The Double Object Construction and Thematization/Extraction

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This paper presents an analysis of the double object construction within the framework of Harley and Noyer’s (1998, 2000) Distributed Morphology. It is shown that double-object verbs decompose into three heads, the light verb $v_{\text{CAUSE}}$, V (l-node) denoting the resultant state of the action identified by the composite overt verbal form, and a null preposition P. The V takes PP in its complement, which is the underlying structure for a possessive relation between the two objects. In this structure, the human first object raises to the specifier of the VP from the complement position of P in the same way that the human locative argument in the get- and have-constructions moves to the subject position. The present analysis can account for a parallelism concerning non-extractability of an object between double object constructions and unaccusative/passive constructions along the lines of Chomsky’s (2001) minimalist approach.*

Keywords: double object construction, asymmetry of syntactic domain, possessive relation, extraction of the first object, Thematization/Extraction

1. Introduction

This paper focuses on three issues raised by the double object construction in English, illustrated in (1):1

(1) a. John sent [NP1 Mary] [NP2 a letter].
   b. John threw [NP1 Mary] [NP2 a ball].

The first concerns how we can structurally capture a number of impor-

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1 For simplicity, I will henceforth refer to NP₁ and NP₂ as the first and second objects.
tant asymmetries between the two objects in double object constructions, as pointed out by Barss and Lasnik (1986). That is, the first object asymmetrically c-commands the second, but not vice versa. This asymmetry must be taken into consideration in presenting an analysis of the double object construction. The second concerns how the possessive relation between the two objects is represented in the structure of double object constructions. In (1), the letter or the ball actually reached Mary, who was its possessor. If the first object is not animate and human, it is not affected by the action described in the sentence and thus cannot be the prospective possessor of the second object; hence the deviance of (2):

(2)  
\begin{align*}
a. & \quad \text{*John sent New York a letter.} \\
b. & \quad \text{*John threw first base a ball.}
\end{align*}

And third, how can we account for the fact that the first object, either as a whole or in part, is completely inaccessible to any syntactic operations including \textit{wh}-movement?

(3)  
\begin{align*}
a. & \quad \text{*Who did you give t the book?} \\
b. & \quad \text{*Who did you say John sent [a friend of t] a book?}
\end{align*}

In this article, I present an analysis of the double object construction, which implements a proposal by Freeze (1992) about a 'have' predication. According to his proposal, an English 'have' predication like \textit{John has a book} derives from the underlying structure in (4a), in which \textit{P} takes the theme \textit{a book} in its specifier and the location \textit{John} in its complement. The movement of \textit{John} to the subject position, coupled with the movement of \textit{P} to INFL, yields the structure (4b). The 'have' copula results from the incorporation of \textit{P} into INFL:

(4)  
\begin{align*}
a. & \quad [\text{IP} \quad [I \quad [PP [NP \text{ a book}] [P \quad P [NP \text{ John}]]]]] \\
b. & \quad [\text{IP} \quad [NP \text{ John}] \quad [I \quad I-P \quad [PP [NP \text{ a book}] [P \quad t \quad t]]]]
\end{align*}

With this view of a 'have' predication structure and Harley and Noyer's theoretical framework (the Distributed Morphology), I assume that the underlying structure for double object constructions like (1a) is (5a), from which the structure (5b) is derived by the movement of the first object \textit{Mary} to the specifier of the lower VP and the incorporation of a null preposition \textit{P} into sent:
In (5a), the verb sent takes PP as its complement, which represents the underlying structure for a possessive relation between the two objects Mary and a letter. Furthermore, I assume that in (5b), the movement of Mary is due to an operation of Thematization/Extraction (Th/Ex) proposed by Chomsky (2001), which is originally put forth to derive sentences like (6):

(6) a. There were [many packages] placed t on the table.

b. There were [some books about ecology] placed t on the table.

It should be noted that the structure (5b) settles the first and second issues, since the first object, the raised NP, asymmetrically c-commands the second, and functions as its prospective possessor. Furthermore, the proposed analysis clears up the third issue, that is, the non-extractability of the first object, either as a whole or in part, since it is assumed in Chomsky (2001) that the output of Th/Ex is inaccessible to any syntactic rules, as illustrated in (7):

(7) a. *How many packages were there t placed on the table?

b. *What topics were there [some books about t] placed on the table?

This paper is organized as follows. After presenting the above properties in more detail in the following section, I briefly review previous analyses such as Larson (1988), Pesetsky (1995), and Harley (2000), and point out their drawbacks in section 3. In section 4, I propose a structure for the double object construction on the basis of the analysis suggested by Freeze (1992), who discusses the structure of a 'have' predication. In section 5, I discuss some consequences of the analysis proposed in the previous section. Conclusions are in section 6.
2. Syntactic and Semantic Properties of the Double Object Construction

2.1. Asymmetrical C-command Relation between the Two Objects

It has long been recognized in the literature (e.g. Barss and Lasnik (1986) and Larson (1988), among others) that there are a number of important asymmetries in the behavior of the two objects in the double object construction. Let us consider the following sentences:

(8) a. I showed Mary herself.
   b. *I showed herself Mary.

