reanalysed them as compounds. Some evidence for this comes from the contrast between (12a) and (12b).

(12) a. This is a children's book
b. This is a child's book

There is a subtle difference in interpretation between the two examples. A children's book must be a book whose contents are specifically designed for children. A child's book, on the other hand, could be a book with regular content, but perhaps printed on extra-durable paper. In this sense, *children's book* is idiomatic. The contrast becomes more clear if we replace *book* with *edition.* Consider (13).

(13) a. This is a child's edition of the Bible
b. This is a children's edition of the Bible

While (13a) could mean a version of the Bible with large print and pictures, (13b) seems to have an added dimension of having been re-written for children. If one were a literalist interpreter of the Bible, you might be alarmed at the thought of a *children's edition*, even though a *child's edition* might be acceptable.

The agreement facts provide further evidence that MPs are not compounds, since (14a) is not the singular of *men's rooms* (bathrooms). Similarly, *old wife's tale* (14b) is not the singular of *old wive's tale*. As in the case of *children's book*, the more lexically idiosyncratic cases do not show agreement.

(14) a. *This is a man's room = bathroom
b. *This is an old wife's tale = apocryphal

That the agreement pattern is linked to idiomaticity is shown clearly in the contrast between (14a) and (11d). Under the non-idiomatic meaning, agreement is obligatory. One might suppose that when the plural form is used idiomatically as in

(14a), the singular would be used for the non-idiomatic meaning. This would predict (11a) to be grammatical and (11e) to be unambiguously referring to bathrooms, neither of which are the case.

Some further examples are given in (15). Under its (idiomatic) interpretation as feminism, *the women's movement* requires a plural possessor. Under its non-idiomatic meaning, the singular form is required if the possessed noun is singular (15b/c) while the plural form is required if the possessed noun is plural (15d/e). Again, although *women* (15d) is plural, it does not have an idiomatic interpretation.

(15) a. The women's movement changed people's lives
b. That was a real woman's movement she made
c. *That was a real women's movement she made
d. Those were real women's movements she made
e. *Those were real woman's movements she made

One final piece of data clearly shows the lack of agreement with the idiomatic interpretations. All of the idiomatic interpretations have involved plural possessors. However, as noted for example (11c) above, plural agreement may be marginally available with singular MPs perhaps without any idiomaticity. This might argue that the plural form is simply the unmarked case and is not really showing agreement. We could prove this hypothesis incorrect if we could find an idiomatic possessive with a possessor that is the singular form of an irregular plural. I have found one such example:

(16) a. We had a real busman's holiday last year
b. *We had two busmen's holiday's in a row
c. We had two busman's holidays in a row

Although compounds such as *busman* have irregular forms when used normally (cf. *There were two busmen/*busmans on the tour*), the irregular form is not possible in the idiomatic possessive in (16). (A busman's holiday is a vacation that ends up being the same as work.)

The data above are important for two reasons. First of all, they show that there is a difference between the idiomatic interpretation of the modificational possessive and the non-idiomatic interpretation: the latter shows agreement, while the former does not. Secondly, they provide some evidence that the non-idiomatic MP should be treated syntactically rather than as compounds, since compounds do not exhibit such agreement effects (e.g. *footbaths/ *feetbaths*). The lack of agreement in the idiomatic possessives, on the other hand, provides confirmation of their status as compounds.

The agreement facts discussed above also provide more evidence for distinguishing the modificational possessive from the regular possessive. Returning to the regular possessive constructions, we find that no such agreement pattern shows up, as the data in (17) show. Thus, (17b) means "the sisters of more than one child" rather than "the sisters of one child". Given the preliminary structures in (5), this is predicted since the DP specifier is not in any syntactic configuration to trigger agreement with the possessed noun.

(17) a. One man's/*men's books
b. *The children's sisters ≠ the sisters of the child

To summarise the facts so far, the modificational possessive forms a constituent with the possessed noun, acts like an adjective, forces a 'type' reading on the possessor (which must be an NP, not a DP) and shows agreement with the noun it possesses. The regular possessive on the other hand shows no such restrictions. These constitute the major differences between the two constructions.

