

## Obligation and Possession\*

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### 1 Introduction

In several languages, the means that are used for marking possession can be used for marking obligation.

- (1) a. John has a book.  
b. John has to read a book.

Henceforth, I will refer to the construction in (1b) as the Obligational Construction (**OC**) (= the construction used for possession + a non-finite verbal part).

In this paper, I will discuss the question of why the same means are used for marking possession and obligation in many languages and provide a syntactic analysis of the obligational construction. The analysis proposed here derives the answer by treating obligational constructions as existential constructions, of which possessives can be seen as a special case (cf. Benveniste 1971, Freeze 1972, Kayne 1993, Hoekstra 1994 i.a.). One aspect of this analysis is that the modality of the obligational construction is not located in *have*; the semantic contribution of *have* in this analysis of the obligational construction is minimal. This is in line with recent analyses of possessive *have* (cf. Benveniste 1971, Freeze 1972, Kayne 1993, Hoekstra 1994 i.a.) and auxiliary *have* (cf. Kayne 1993 i.a.).

### 2 The obligational construction cross-linguistically

The languages which have the obligational construction vary with respect to how they realize it. Many languages that use the verb *have* for possession (henceforth *have* possession languages), can use *have* in combination with a non-finite form of the verb in the OC (for example English, Catalan, Galician, Haitian Creole, Spanish, European and Brazilian Portuguese, German).

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Spanish: *have*<sub>Possessive</sub> + infinitive

- (2) a. Juan tiene un libro de Bello  
J. has a book by Bello  
'Juan has a book by Bello.'
- b. Juan tiene que comer esta manzana  
J. has that/to eat.inf this apple  
'Juan has to eat this apple.'

Galician: *have* + infinitive

- (3) a. Xoán ten un libro de Bello  
J. has a book by Bello  
'Juan has a book by Bello.'
- b. Xoán ten que comer esta mazá  
J. has that/to eat.inf this apple  
'Juan has to eat this apple.'

European Portuguese: *have*<sub>Possessive</sub> + infinitive

Brazilian Portuguese: *have* + infinitive

- (4) a. João tem um livro de Bello  
João has a book by Bello  
'João has a book by Bello.' (Standard EP has 'O João')
- b. João tem que comer esta maçã  
João has that/to eat.inf this apple  
'João has to eat this apple.' (Standard EP has 'O João')

Haitian Creole: *have* + verbal component

- (5) a. Jan gen yon machin  
John has a car  
'John has a car.'
- b. Jan gen pou l ale nan sinema  
John<sub>i</sub> has FOR 3sg<sub>i</sub>/<sub>\*j</sub> go in cinema  
'John has to go to the cinema.'

German: *have* + infinitive

- (6) a. Der Hans hat ein Buch  
the Hans has a book  
'Hans has a book.'
- b. Der Hans hat rechtzeitig in Wien anzukommen  
the Hans has in-time in Vienna to-arrive  
'Hans has to arrive in Vienna in time.'

Many languages which use *be* in possessive constructions, for example Bengali, Hindi, Punjabi, Gujarati, Marathi, and Sindhi (henceforth *be* possession languages), use *be* with an oblique subject in the obligatory construction.

Bengali: genitive subject + infinitive

- (7) a. Ram-er ek-ta boi aachhe  
Ram-Gen one-CL book be.PRS  
'Ram has a book.'
- b. Ram-er Dilli je-te ho-be  
Ram-Gen Delhi go-Inf be-Fut  
'Ram has to go to Delhi.'

Hindi: dative subject + gerund

- (8) a. John-ko sirdard hai  
John-Dat headache be.PRS  
'John has a headache.'
- b. John-ko seb khaa-naa hai  
John-Dat apple eat-Ger be.PRS  
'John has to eat the apple.'