(9) a. I gave every worker his paycheck.
   b. *I gave its owner every paycheck.

(10) a. Which man did you send his paycheck?
     b. *Whose paycheck did you send his mother?

(11) a. Who did you give which paycheck?
     b. *Which paycheck did you give who?

(12) a. I showed each man the other's socks.
     b. *I showed the other's friend each man.

(13) a. I showed no one anything.
     b. *I showed anyone nothing.

(Barss and Lasnik (1986: 347–350))

First, anaphors (reflexives and reciprocals) must be bound by their antecedents. The double object structure in (8) displays asymmetries with respect to the possibilities of antecedent-anaphor binding. Second, a quantifier must bind a pronoun. The two double objects in (9) show an asymmetry in the binding of the pronoun. Third, a wh-phrase cannot be moved across a co-indexed pronoun, which is referred to as the so-called weak crossover effect. In (10), the double object construction shows an asymmetry concerning this effect. Fourth, wh-movement cannot move a constituent over another wh-phrase that is superior to it in the underlying structure. This is called the superiority effect, and asymmetries concerned with this effect are observed in double object constructions as in (11). Fifth, in the each...other construction, the other-phrase must occur in the c-command domain of the each-phrase. The double objects in (12) show an asymmetry regarding this construction. Sixth and finally, a negative polarity item must be c-commanded by an affective element such as a negation or negative quantifier. In (13), the double objects show asymmetries in the licensing of a negative polarity item. As Larson (1988) notes, these phenomena indicate that the first object in double object constructions must c-command the sec-
and object, but not vice versa.

2.2. The Prospective Possessor of the First Object

It has been observed by many scholars (Green (1974), Oehrle (1976), Larson (1988), Harley (2000), among others) that the constant meaning of the double object construction is a sort of possessive relation that holds between the first and second objects. This well-known contrast is illustrated in (14)–(16):

(14) a. John sent Mary a telegram.
   b. *John sent France a telegram.

(15) a. She’s going to sing her lover a song.
   b. *She’s going to sing her dead lover a song.

(16) a. Bill threw John a ball.
   b. *Bill threw first base a ball.

The pairs in (14)–(16) show that the first object must be animate and human in order to be the prospective possessor of the second object. This is one of the properties of the double object construction. Contrary to this, the same sort of restriction does not hold for the object of the preposition to in the oblique dative construction, as in (17)–(19); hence the grammaticality of the b-sentences in (17)–(19).

(17) a. John sent a telegram to Mary.
   b. John sent a telegram to France.

(18) a. She’s going to sing a song for her lover.
   b. She’s going to sing a song for her dead lover.

(19) a. Bill threw a ball to John.
   b. Bill threw a ball to first base.

Similar remarks apply to the sentences in (20):

(20) a. John taught the students French.
   b. John taught French to the students.

(Larson (1988: 376))

As for the contrast in meaning of these sentences, Larson (1988) notes that (20a), but not (20b), more strongly implies that the students have actually learned French. On the other hand, Baker (1997) claims that while there is something in this judgment, it must be stated at the level of “suggestion,” rather than “assertion” or “implication.” To illustrate this, he offers the following sentence:

(21) I taught the children French, but they didn’t learn it at all.

(Baker (1997: 89))

In any case, however, there is no doubt that the first object (that is,
the "recipient") is affected by the action denoted by the verb in (20a) and tends to be the prospective possessor of the second object, even if it is stated at the level of suggestion, whereas there is no such suggestion or implication in (20b).

2.3. Non-Extractability of the First Object

As has often been pointed out in the literature, the first object in a double object construction cannot be extracted, while the second object can, as illustrated in (22):

(22) a. *Who did you give t a book?
    b. What did you give John t?

A parallel contrast can be observed in the following constructions:

(23) Relativization:
    a. *This is the person who he gave t that book.
    b. This is the book which he gave the person t.

(24) Clefting:
    a. *It is John that he gave t that book.
    b. It is that book that he gave John t.

(25) Tough Movement:
    a. *John is impossible to give t that book.
    b. That book is impossible to give John t.

(26) Topicalization:
    a. *John, he gave t that book.
    b. That book, he gave John t.

Furthermore, Runner (2001) points out that a similar contrast is also found in the case of extraction of a wh-phrase out of the first and second objects:

    b. Who did you say John sent me [a picture of t]?

(Runner (2001: 40))

Extraction out of the first object is not allowed as in (27a), while extraction out of the second object is permitted as in (27b). In addition, there is a well-known fact with respect to the interaction of double objects with "Heavy NP Shift." A heavy first object in a double object construction cannot be shifted to the right periphery of the sentence:

(28) a. *John sent t a letter [every musician in the orchestra].
    b. *Max gave t a book about roses [the tall man in the garden].

(Larson (1988: 354))

These data indicate that the first object, either as a whole or in part,
cannot be extracted. However, the reason for this has so far remained mysterious in the literature.