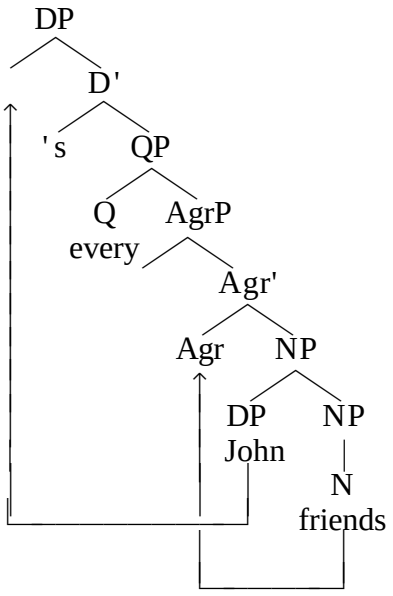
3 Deriving the differences

3.1 The internal structure of DP

We now need to make more explicit the structures given in (5). I will begin with the structure of the regular possessive, i.e. (5b). Semantically, possessives are licensed as arguments of relational nouns (see Barker 1991). Following Szabolcsi 1985, 1994, and Kayne 1993 I will assume that they are external arguments of NP (i.e. subjects) in a position adjoined to NP similar as in Koopman and Sportiche's 1991 analysis of VP internal subjects. Following Abney 1987, I will generate the (regular) possessive *-s* as the head of DP. Because it will be necessary to talk about the interaction of the modificational possessive with quantifiers in the discussion that follows, I give a full representation of the possessive quantified phrase *John's many friends* in (18). The projections QP and AgrP contain quantifiers and (possibly) number features respectively. The AgrP may in fact be NumP, as suggested for Hebrew by Ritter 1991, for example. To derive the correct word order, the DP possessor generated adjoined to NP raises to Spec DP to check strong D features, which I take to be Case, while N raises to Agr at LF.

(18) $[_{DP}\ [John]_i\ [_{D'}\ 's\ [_{QP}\ many\ [_{AgrP}\ friends_j +\ Agr\ [_{NP}\ t_i\ [_{NP}\ tj\ ]\ ]\ ]\ ]\ ]\ ]\ ]$

(19)

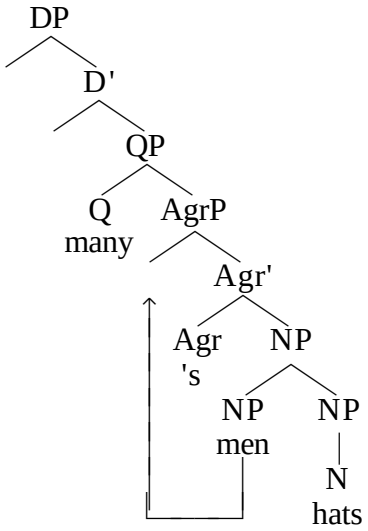


Using the same structure we can immediately account for the modificational possessive with two simple assumptions. First, the possessive marker is generated as head of AgrP rather than of DP, and second, the subject of the whole NP *hats*

(i.e. the modificational possessor itself) is an NP rather than a DP. This yields the structure in (20) for *many men's hats* (i.e. many hats for men).

(20) $[_{DP}\ [_{QP}\ [_{Q'}$ many $[_{AgrP}$ men$_i$ $[_{Agr'}$'s $[_{NP}$ t$_i$ $[_{NP}$ hats]]]]]]]

(21)



We now need to motivate both assumptions. The logic of the argument will go as follows. First I will show that the agreement facts described above are best accounted for by moving the MP to the Spec AgrP projection. I will provide further support for the structure in (20) by showing that the agreement pattern is sensitive to the quantifier in QP. I will propose a set of syntactic and semantic features to account for the agreement. Second, I will show that NP subjects of NP (i.e. modificational possessors) *must* move to Spec AgrP, and *cannot* move to Spec DP, while the converse is true for DP subjects of NP (i.e. regular possessors) which *must* move to Spec DP and *cannot* move to Spec AgrP.

3.2 Accounting for the agreement facts

Recall that the MP, unlike the RP, shows agreement with the head noun. This means that by LF the head noun and the modificational possessor must be in a Spec/Head relation. Moving the MP to Spec AgrP and then moving the head N to Agr will achieve this result directly. There is however, another wrinkle to the agreement pattern that further supports the structure in (20).