Gujarati: dative subject + gerund

- (9) a. Ram-ne tav che  
Ram-Dat fever be.PRS  
'Ram has a fever.'
- b. mahne mārā bhāine thoḍā paysā āpvānā che  
I-Dat my brother-Dat a-little money give-Ger.dat be.PRS  
'I have to give some money to my brother.' (ex. from Cardona 1965:109)

Sindhi: dative subject + gerund

- (10) a. huna khē ba puṭ<sup>a</sup> āhin  
He Dat two sons be.PRS  
'He has two sons.' (ex. Addleton and Brown (1981:92) via Masica (1991))
- b. mū khē kētrā-ī kam karaṇa āhin  
I Dat number-of things do-Ger be.PRS  
'I have to do a number of things.' (ex. Addleton and Brown (1981:193) via Masica (1991))

### 3 The Obligation-Possession Link

The Obligation-Possession link that I refer to is that the same auxiliary *have* (or *be*) is used in both possessive and obligational constructions. *have* or *be* are used in many languages in existential constructions and as the auxiliary in perfect/passive constructions. This fact has led several scholars to propose that there is a link between *have* and *be*, which I turn to now.

#### 3.1 The *have-be* link

Benveniste (1971), Freeze (1992), Kayne (1993), among others present an analysis which relates possessive *have* to an existential construction (which contains *be*). For Freeze (1992), *have*<sub>Possessive</sub> is the equivalent of a *be* with an incorporated  $X^o$ . Kayne (1993) modifies and extends Freeze's analysis to auxiliary *have* proposing that like *have*<sub>Possessive</sub>, *have*<sub>Auxiliary</sub> is equivalent to *be* with an incorporated  $X^o$ . Under these accounts, possessives are a kind of existential sentence. The superficially dissimilar (11a) and (11c) are argued to have the very similar underlying representations (11b) and (11d) respectively (abstracting away from the differences between Freeze and Kayne's analysis for now).

- (11) a. John has a book.  
b. BE<sub>existential</sub> [ (a book) (to John)]  
c. There is a book on the table.  
d. BE<sub>existential</sub> [ (a book) (on the table)]

To account for the similarity between possessives and the obligational construction, I reduce the obligational construction to an existential construction. Several options arise as to how this may be implemented (setting aside the question of the source of the obligation right now). The most plausible reduction is shown in (12a). In this representation, the bearer of the obligation is explicitly represented in the underlying representation. The existential analogue of (12a) is shown in (12b).

- (12) a. There is an obligation [(PRO<sub>i</sub> to eat an apple) (to John<sub>i</sub>)].  
b. There are unicorns in the garden.

At first glance, (12a) seems to be the right analysis since it makes the link with possession clearest. However, there turn out to be several reasons to not adopt it and I argue against it in favour of (13a). In (13a), only the existence of the obligation is asserted (cf. 12b) ( (13b) is the existential analogue of (13a)).

- (13) a. There is an obligation [(John to eat an apple)].  
b. There are unicorns.

### 3.2 The Bearer of the Obligation

The strongest argument in favor of choosing (13a) and not (12a) as the correct representation for the Obligational Construction comes from the fact that the identity of the bearer of an obligation is not asserted. It has to be inferred.

The question of whether it is (12a) or whether it is (13a) which is the appropriate underlying representation for the Obligational Construction can be reduced to the question of whether deontic modality involves Raising or Control and it is to this question that I turn next.

### 4 Deontic Modality: Raising or Control?

In the literature on deontic modality, a distinction is often made between the *ought to be* and the *ought to do* reading (cf. Brennan (1993), Barbiers (1995) *inter alia*). The terms *ought to be*, *ought to do* are from Feldman (1986). Examples of both these kinds of deontic modality are shown below.

- (14) a. Deontic: *ought to be*
- i. There must be regular elections in a democratic country.
  - ii. Taxes must come down otherwise the middle class will be pauperized.
- b. Deontic: *ought to do*
- i. John must finish his assignments on time.

The intuitive distinction between *ought to be* deontic modality and *ought to do* deontic modality is that the former merely describes what the world should be like according to someone's desires/the law (cf. Kratzer (1991)'s conversational background), while the latter describes what the world should be like according to someone's desires/the law and who should be responsible for bringing it into its desired/ law-obeying state. Whether a given deontic modality is interpreted as an *ought to be* deontic modality or as an *ought to do* deontic modality depends upon the context of the utterance in which the deontic modality occurs (cf. 15).

- (15) We are expecting fifty guests tonight. There have to be 50 chairs in the living room by 5 p.m. (as said to the caterers).