3. Previous Analyses

3.1. VP Shell Analysis

Noting that the first object must c-command the second, Larson (1988) proposes a hierarchical structure for the VP, involving two VP-shells. In his analysis, the structure of a double object construction results when a passive-like operation applies to the lower VP of oblique dative constructions. For instance, let us consider sentences like (29):

(29) a. John sent a letter to Mary.
    b. John sent Mary a letter.

According to his analysis, the oblique dative construction and the double object construction as in (29a, b) are derived from the underlying structure shown in (30a) and (30b), respectively:

(30) a. \[VP1 \[NP \text{John} \] \[V' V_1 \[VP2 \[NP_2 \text{a letter} \] \[V' \text{send} \[PP \text{to} \[NP_1 \text{Mary} \]\]\]\]\]\]
    b. \[VP1 \[NP \text{John} \] \[V' V_1 \[V' \[V' \text{send} \[NP_1 \text{Mary} \]\]\]\[NP_2 \text{a letter} \]\]\]\]

In (30a) \text{send} raises to \(V_1\) to derive the surface order of (29a), and in (30b) the second object \text{a letter} is demoted to an adjunct position from the specifier of \(VP_2\), to which the first object \text{Mary} is raised. Again, \text{send} raises to \(V_1\), resulting in the surface order of (29b).

With this overview of Larson’s treatment of double object constructions in mind, let us turn to the three properties of double object constructions mentioned in section 2. First, we notice that in (30b), the raised first object asymmetrically c-commands the second; thus this structure appropriately captures the asymmetrical c-command relation between the two objects. Second, as for the possessive relation between the first and second objects, Larson claims that the deep first object (i.e. the complement of a verb as in (30b)) is the individual affected by the action described in the clause, and the fact that sentences like (20a), repeated as (31), carry the implication that the students have actually learned French results from the affected position that the students occupies.

(31) John taught the students French.

Furthermore, considering the following sentences, Larson (1988: footnote 44) notes that ‘although (32a) is perfectly acceptable as an utter-
ance by a pregnant wife to her husband, the second is decidedly odd in this context because it appears to require the baby’s present existence.’

(32) a. I knitted this sweater for our baby.
   b. I knitted our baby this sweater.

Again, he claims that ‘we can understand this judgment as resulting from the fact that our baby occupies the position of the affected argument and only the extant individuals can be affected.’ From this, we can see that affectedness appears to play an important role in the interpretation of double object constructions and the first object can be the prospective possessor of the second object on the grounds that the first object occupies the position affected by the action described in the sentence.

However, Larson’s analysis cannot account for the phenomena that the first object is completely inaccessible to any syntactic operation, either as a whole or in part, as illustrated in (33) and (34):

(33) a. *Who did you give t a book? (=22)
    b. What did you give John t?

    (=27)
    b. Who did you say John sent me [a picture of t]?

In his analysis, the object in oblique dative constructions occupies the same position as the first object in double object constructions; it occupies the specifier position of the lower VP. This predicts that it is inaccessible to wh-movement, either as a whole or in part. But this prediction is not correct as shown in (35):

(35) a. What did you give t to Mary?
    b. Who did you give [a picture of t] to Mary?

From this, we see that Larson’s analysis cannot account for the impossibility of extraction of the first object.

3.2. An Analysis with the Null-Preposition ‘G’

Pesetsky (1995) proposes that in the double object construction, the complement of a verb is a prepositional phrase headed by a null preposition, G, which takes the first object (the Goal) Mary in its specifier position and the second object (the Theme) a letter in its complement, as in (36a). Since G is an affix, it must move to the verb send. In the oblique dative construction, on the other hand, the PP is headed by to with the Theme in its specifier and the Goal in its complement:
Pesetsky’s analysis is different from Larson’s in that no transformation applies to the first object; the first and second objects are base-generated in the underlying structure, as in (36a). Thus, we can automatically capture the asymmetrical c-command relation between the two objects in this structure.

However, his analysis cannot account for a possessive relation that holds for the first and second objects. On his account, send directly theta-selects the Goal in (36a), and it indirectly theta-selects the Goal in (36b) because of the intervention of the preposition to. He says (p. 141) that the Goals selected by to are a superset of the Goals directly selected by send. This means that any double object construction can alternate with an oblique dative construction, as in (37):

(37)  a. John taught the students French.  (=20)
    b. John taught French to the students.

However, (37a) has the suggestion or implication that the students actually have learned French, while (37b) does not. Pesetsky’s analysis does not account for this observation, since his claim that the Goals assigned to the students in (37b) are a superset of the Goals assigned to the students in (37a) does not entail the suggestion or implication mentioned above, and furthermore, the null preposition ‘G’ in the relevant underlying structure of (37a) does not encode possession, either.

In addition, his analysis provides no explanation for the phenomena of extraction of the first object. As is obvious from the structures (36a, b), the first object in the double object position occupies the same position as the object in the oblique dative construction. As shown in the previous section, the object in the latter construction can be extracted, either as a whole or in part, as in (38):

(38)  a. What did you give t to Mary?  (=35)
    b. Who did you give [a picture of t] to Mary?