In addition to being sensitive to the plurality of the head noun, the agreement is also sensitive to the count/mass distinction in a way that regular subject/verb agreement or demonstrative determiner agreement is not. This can be shown by the obligatoriness of the plural possessor when the possessed noun is a mass noun, as in (22).

(22) a. women's clothing
b. *woman's clothing

As in the plural/singular agreement, when we examine idiomatic/non-idiomatic pairs, the agreement pattern does not arise. While (23a) has a non-idiomatic

interpretation, and forces plural agreement with a mass noun, the idiomatic (23b) does not.

(23) a. women's work
b. child's play
c. *children's play ≠ trivial/simple

This agreement pattern supports the structure in (20) in that it is identical to the pattern of quantifier selection in English. Quantifier selection is not sensitive to the singular/plural distinction, but rather treats mass nouns and plurals as a group separate from singular count nouns. This is shown in (24). The quantifiers *most* and *all*, for example, select NPs that are either plural (24a) or mass (24b), but not singular[3]. Thus for quantifier selection, mass nouns and plurals behave alike. In contrast, the relation between a demonstrative determiner and the head noun (which I will call demonstrative agreement) treats mass nouns and singulars alike (i.e. as singulars), while only count plurals trigger plural agreement as (25) shows.

(24) a. Most/all men
b. Most/all clothing
c. *most man
d. *all man

(25) a. These men are boring
b. *These clothing are boring
c. This man is boring
d. This clothing is boring

The agreement in MPs patterns like (24) rather than (25):

(26) a. most [men's watches]
b. most [men's clothing]
c. *most [man's clothing]

I am purposefully making a distinction here between selection and agreement, which distinguishes the patterns in (24) and (25). I would like to claim that there are two different sets of features are necessary to account for the facts in (24) and (25). First of all, it is uncontroversial to assume that the singular/plural feature is a syntactic feature because it is inflectionally marked and enters into agreement relations as shown by the subject/verb agreement in (25) in addition to the demonstrative agreement. Since subjects are never selected, it is also possible that this feature is never selected for.

In order to account for the data in (24), however, we cannot use the singular/plural distinction. Neither can we use the mass/count distinction, since that distinction would incorrectly group plurals and singular counts together with mass nouns separate. Notice also, that the grouping is not syntactically marked. One way of treating mass nouns and plurals alike is to treat them as *homogeneous*. I will take this to be a cover term for mass nouns an plurals. This is a *semantic* rather than a syntactic feature.[4] Using the two sets of features given in (27), we can then derive a typology of DPs as outlined in (28).

(27) Noun features

Semantic:	± Homogeneous	(semantic plurality)
Syntactic:	± Plural	(syntactic plurality)

(28)

mass nouns	+H,	unspecified	e.g. *clothing*
plurals	+H,	+plural	*men*
count singulars	–H,	–plural	*man*
pluralia tantum	–H,	+plural	*scissors*

Returning to the structure in (20), we can now say that Q *selects* the semantic feature ±H on Agr (i.e. when the head noun raises to Agr, this selection will be visible.) In addition, Agr and N will contain the syntactic feature ±plural which must be checked by N raising to Agr. We can now derive the pattern in (26). Suppose Q contains *most*, then it selects for a +H head noun, which would allow for either a mass singular noun or a plural noun. Now, for the modificational possessor, we have two choices: we can either general the plural noun *men* [+H, +PL] or the singular noun *man* [–H, –PL]. Given the feature system, only the [+PL] possibility will match the semantic feature [+H], thus the possessor will always be *syntactically* plural when the head noun is either mass or plural. Only when the head noun is [–H –PL] will a singular modificational possessor be possible.

The feature system in (27) in conjunction with the assumption that modificational possessors are always NPs and regular possessors are always DPs can account for the differences between the RP and the MP. I have discussed the two grammatical cases (i.e. DP regular possessives and NP modificational possessives above.) The two other logical possibilities are those in (29), corresponding to the phrases in (30).