(15) is structurally similar to the example of *ought to be* deontic modality in (14a.i), but it is clear from the context that the modality in (15) is an *ought to do* deontic modality, where the caterers are the bearers of the obligation. The distinction between an *ought to be* and an *ought to do* deontic modality depends upon whether the obligation is taken to be borne by someone or not. If the obligation is not taken to be borne by anyone, the modality is an *ought to be* deontic modality, otherwise it is an *ought to do* deontic modality.

It is not the purpose of this paper to argue that there is no difference between *ought to be* and *ought to do* deontic modality. What I want to argue is that

no difference between these two kinds of deontic modality is syntactically represented. Deontic *ought to be* readings have been argued to involve Raising (cf. Brennan 1993 inter alia). On the other hand, deontic *ought to do* readings have been argued to involve control (cf. Brennan 1993 inter alia)<sup>1</sup>.

I argue that both *ought to do* readings and *ought to be* readings in the *have to* construction involve Raising.

#### 4.1 Arguments for Raising in *ought to be* deontic modality

Since this is a fairly uncontroversial position, I will only discuss it briefly. Definitionally, *ought to be* deontic modality has only one argument, which is propositional. The syntactic subject of the modal is, therefore, not an argument of the modal. We see in (16a, b) that the choice of the expletive is determined by the underlying predicate. This suggests that the syntactic subject of the modal raises to the syntactic subject position of the modal from the subject position of the underlying predicate.<sup>2</sup>

- (16) a. For our crops to survive,  $it_i/*there_i$  has [ $t_i$  to rain a lot in the coming month].  
b. For the party to be a success,  $there_i/*it_i$  have [ $t_i$  to be 50 chairs in the living room by 5 p.m.].

#### 4.2 Arguments for Raising in *ought to do* deontic modality

I will present two kinds of arguments for a Raising analysis of *ought to do* deontic modality. The first kind will show that it is unnecessary to postulate a Control analysis to syntactically mark the bearer of an obligation in sentences like (17), since an inferential mechanism to identify the bearer of the obligation is needed on independent grounds.

- (17) Mary has to read this book today. (on the reading in which it is Mary's obligation to read the book)

The second kind of argument will show that not only is a Control analysis of the obligational construction not necessary, it is, in fact, untenable.

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<sup>1</sup>See also Perlmutter (1970) and Jackendoff (1971). These authors do not discuss the distinction between *ought to do* and *ought to be* deontic modality *per se*. However, their discussion of Raising vs. Control in the context of epistemic and deontic modality carries over the current discussion.

<sup>2</sup>The arguments for Raising in *ought to be* deontic modality carry over unchanged to epistemic modality. Like *ought to be* deontic modality, epistemic modality has only one argument, which is propositional. The obligational construction can also be interpreted epistemically; it is easier to get the epistemic interpretation when the predicate in the embedded clause is stative as in (i).

- i. John has to be at home. I've looked for him everywhere else.

#### 4.2.1 Syntactic control is not necessary

There are cases where the bearer of the obligation is not present in the sentence (cf. 18). A syntactic control analysis is clearly unavailable here if the control analysis is meant to represent the bearer of an obligation as a controller. Instead, the bearer of the obligation is identified by a process of inference from the context.

- (18) a. We are expecting fifty guests tonight. There have to be 50 chairs in the living room by 5 p.m. (as said to the party organizers)  
b. John has to eat an apple today. (as said as an instruction to John's caretaker at the day-care)

Even in cases where the bearer of the obligation is present in the sentence, it does not have to be the syntactic subject of *have* as in (19).

- (19) Bill has to be consulted by John on every decision. (*John* being the bearer of obligation)

Based on (18) and (19), I make the following two observations. Firstly, for an *ought to do* modality, it is not necessary to have the bearer of obligation in the sentence Cf. (18). If present, it does not have to be the syntactic subject (19).

Secondly, the identity of the bearer of obligation is not asserted; it is inferred by a pragmatic mechanism which makes reference to the notion *bringer about of situation*. To be the bearer of an obligation, it must be possible for the potential bearer to be understood as the *bringer about of the situation*.