Accordingly, it is predicted that extraction of the first object in the former construction is possible in the same way as in (38). However, the outcome described in sections 1 and 2 shows that this prediction is wrong:

(39)  a. *Who did you give t the book?  (=3)
3.3. Decomposition of Double-Object Verbs

Adopting Pesetsky’s analysis basically, Harley (2000) proposes the structure of double object constructions as illustrated in (40a), in which a double object verb decomposes into two heads, a CAUSE predicate (vCAUSE) selecting an external argument and a prepositional element (PHAVE).2 The latter head takes the first object as its specifier and the second object as its complement. In the oblique dative construction, on the other hand, the PP is headed by PLOC with the Theme in its specifier and the Goal in its complement, as in (40b):

(40) a. \[vP [NP John] [v' vCAUSE [PP [NP Mary] [P' [PHAVE] [NP a letter]]]]\]

b. \[vP [NP John] [v' vCAUSE [PP [NP a letter] [P' [PLOC] [PP to Mary]]]]\]

The PHAVE in (40a), which raises to vCAUSE, is identified with a preposition which encodes possession (Freeze (1992), Kayne (1984), and Guéron (1995), among many others). Harley claims within the theoretical framework of Distributed Morphology, which is outlined in Halle and Marantz (1993), that the final form of a double-object verb is derived from the combination of vCAUSE and PHAVE. It should be noted here that in (40a), the first object asymmetrically c-commands the second, and that a possessive relation between the two objects is represented by the intervention of the PHAVE.

However, her analysis provides no explanation for the fact that the first object in the double object construction is not completely accessible to any syntactic rules, since she adopts Pesetsky’ structure fundamentally and the argument against his analysis mentioned above holds for her analysis as it is.

4. The Structure of the Double Object Construction

4.1. The Structure of a ‘Have’ Predication

In many languages, as Freeze (1992) points out, existential sentences and ‘have’ predications share the same constituents and order. For instance, let us consider the following examples, which are from Hindi (SOV), Tagalog (VSO) and Russian (SVO):

2 These elements, she calls morphosyntactic primitives.
(41) Hindi:
   a. kamree-mēē aadmii hai.
      Room.OBL-in man COP.3sg.PRES
   [+LOC]
      ‘There is a man in the room.’
   b. larkee-kee paas kuttaa hai.
      boy.OBL-GEN proximity dog COP.3sg.PRES
   [+LOC]
      ‘The boy has a dog.’ (lit. ‘By the boy is a dog.’)

(42) Tagalog:
   a. may gera sa ewropa.
      COP war in Europe
   [+LOC]
      ‘There is a war in Europe.’
   b. may relos an naanai.
      COP watch ART mom
   [+LOC]
      ‘Mom has a watch.’

(43) Russian:
   a. na stole byla kniga.
      on table.LOC COP book.NOM
   [+LOC]
      ‘There was a book on the table.’
   b. u menja byle sestra.
      at 1sg.GEN COP sister.NOM
   [+LOC]
      ‘I had a sister.’

(Freeze (1992: 576–577))

Each set contains both an existential sentence and a ‘have’ predication. What is common to the sentences in each pair is that they have a locative subject and a Theme + copular in the predicate, as obvious from agreement between the subject and a copular.

In order to account for this syntactic similarity, Freeze proposes that existentials and ‘have’ predications have a common underlying structure. According to his proposal, sentences like (43) are derived from the D-structure in (44a) by the movement of both a locative argument and a preposition to the subject position, skipping the intervening Theme as
illustrated in (44b):³

(44) a. \[IP\ [X'P [I' I [PP [NP Theme] [P' P [NP Location]]]]]]
   b. \[IP [P' P [NP Location]] [I' I [PP [NP Theme] [P' t]]]]

(Freeze (1992: 588))

As Freeze notes, the difference in the interpretations between the a- and b-sentences in (41)-(43) results from the [+/-human] feature of the locative subject. That is, if the locative subject has the [+human] feature, the sentence is interpreted as a ‘have’ predication, and if it has the [-human] feature, it yields an existential expression.

Here, it should be noted that a ‘have’ predication like (42b), which is from Tagalog, has no preposition, while an existential like (42a) includes a subject with a lexical preposition. If Freeze’s assumption that the structures of existentials and ‘have’ predications are identical in many languages including Tagalog is correct, there must be a null preposition in the ‘have’ predication with a [+human] subject:

(45) a. \[IP [I' I [PP [P' [Pƒ] [NP Location]] [NP Theme]]] XP\]
   b. \[IP [I' I [PP [P' t] [NP Theme]] [P' [Pƒ] [NP Location]]]]

(Freeze (1992: 561))

In other words, [+human] subjects without any lexical prepositions occur in the ‘have’ predication. The same can be observed in languages such as Tongan and Shanghainese. That is, in these languages, a [+human] subject occurs without a lexical preposition in the ‘have’ predication, whereas a [-human] subject must come out with a lexical preposition in an existential sentence:

(46) Tongan:
   a. 'oku 'i ai 'ae faanau 'a sione.
   TNS P 3sg ABS.ART children ABS/GEN John
   ‘John has children.'