(29) a. $[_{DP}\ [_{QP}\ [_{Q'}$ many $[_{AgrP}$ [the men$_{DPi}$ $[_{Agr'}$'s $[_{NP}$ t_i $[_{NP}$ hats]]]]]]]
b. $[_{DP}\ [men]_{NPi}\ [_{D'}$'s $[_{QP}$ many $[_{AgrP}$ $[_{Agr'}$ hats$_j$ $[_{NP}$ t_i $[_{NP}$ t_j]]]]]]]

(30) a. *many the men's hats
b. *men's many hats

The unacceptability of (30a) shows that a full DP cannot appear in the MP position. Surprisingly, however, (30b) is also unacceptable. If bare plurals could always receive existential interpretations, (30b) should mean "the many hats belonging to some men". The unacceptability of this example is not due to some incompatibility with the quantifier, as (31) shows. While (31a) is ambiguous (it can mean either "the hats of some men were found in the theatre", (the RP reading) or "some hats of the type for men were found in the theatre" (the MP reading)), (31b) is unambiguous and can only be interpreted as an MP.

(31) a. Some men's hats were found in the theatre. (MP or RP)
b. Men's hats were found in the theatre. (only MP)

3.3 Greed and feature checking

The data in (29) are derivable given certain independently motivated assumptions in the Minimalist framework. In the Minimalist framework, the notion

of Greed plays an important role. In particular, Greed largely supplants most of the need for filters in the sense used in e.g. Chomsky and Lasnik 1977 or as conceived in Chomsky 1981. The basic intuition behind the principle of Greed is that an element α may only move to some position to satisfy its own (i.e. α's) requirements. In particular, it cannot move to satisfy the requirements of some other element. There is at least one desirable consequence of this view: movement to the "wrong" position cannot possibly arise and therefore does not need to be "filtered". This is arguably an advantage over a system that permits massive over-generation of structures as in Chomsky 1981, for example. Over-generation is severely limited under the checking theory incorporating Greed. It is clear that Greed is the important factor here, and not simply the checking theory itself, since one could easily formulate movement to positions where no feature could be checked, with subsequent filtering of the output.

In order to make feature checking and Greed work, we need some condition on feature visibility, which I will state in (32), along with the principle of Greed which I state informally in (33). "Features" here are taken to be syntactic rather than semantic.

(32) Feature visibility
In the structure $[_{XP}\ X\ [_{YP}\ Y\ [_{ZP}\ Z\ ]\ ]\ ]$, only features of XP are visible for Spec/Head agreement if XP moves

(33) Greed
(i) An element α can only move to check some features of α.
(ii) β can only check features for α only if β bears those features

Now consider the ungrammatical structures in (29). Suppose we generate a DP as the subject (i.e. possessor) of the NP. By the feature visibility condition, number features (i.e. Agr features) will only be visible on NPs but not on DPs. The principle of Greed will then rule out movement of DP to the Spec AgrP position on the grounds that no features can be checked there since the relevant features are not visible. This accounts for the unacceptability of (30a). Independently, we need to assume that the (regular) possessive determiner *-s* has strong features which force movement of the possessor to Spec DP.[5]

On the other hand, assuming we generate an NP in the subject position, then Greed will force movement to the Spec AgrP position and no further, since the NP will not bear the relevant syntactic features (specifically, Case, which I take to be a D feature.) This will correctly rule out (30b).[6]

There is one further prediction the feature system in (28) makes in conjunction with Greed. I have been assuming that mass nouns are unspecified for number (this amounts to saying that only count nouns can be specified for number.) If this is correct, then mass nouns should have no motivation to move to Spec AgrP. This predicts that mass nouns should never be able to be modificational possessors when Agr is strong (i.e. contains the possessive marker), which is, in fact, the case, as (34) shows.

(34) a. *White is a great sand's colour
'White is a good colour for sand'
b. *A glass bottle makes a lousy shampoo's container
'A glass bottle makes a lousy container for shampoo'

Mass nouns *can* be modificational possessors, however, provided there is no over possessive marker. This is shown by the acceptability of (35).

(35) a. White is a great sand colour
b. Glass makes a lousy shampoo container

According my analysis, the NPs *sand* and *shampoo* in (35) should be in their base generated subject position. This seems to be correct, since APs (which I assume to be adjoined to NP) cannot intervene between the mass noun possessor and the possessed noun (36a) even though they can when the possessive marker is present (36b).