Since a mechanism for identifying the bearer of obligation is needed on independent grounds for (18a, b) and (19), it is unnecessary to posit a control analysis to identify the bearer of obligation of (17).

The following argument show that not only is a Control analysis of the obligational construction unnecessary, it is also untenable.

#### 4.2.2 A Control analysis is not tenable

Another argument for a Raising analysis comes from Hindi. This argument is interesting because it shows that, at least for the Hindi obligational construction, a Control analysis is untenable.

(20) is an example of the obligational construction from Hindi.

- (20) Tim-ko davaai pii-nii hai  
Tim-Dat medicine.f drink-Ger.f be.Prs  
'Tim has to drink medicine.'

It consists of a dative-marked subject and a non-finite part, which I argue to be a gerund<sup>3</sup>. Gerunds can have genitive subjects but not in the obligational construction.

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<sup>3</sup>This is contra Mahajan (1990) who assumes the non-finite complement of verbs like *want* in Hindi

- (21) \*Roumi-ko [Leela-ka seb khaa-naa] hai  
 Roumi-Dat Leela-Gen apple eat-Ger be.Prs  
 ‘\*Roumi has an obligation that Leela eat the apple.’

This follows, if we assume that the obligational construction involves Raising.<sup>4</sup>

- (22) Tim-ko<sub>i</sub> [ t<sub>i</sub> davaai pii-nii] hai  
 Tim-Dat Malta drink-Ger.f be.Prs  
 ‘Tim has to go to Malta.’

The arguments discussed in favour of the Raising analysis for the English *have to* construction carry over to Hindi also. In addition, the Hindi obligational construction displays a striking paradigm which supports a Raising analysis. This paradigm is schematized in (23).

- (23) a. Subj-Dat/\*-Acc [ V-unergative-Gerund] BE  
 b. Subj-Acc/\*-Dat [ V-unaccusative-Gerund] BE

The actual Hindi examples are displayed in (24). The following fact about the Hindi case-marking system is necessary to understand the examples in (24): Dative case is always realized by the case clitic *-ko*, accusative case can be realized by the case clitic *-ko* or by the default  $\phi$ , nominative case is always realized by the default  $\phi$ .

- (24) a. *pii* ‘drink’ is unergative, subject is dative
- i. Han-ko davaai pii-nii thii/hai  
 Han-KO medicine.f drink-Ger.f be.Pst.f/be.Prs  
 ‘Han had/has to drink medicine.’

to be an infinitival. The non-finite complement of verbs like *want* has the same morphology as the non-finite complement in (20). My argument is based on the following three facts: (i) the non-finite complement can occur in case positions, as objects of postpositions and with overt case-marking. This is like the contrast between English gerunds and infinitivals. However, it should be noted that Romance infinitival clauses can occur as objects of prepositions, (ii) the non-finite complement can assign genitive case to its subject, and (iii) the non-finite morphology *-naa* inflects exactly like nouns ending in *-aa* showing the following paradigm: *-naa* ‘m.sg’, *-ne* ‘oblique/m.pl’, *-nii* ‘f.sg/f.pl’. This point has also been made by Butt (1994).

<sup>4</sup>The possibility that the ungrammaticality of (21) is due to the obligational construction involving obligatory control can be discounted. The ungrammaticality of the obligational construction with an overt genitive subject (cf. 21) is far worse than the cases of obligatory control with overt genitive subjects (cf. i), which are only marginal.

- i. ??Aamir-ne [Akshay-ke Amriika jaa-ne ke-liye] koshish kii  
 Aamir-Erg Akhsay-Gen.obl America go-Ger.obl for attempt.f do-Pfv.f  
 ‘?Aamir tried for Akshay to go to America.’

This contrast suggests that the obligational construction in Hindi does not involve control.

- ii. \*Han davaai pii-nii thii/hai  
Han medicine.f drink-Ger.f be.Pst.f/be.Prs  
'Han had/has to drink medicine.'
- b. *kaɕ* 'get cut' is unaccusative, subject is accusative
  - i. yeh tehni kaɕ-nii thii/hai  
this branch.f cut<sub>intr</sub>-Ger.f be.Pst.f/be.Prs  
'This branch had/has to be cut.'
  - ii. is tehni-ko kaɕ-naa thaa/hai  
this.obl brach.f-KO cut<sub>intr</sub>-Ger be.Pst/be.Prs  
'This branch had/has to be cut.'