³ In (44), X’-level categories move to the specifier of I. This movement is inconsistent with Chomsky’s (1986) proposal that only heads and maximal projections are visible for substitution movement. However, Freeze claims that X’ and a maximal projection XP are equivalent, and it is quite standard to assume this movement, since there are a number of analyses that propose movement of X’ categories such as pronominalization and movement of French en and Italian ne, and V raising in many analyses of causatives.
b. ‘oku ‘i ai ‘ae nofo’anga ‘i he poopao.
   TNS P 3sg ABS.ART seat P ART canoe
   ‘There’s a seat in the canoe.’

(47) Shanghainese:
   a. ȵow yu i-tstå mɔ.
      I COP one-CL cat
      ‘I have a cat.’
   b. (lålå) vəŋts lidaw yu i-tstå mɔ.
      (in) building inside COP one-CL cat
      ‘There’s a cat in the building.’

(Freeze (1992: 585))

In some languages, although a preposition and a locative argument
move to the subject position in the existential, they occur immediately
following the copula in the ‘have’ predication. Yucatec (Mayan, VOS)
and Palestinian Arabic (VSO) illustrate this:

(48) Yucatec:
   a. yaan ba?alche ich k’ax.
      COP animal in forest
      ‘There are animals in the jungle.’
   b. yaan ti? Pablo xuntul ciimin
      COP at Paul one horse
      ‘Paul has a horse.’

(49) Palestinian Arabic:
   a. kaan fii ?ulad ţa(la) l maktab.4
      COP.TNS p boys on the desk
      ‘There were boys on the desk.’
   b. kan ţìnd il walad ktab.
      COP.TNS to the boy book
      ‘The boy had a book.’

(Freeze (1992: 586))

These data indicate that in the existential, a locative argument and a
preposition are in the subject position, but in the ‘have’ predication,
they immediately follow the copula; a preposition is adjacent to the
copula.

4 In Palestinian Arabic, there is a proform (fii) to the right of INFL in the exis-
tential. In the same position, there is a preposition like ţìnd in the ‘have’ predic-
tion.
Furthermore, in languages such as Portuguese (SVO), there are two types of possessive with a [+human] subject; one type has a combination of *be* + a preposition, and the other has no preposition, but it has a kind of verbal ‘have,’ different from the verbal *be*. The examples in (50) indicate this:

(50) a. O menino esta com fome.
   the child is with hunger
   ‘The child is hungry.’

b. O menino tem fome.
   the child has hunger
   ‘The child is hungry.’

(Freeze (1992: 587))

In (50a), the locative argument raises to the subject position, while the preposition moves to *be*. Similarly, in (50b), the locative argument undergoes the same movement, but no preposition occurs. Instead, the verb *tem* ‘have,’ different from *be*, occurs in that sentence. It is inferred from this that the verb *tem* results from the actual incorporation of a null preposition into *be*.

Japanese is very similar to Portuguese in that although an existential verb *aru* ‘be/exist’ occurs in a ‘have’ predication with a human subject and a preposition, a possessive verb, *motsu* ‘have,’ is used when a [+human] subject occurs without a lexical preposition:

(51) a. John-ni takusan-no okane-ga aru.
   John-DAT a lot of money-NOM exist
   ‘John has a lot of money.’

b. John-wa takusan-no okane-wo motteiru
   John-TOP many money-ACC have
   ‘John has a lot of money.’

(51a) is quite similar to the ‘have’ predications in languages like Hindi, Tagalog and Russian in that both the human locative argument and a preposition move to the subject position. In contrast to this, (51b) is

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5 As noted by Freeze (1992: 587), (50b) is a normal alternative of (50a) with *ter* ‘have.’
6 In Japanese, there is an existential expression with a [-human] subject:
   (i) Koen-ni buranko-ga aru
       park-in swing-NOM exist
       ‘There is a swing in the park.’
7 I assume that the *ni*-marker is not a case-marker but is a preposition.
similar to Portuguese ‘have’ predications like (50b) in that a verb expressing possession results from the actual incorporation of a null preposition into an existential verb.

Before concluding this section, we will briefly consider English existentials and ‘have’ predications:

(52)    a. *There is a book with/at/by the man.
        b. The man has a book.

(53)    a. There is a nest in the tree.
        b. *The tree has a nest.

As shown in examples from Hindi, Tagalog, and Russian, the existential with a locative-phrase subject is the most common form. However, the English existential is unique in that the expletive there must occur in the subject position. Furthermore, in English existential sentences the feature of location must be [−human], as inferred from (52a) and (53a). On the other hand, in the ‘have’ construction, the feature of the subject must be [+human], and there is no preposition as seen in (52b). 8 If we assume that an English ‘have’ predication is derived from the standard version of the universal locative D-structure, that is, a structure in which be takes PP as its complement and the PP is headed by a overt or null preposition with the Theme in its specifier and the Location in its complement, the human complement argument of P raises to the subject position and P incorporates into be, and the combined element is lexically realized as the verb ‘have.’ From this assumption it follows that the underlying structure of (52b) is (54a), from which (52b) is derived as shown in (54b):

(54)    a. [IP [I [VP be [PP [NP a book] [P [P' [P f0] [NP the man]]]]]]]

8 In English, a [−human] subject occurs in a possessive expression and then the Theme must be inalienably possessed.

(i)    a. The tree has branches.
       b. The flour has weevils. (Freeze (1992: 583))
b. 