(36) a. *a shampoo fancy container
b. a man's fancy shirt

3.4 Modificational and regular possessives together

By generating the modificational possessor in a different position from the regular possessive I have accounted for most of the differences described in sections 1 and 2. The analysis clearly makes the prediction that both types of possessives should be allowed in the same DP, and this turns out to be the case as the acceptability of (37) shows.

(37) Pierre Cardin's men's clothing

According to the analysis, both possessors are generated adjoined to NP; in keeping with Economy considerations, the regular possessor must be generated higher than the modificational possessor. This accords well with the closer relation that holds between the modificational possessor and the head noun compared to the looser relation that holds between the regular possessor and the possessed noun and is consistent with semantic compositionality. It also makes a surprising prediction.

Consider the ambiguity in (38). *Pierre Cardin's pictures* can either have the possessive reading (pictures belonging to or related to Pierre Cardin) or the Theme reading (pictures of Pierre Cardin.) We can capture this ambiguity by generating the Theme reading as a complement to N rather than as a subject. (38) then has the structure in (39a) or (39b) (ignoring the raising of N to Agr).

(38) Pierre Cardin's pictures (ambiguous)

(39) a. $[_{DP}$ Pierre Cardin$_i$ $[_{D'}$'s $[_{AgrP}$ $[_{Agr'}$ $[_{NP}$ t_i $[_{NP}$ pictures]]]]]]
b. $[_{DP}$ Pierre Cardin$_i$ $[_{D'}$'s $[_{AgrP}$ $[_{Agr'}$ $[_{NP}$ $[_{N'}$ pictures t_i]]]]]]

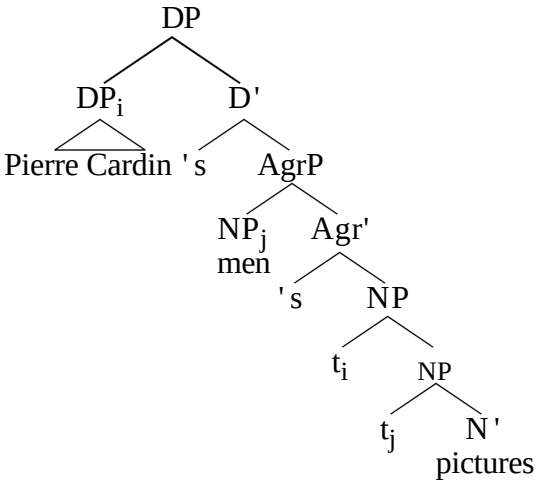
Suppose Pierre Cardin wanted to market a line of pictures for men (i.e. special pictures that would appeal to men). We could then get the modificational possessive in (40). However, unlike (38) which is ambiguous between the possessor reading

and the theme reading of *Pierre Cardin*, (40) cannot have the theme reading, i.e., it cannot mean "pictures of Pierre Cardin of the type that appeal to men".

(40) Pierre Cardin's men's pictures (unambiguous)

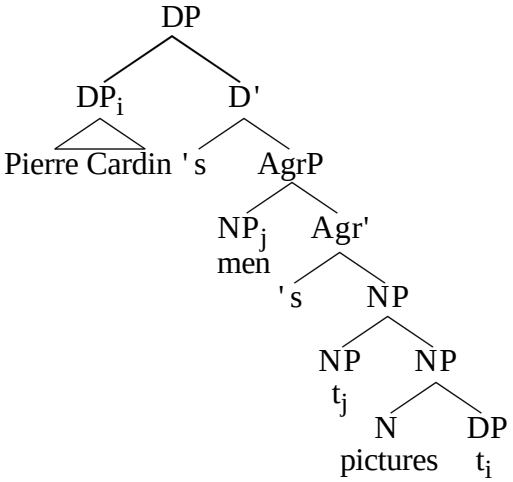
This fact follows directly from the structure we are assuming and the minimalist framework. In Chomsky 1993, Chomsky shows that in a simple transitive clause (i.e. SVO), the object must raise to AgrO while the subject must raise to AgrS. This yields a crossed dependency structure rather than a nested dependency structure and follows from the definitions of minimal domain and the principles of Economy. The structure in (41) exhibits exactly the same properties: the chain of the regular possessor crosses the chain of the modificational possessor on the assumption that both are generated as subjects of the NP.