The case on the syntactic subject is determined by whether it is underlyingly an external argument or an internal argument. External arguments get Dative, internal arguments get Accusative. In order to determine the case of the matrix subject of the Obligational Construction, reference needs to be made to the underlying position of an argument i.e. we need a chain. Since we have a chain, we have Raising.

Based on the above arguments,<sup>5</sup> I conclude that (12b) is the correct representation for deontic modality and hence for the obligatory construction. Having made this conclusion about the argument structure of the modality in the obligatory construction, in the next two sections I will discuss the source of the modality in the obligatory construction and the properties of the *have* that occurs in the *have to* variety of the obligatory construction. After that I will pull the various strands in the discussion together and provide a structure for the obligatory construction in §6.

## **5 Source of Modality**

The obligatory construction involves modality. However, it remains to be explained why it is possible to interpret the *have to* construction as containing a modality. *have/be* do not contribute any modality in their role as possessive verbs/auxiliaries. So does this modality fall out of the semantics of non-finite constructions? I argue that it does not.

Since there are instances of infinitives without any explicit modal meaning, I conclude that modality is not an intrinsic part of the semantics of an infinitive.

- (25) a. It was fun to dance the tango in the park yesterday. ↔ The event of dancing the tango yesterday was fun.
- b. I believe him to be innocent.
- c. I want to go to Marrakesh.

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<sup>5</sup>For related, but more general arguments that modal verbs always involve raising see Barbiers 1995.

In (25a), there does not seem to be any modality. As for (25b, c), it is unclear if there is any modal contribution made by the infinitival. Whatever modality/intensionality is present seems to follow from the matrix predicate.

There is also some Hindi-internal evidence for the conclusion that the modality in the obligational construction does not come from the non-finite construction alone. The non-finite verbal part of the obligational construction (which is a gerund) does not contribute a modal interpretation in isolation (cf. 26b, c).

- (26) a. hamaari list par aur kyaa cheezē haī?  
 our list on else what things be.PI.PRS  
 ‘What other things are on our list?’
- b. [Tim-kaa Malta jaa-naa] hai  
 Tim-Gen Malta go-Ger be.Prs  
 ‘There is Tim’s going to Malta.’
- c. aur [Kiki-kaa Kaahira jaa-naa] hai  
 and Kiki-Gen Cairo go-Ger be.Prs  
 ‘and there is Kiki’s going to Cairo.’

It can be seen that the examples in (26) lack a modal interpretation. I take this as evidence that the modal interpretation does not spring from the gerund.<sup>6</sup>

### 5.1 A covert modal

Therefore, I assume from this point onwards that the modality in the *have to* construction does not follow directly from the semantics of the infinitival. Instead, I posit the existence of a covert modal in the *have to* construction.

There is some evidence from the Indo-Aryan languages for positing such a covert modal. In the Indo-Aryan languages, corresponding to the obligational construction (in 27a), there is a class of related constructions that differ only in the presence of an overt modal (in 27b).

- (27) a. Ram-ko phal khaa-naa hai/thaa  
 Ram-Dat fruit eat-Ger be.PRS/be.PST  
 ‘Ram has/had to eat the apple.’
- b. Ram-ko seb khaa-naa chahiye thaa  
 Ram-Dat fruit eat-Ger should be.PST  
 ‘Ram should have eaten the apple.’

<sup>6</sup>Note that in isolation (26b, c) are ungrammatical. Since a gerund can assign Genitive to its subject, this ungrammaticality is unexpected. However, the ungrammaticality of (26b, c) becomes understandable once we note that (26b, c) are existential sentences and therefore subject to the Definiteness Effect. In (26b, c), there is a Definiteness Effect on the event of Tim (or Kiki)’s going to Malta. A similar effect appears in English as can be seen in (i)

i. # There is [Tim’s going to Malta].

Sentences ruled out by the Definiteness Effect are known to become acceptable if given a list reading interpretation. We see this alleviation of the Definiteness Effect in (26).