(adaptive from Freeze (1992: 588))

We have seen in this section that (i) both a preposition and a locative argument move to the subject position in most languages as noted by Freeze, (ii) human subjects occur in expressions interpreted as possessives, while non-human subjects are found in expressions interpreted as existentials, (iii) in sentences with human subjects, a preposition may be adjacent to INFL or be in some languages or no preposition may occur in other languages, whereas in sentences with non-human subjects, a preposition must occur in the subject position, (iv) while a possessive expression with a preposition has a 'be' copula, a possessive expression with no preposition includes a sort of verbal 'have,' in languages like English, Portuguese, and Japanese. Among these properties, the most relevant to this article is that the underlying structure for a possessive expression is PP, which is headed by a null preposition with the Theme in its complement and with the Location (possessor) in its complement and then the preposition raises to INFL or be, and the human locative argument (possessor) raises to the subject position.

4.2. The Structure of the Get-Construction

Having so far considered the structure of a 'have' predication, we will turn to the structure of the get-construction in this section. This structure is very similar to that of a 'have' predication in that the subject of the construction must be animate and human, and no lexical
preposition is required. Let us consider sentences such as (55) and (56):

(55) a. The book got to Sue.
    b. Sue got the book.

(56) a. The book got to France.
    b. *France got the book.

(Pesetsky (1995: 124))

As Pesetsky (1995) notes, get is an unaccusative verb, since it is not passivized as shown in (57):

(57) *The book was got t by Sue. (Pesetsky (1995: 125))

Before proposing a structure for the get construction, I briefly review the theoretical framework of the Distributed Morphology presented by Harley and Noyer (1998, 2000), which I adopt in this article. According to Harley and Noyer's analysis, syntactic terminals fall into two classes. One class, which is called f-nodes, consists of feature bundles such as [definite], [past], and [indefinite], among others. These features are filled with the Vocabulary Items the, -ed, and a, for which the speaker has no choice at the lexical insertion. There are also nodes representing the functional category like a light verb v, which is assumed to be provided by UG. These nodes are filled with the morphemes cause, become, and be. The other class, which is called l-nodes, contains Vocabulary Items such as book, table, and house, and so on. These kinds of Vocabulary Items are freely chosen by the speaker. Let us consider the following sentences:

(58) a. John grows tomatoes.
    b. Tomatoes grow.

According to Harley and Noyer, the sentences in (58) have structures like (59):

(59) a. [vP [NP John] [v vCAUSE [vP grown [NP tomatoes]]]]
    b. [vP [v vBECOME [vP grown [NP tomatoes]]]]

In (59a), the light verb selecting the external argument has the UG feature cause, and the l-node, grown, denotes the resultant state of the action identified by the composite overt form. This l-node combines with the cause morpheme to produce the transitive verb. In (59b), on the other hand, the same l-node as in the transitive use occurs in the head of the lower VP, combining with the become morpheme to produce the final form.

With this in mind, let us consider the get-construction. As mentioned above, get is an unaccusative verb. Accordingly, (55a) and (56a)
are derived from the same kind of structure as (59b) by the movement of *the book* to the subject position:

\[
(60) \quad \text{a. } [\text{IP } [\text{I'} \text{ I }] [\text{vP } [\text{v'} \text{ vBECOME } [\text{VP } [\text{PP } [\text{NP the book}] [\text{P'} \text{ to } [\text{NP Sue}]]] ]]]]]
\]

\[
(60) \quad \text{b. } [\text{IP } [\text{I'} \text{ I }] [\text{vP } [\text{v'} \text{ vBECOME } [\text{VP } [\text{PP } [\text{NP the book}] [\text{P'} \text{ to } [\text{NP France}]]] ]]]]
\]

Here, let us assume Baker’s (1988) Uniformity of Theta Assignment Hypothesis (UTAH). Then, it follows that (55b) is derived from the same kind of underlying structures as (60a) except that the preposition is phonologically empty:

\[
(61) \quad \text{IP}
\]

\[
\text{NP} \quad \text{I'}
\]

\[
\text{I} \quad \text{vP}
\]

\[
\text{vBECOME} \quad \text{VP}
\]

\[
\text{V} \quad \text{PP}
\]

\[
\text{NP} \quad \text{P'}
\]

\[
\text{the book} \quad \text{P} \quad \text{NP}
\]

\[
\emptyset \quad \text{Sue}
\]

It should be observed that the subject of the *get*-construction must be animate and human; hence the deviance of (56b). This structure reminds us of the structure of a ‘have’ predication as in (54b). The advantage for this treatment of *get* comes from the syntactic and semantic similarities to a ‘have’ predication. Both constructions express a

---

9 This hypothesis states that identical thematic relations are mapped onto identical syntactic positions across structures.
possessive relation between the subject and the Theme *the book*. Furthermore, in the underlying structures for both constructions, the locative phrase (possessor), which is animate and human, is in the complement of a null preposition P and it raises to the subject position. In addition, the null preposition P incorporates into V in both constructions.