(41)



On the other hand, if we generated the DP *Pierre Cardin* as the complement of the head noun, as in (42) (to get a Theme reading of the possessor), the structure would be ruled out, since the Spec DP position would be too far away.

(42)



4 Concluding remarks

In this paper I have given an analysis of both the modificational and the regular possessives by giving them different phrase structural representations. In addition I have accounted for the NP restriction and agreement facts that MPs exhibit by simply using the notion of feature visibility and Greed. I would like to briefly comment on this approach to movement, which I think shows promise for explaining a rather puzzling question to which the theory at the present time has no answer. A standard assumption of the checking theory in the Minimalist programme is that features of heads are checked by head movement while features of XPs are checked by XP movement. In Chomsky 1993, this assumption is partially built into the distinction between V features and N features although that distinction in itself is not sufficient. A priori, if XPs are projections of heads, as is standardly assumed in X-bar-theoretic terms and even more strongly assumed in the Bare Phrase Structure system in Chomsky 1994, there is no reason think that some features need to be checked by head movement while others can be checked by XP movement. In fact, it may be impossible to state such a stipulation in terms of the framework of Chomsky 1994, and at least non-trivial to state in standard X-bar theoretic terms.

The question is the following: in a given extended projection, why does XP move to some functional projection FP to check its features rather than X^0 moving to F^0? To put it more concretely, why does the Verb move as a head to AgrO rather than the VP moving to Spec AgrOP? Our present conception of the theory implicitly assumes that this is what happens in the relevant cases, without providing an explanation for it.

I think that the approach outlined here, using Greed and feature visibility, will allow us to derive most cases of XP vs. X^0 movement without further stipulation. Since feature visibility will rule out checking a feature embedded in a projection XP by moving XP, it will follow that the relevant feature must be checked by head movement within the extended projection. In some cases, either movement will be possible; noun incorporation structures might be one such, and in other work (Munn 1994) I have argued that the optionality of first conjunct agreement may be accounted for in the same way.

Notes

* For comments and discussion, I would like to thank Norbert Hornstein, Dave Lebeaux, Juan Uriagereka and Cristina Schmitt and the audiences of ESCOL and WECOL.

1 Quirk et al. 1985 is the only reference I have found to the modificational possessive, which they call the *modificational genitive*. Since the term *possessive* seems to be more widely used than *genitive* for the regular possessive, I will simply stick with the more commonly used term *possessive.* I will use the abbreviation *MP* both to mean modificational *possessive* and modificational *possessor*. Context should make the intended usage clear.

2 I thank Piroska Csuri for raising this issue.

3 Quantifier agreement is probably sensitive to the plural singular distinction as well, given that quantifiers such as *every* and *many* select singular and plural count

nouns respectively. The exact nature of quantifier/determiner agreement is beyond the scope of this paper at the moment.

4 The distinction between syntactic and semantic features that I am assuming is along the lines of Grimshaw 1979 and Williams 1985, for example.

5 For convenience of exposition I have generated the possessive markers in the functional head rather than on the possessors themselves.

6 The derivation in (29b) assumes that the bare plural is an NP, which, in the case of the modificational possessor is well motivated. Nothing in principle, however, precludes generating a bare plural with an empty D head, and subsequent raising of the DP to check case in the specifier position of a regular possessive DP. This is a possible derivation under my analysis, but even so, such a derivation does not yield an existential reading of the bare plural. In fact, bare plurals can never receive existential interpretations inside noun phrases as the data (i-iii) show. Schmitt 1992, who first noted this fact, attributes it to the non-argument status of elements inside noun phrases. For details, see Schmitt (in progress).

(i) *The destruction of cities took 3 days
(ii) People's houses are small in this town ≠ houses belonging some people
(iii) Actor's pictures were on the restaurant wall ≠ pictures of some actors

Example (ii) above, clearly shows that the type reading of the modificational *possessor* and the generic reading of a DP bare plural *possessor* can be distinguished, since the possessor in (ii) is ambiguous between a generic reading "houses of people" (the preferred reading in this case) and a type reading "houses for people". I thank Cristina Schmitt for discussing this issue with me.

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