The constructions with overt modals are closely related to the obligational construction in both form and interpretation and any analysis of the obligational construction should extend to the constructions with overt modals in (27b) also.

### 5.1.1 Quantificational force of the covert modal

The quantificational force of the covert modal in the obligational construction is universal. Why is this so? In other words, why can ‘John has to eat an apple’ not mean ‘John may eat an apple’? <sup>7</sup>

A possible answer relates the universal quantificational force of the covert modal in the obligational construction to a more general property of covert semantic operators - they tend to be interpreted universally. An instance of a covert operator that is interpreted universally is the covert adverb of quantification in *donkey*-sentences like (28).

(28) If a farmer owns a donkey, he beats it.

Another instance of a covert operator that is interpreted universally is the covert modal in *wh*-infinitivals (cf. 29).

(29) John knows [how PRO<sub>arb</sub> to behave oneself].

The covert modality in the infinitival is best glossed as *should*, which has universal force.

## 6 Which *have* is it?

There are several pieces of evidence that suggest that the *have* in the Obligation Construction is the same/has the same properties as the possessive *have*.

In English, possessive and obligational *have* behave as main verbs, while auxiliary *have* behaves like an auxiliary: i.e. possessive and obligational *have* trigger *do*-support in questions and in the presence of negation while auxiliary *have* does not.

- (30) a. Has John eaten the apple?  
b. Does John have the book/\* Has John the book?  
c. Does John have to eat the apple/\* Has John to eat the apple?  
d. John hasn't eaten the apple.  
e. John doesn't have the book/\* John hasn't the book.  
f. John doesn't have to eat an apple/\*John hasn't to eat the apple.

In German, the choice of auxiliary *have* depends upon the underlying predicate (i.e. there is auxiliary selection). There is, however, no auxiliary selection for either the obligational or the possessive *have*.

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<sup>7</sup>There is also the question why the covert operator is interpreted as a modal and not as some other intensional operator? Why, for example, is it not interpreted as the *Gen(ericity)* operator? I have no explanation for this fact and have to assume that the covert operator is a modal operator.

- (31) a. Der Hans ist/\*hat rechtzeitig in Wien angekommen  
 Det Hans is/has in-time in Vienna arrived  
 ‘Hans has arrived in Vienna in time.’  
 b. Der Hans hat/\*ist rechtzeitig in Wien anzukommen  
 Det Hans has/\*is in-time in Vienna to-arrive  
 ‘Hans has to arrive in Vienna in time.’

We get a third kind of evidence from Spanish, where possessive and obligatory *have* surfaces as *tener* while auxiliary *have* surfaces as *haber*. However, this evidence is somewhat inconclusive because Catalan uses auxiliary *have* and not the possessive *have* in the obligatory construction.

- (32) a. En Joan té dos germans  
 Det Joan has two brothers  
 ‘Joan has two brothers.’  
 b. En Joan ha d’anar a Girona  
 Det Joan has of-go.inf to Girona  
 ‘Joan has to go to Girona.’

## 7 An analysis of the obligatory construction

### 7.1 Freeze and Kayne revisited

Freeze (1992) proposes that *have*<sub>Possessive</sub> is derived from the incorporation of an  $X^0$  into *be*. Kayne (1993) extends and modifies this approach to handle *have*<sub>Auxiliary</sub>. He proposes that *have*<sub>Auxiliary</sub> is also derived from the incorporation of an  $X^0$  into *be*. However, the relation of the  $X^0$  to the  $DP_{Possessor}$  (for possessives) is not the same in the two analyses.

In Freeze (1992), the  $X^0$  (=  $P^0$ ) which incorporates into *be* to yield *have* is in a thematic relationship with the  $DP_{Possessor}$ . This can be seen in (33b) - the possessor is a complement of the  $P^0$ . In the languages where the  $X^0$  incorporates into *be*, we get *have* and a non-oblique subject. If the incorporation does not take place, we get an oblique subject and a *be*. The relationship between nominative subjects and possessive *have* on the one hand and between oblique subjects and possessive *be* is thus represented very directly.

Freeze (1993) proposes the structures in (33) for existentials, alienable possession, and predicate locatives (The examples in (33) are from Hindi).