4.3. The Structure of the Double Object Construction

In this section, we will consider the structure of double object constructions. As Pesetsky (1995: 124) notes, the double object alternation shows a parallelism with behavior of unaccusative verbs like get:

\[(62) \begin{align*}
    & a. \text{John sent the book to Sue.} \\
    & b. \text{John sent Sue the book.}
\end{align*}\]

\[(63) \begin{align*}
    & a. \text{John sent the book to France.} \\
    & b. *\text{John sent France the book.}
\end{align*}\]

In oblique dative constructions such as (62a) and (63a), the Goal is of any sort, which is similar to sentences such as (55a) and (56a). Accordingly, adopting the theory by Harley and Noyer (1998, 2000), we have no difficulty in deriving (62a) and (63a):

\[(64) \begin{align*}
    & a. [vP \text{John} [v' vCAUSE [VP sent [PP the book [P' [P to] Sue]]]]] \\
    & b. [vP \text{John} [v' vCAUSE [VP sent [PP the book [P' [P to] France]]]]]
\end{align*}\]

(64) has the light verb with the morpheme CAUSE and the l-node sent designating the resultant state of the action described by the verb in the sentences. The l-node takes PP as its complement, whose head is to with the Theme *the book* in its specifier and the Goal Sue or France in its complement, and sent raises by head movement to the light verb v to produce the final form.

Turning to double object constructions such as (62b), we notice that it is the subject of the get-construction that occurs in the first object position of the double object construction. It should be observed here that in both constructions, the recipient (i.e. the subject in (55b) and the first object in (62b)) must be animate and human and no lexical preposition is required.

In this paper, agreeing with Harley and Noyer’s analysis, I propose the following structure for double object constructions like (62b):
In (65), sent takes PP as its complement, which is headed by a null preposition with the book in its specifier and Sue in its complement. The PP represents the underlying structure for a possessive relation between Sue and the book. The null preposition P incorporates into sent, and P+sent combines with the cause morpheme to produce the final form send. Also, Sue moves to the specifier of the lower VP in the same way as the locative NP in (54b) and (61) moves to the subject position. As a result, Sue asymmetrically c-commands the book, and then it is qualified as its prospective possessor. Therefore, the first two issues concerning the double object construction mentioned in sections 2.1 and 2.2 are resolved by assuming the structure (65). Furthermore, the locative argument in (65) must be animate and human; hence, the deviance of (63b).

5. Some Consequences

As we have pointed out at the end of the previous section, the proposed structure (65) for double object constructions can unravel the first two issues; (i) how can we account for a number of important structural asymmetries between the two objects? and (ii) how can we represent the possessive relation between the two objects in the structure of double object constructions? There remains one more issue; that is, why the first object is inaccessible to any syntactic rules, either as a whole
or in part. In this section, we will consider this issue.

5.1. On Unaccusative/Passive Constructions

As Chomsky (2001: 20) observes, there are no surface structures of the form (Verb + Direct Object) in English, where the construction is unaccusative/passive.

(66)  
\begin{align*}
\text{a. } & \text{*There arrived a strange package in the mail.} \\
\text{b. } & \text{*There was placed a large book on the table.}
\end{align*}

(Chomsky (2001: 20))

In such cases, the direct object must be moved to the edge of the construction by a certain kind of rule:

(67)  ?There arrived \( t \) in the mail some books about global warming.  

(Chomsky (2001: 22))

(68)  
\begin{align*}
\text{a. } & \text{There were several packages placed } t \text{ on the table.} \\
\text{b. } & \text{There were placed } t \text{ on the table several packages.}
\end{align*}

(Chomsky (2001: 20))

Interestingly, the nominals extracted by this rule are thoroughly immune to any other syntactic operations, either as a whole or in part:

(69)  
\begin{align*}
\text{a. } & \text{*How many men did there arrive?}^{10} \\
\text{b. } & \text{*What did there arrive in the mail [some books about } t]? \\
\text{c. } & \text{*What topics were there [some books about } t] \text{ placed on the table?}
\end{align*}

(Chomsky (2001: 22))

(70)  
\begin{align*}
\text{a. } & \text{*How many packages were there placed on the table?} \\
\text{b. } & \text{*What topics were there [some books about } t] \text{ placed on the table?} \\
\text{c. } & \text{*What topics were there placed on the table [some books about } t]?
\end{align*}

((b)-(c): adapted from Chomsky (2001: 22))

To account for these phenomena, Chomsky proposes that this operation, which is called Th/Ex, is an obligatory operation of phonological component. Furthermore, he assumes that it applies at the level of the verbal phrase, moving the direct object rightward or leftward and leaving a copy without phonological features. He further assumes that the rightward moved direct object is adjoined to \( vP \) and the leftward moved

---

10 Note here that (69a) has undergone (invisible) rightward extraposition, since it is much worse than (i).

(i)  ?There arrived three man.  

(Chomsky (2001: 21))
direct object occupies the specifier position of vP:\(^{11}\)

\[
(71) \quad [vP \ [vP \ [V \ [VP \ V \ NP ]]]] \]

To sum up, we have seen that in unaccusative/passive constructions, Th/Ex applies to the direct object, moving it to the edge of the weak phase headed by an unaccusative verb or a past participle. And then, the phonological features of the extracted element are stripped away at Spell-Out.

5.2. Double Object Constructions and Unaccusative/Passive Constructions

As we have seen in sections 2.3, the first object (either as a whole or in part) in a double object construction is inaccessible to any narrow-syntactic operations including wh-movement:

\[
(72)\quad \begin{array}{l}
\text{a. } *\text{Who did you say Cindy sent t a picture?} \\
\text{b. } *\text{Who did you say Cindy sent [a friend of t] a picture?}
\end{array}
\]

This fact is quite similar to unaccusative/passive constructions such as (73) and (74):

\[
(73)\quad \begin{array}{l}
\text{a. } *\text{How many men did there arrive?} \quad (=69) \\
\text{b. } *\text{What did there arrive in the mail [some books about t] ?}
\end{array}
\]

\[
(74)\quad \begin{array}{l}
\text{a. } *\text{How many packages were there placed on the table?} \quad (=70) \\
\text{b. } *\text{What topics were there [some books about t] placed on the table?} \\
\text{c. } *\text{What topics were there placed on the table [some books about t]?}
\end{array}
\]

In section 4.3, we have proposed the structure of double object constructions, as illustrated in (75):

\[\vdots\]

\(^{11}\) On the other hand, other operations such as Agree and LF-interpretive rules (binding rules, absorption) are applicable to the extracted nominals:

\[
(75)\quad \begin{array}{l}
\text{i) a. } *\text{He thought there were songs about John being played t on the radio (he=John).} \\
\text{b. } \text{They thought there were songs about each other being played t on the radio.} \\
\text{c. } \text{Who thought there were songs about what being played on the radio?} \\
(\text{Chomsky (2001: 23)})
\end{array}
\]
In (75), P incorporates into *sent*, and then the combined element raises to the *cause* morpheme to produce the final verbal form. Also, Sue moves to the specifier of the lower VP. If we assume that this operation is regarded as a kind of Th/Ex, it can predict that the ungrammaticality of (72) is accounted for along the lines of Chomsky’s approach. That is, if the first object raises to the specifier of the lower VP by the obligatory rule Th/Ex, then the moved phrase is not accessible to the operation Move; hence, the deviation of (72).

Furthermore, we can properly account for the fact that a heavy first object in a double object construction cannot be shifted to the right periphery of the sentence:

(76)  a. *John sent t a letter [every musician in the orchestra].

According to our analysis, the first object raises to the specifier of the lower VP by Th/Ex and then its phonological features are stripped away at Spell-Out. Consequently, neither the output of Th/Ex nor the trace left by the rule is accessible to syntactic operations like Move; hence the deviation of (76a).

6. Concluding Remarks

To summarize, we have argued about three issues raised in double object constructions; structural asymmetries between the first and second
objects, a possessive relation between the two objects, and the non-extractability of the first object, either as a whole or in part. As has often been pointed out in the literature, there is a strong implication that the first object is the prospective possessor of the second object, which indicates that the first object must be animate and human. Concerning this, we have shown on the basis of cross-linguistic data that in the 'have' predication, the human locative argument raises to the subject position from the complement position of a (null) preposition. Furthermore, it has been pointed out that the get-construction is subject to the same restriction on argument order as a 'have' construction; in the get-construction, the subject must be human and no preposition appears. To account for this similarity, we have proposed the structure of the get-construction, in which the human locative argument raises to the subject position from the complement position of a null preposition at the presumed underlying structure. Then, the parallelism between double object constructions, on the one hand, and 'have' predications and the 'get' construction, on the other hand, forces us to propose the structure for the former construction, which has as a part of its underlying structure a structure presenting a possession in 'have' predications and the get-construction. Specifically, we have proposed within the theoretical framework of Distributed Morphology that a double-object verb decomposes into three heads, $v_{\text{CAUSE}}$, V, and a null preposition P, and that the PP is a structure for expressing a possessive relation between the two objects. The human locative argument (i.e. the first object) raises from the complement position of the P to the specifier of the lower VP in the same way that the human locative argument in the get- and have-constructions raises to the subject position, and the null preposition incorporates into V. The presented structure for the double object constructions resolves immediately the first two issues. Furthermore, we have shown that there is a parallelism between double object constructions and unaccusative/passive constructions with respect to wh-extraction, and that the proposed analysis for double object constructions can account for the parallelism in terms of Chomsky's minimalist approach, which gives us an answer to the last issue.

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