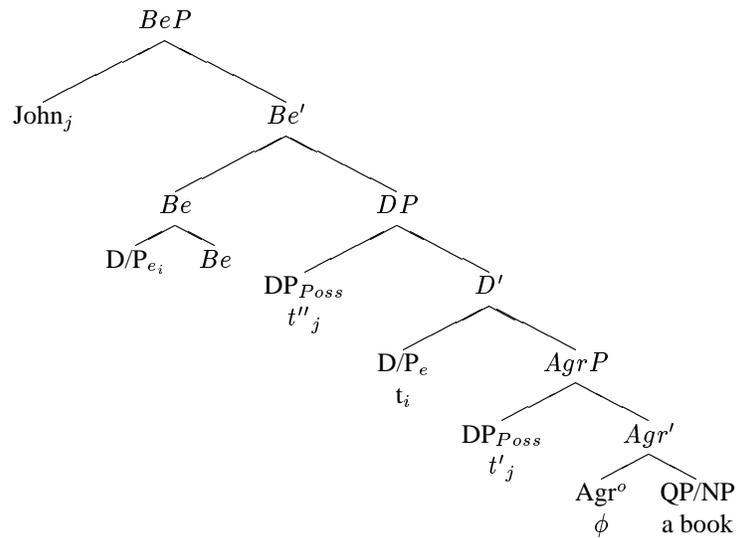
- (33) a. [<sub>IP</sub> [<sub>P'</sub> kamre mē]<sub>j</sub> [<sub>I'</sub> [<sub>PP</sub> [<sub>NP</sub> aadmi] [<sub>P'</sub>t<sub>j</sub>] [<sub>I</sub>hai]]]]  
 room LOC man be.PRS  
 ‘There is a man in the room.’ (Existential)  
 b. [<sub>IP</sub> [<sub>P'</sub> Mohan ke-paas]<sub>j</sub> [<sub>I'</sub> [<sub>PP</sub> [<sub>NP</sub> ek kitaab] [<sub>P'</sub>t<sub>j</sub>] [<sub>I</sub>hai]] ] ]  
 Mohan Gen-NEAR one book be.PRS  
 ‘Mohan has a book.’ (Alienable Possession)

- c.  $[IP [NP \text{aadmi}]_j [I' [PP \text{t}_j [P' \text{kamre mē}] [I\text{hai}]] ]]$   
 man room LOC be.PRS

‘The man is in the room.’ (Predicate Locatives)

In Kayne (1993), the  $X^0 (= D/P_e^o)$  is not in a thematic relationship with the  $DP_{Possessor}$ . The thematic relationship between possessor and possessee is established lower in the tree as can be seen in (34).

- (34) John has an apple.

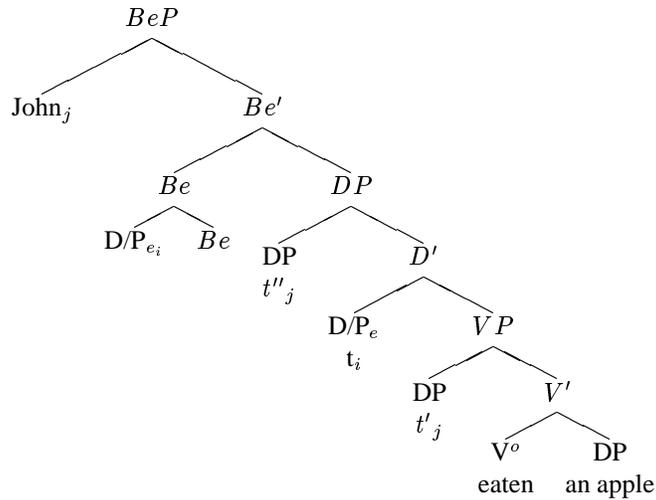


The relationship between nominative subjects and *have* on the one hand and between oblique subjects and *be* on the other is captured by Kayne in the following way: In certain languages, oblique Case is licensed in [Spec, DP]. The  $DP_{Possessor}$  raises from the [Spec, AgrP] to the [Spec, DP] for case purposes. The oblique Case licensed in [Spec, DP] is equivalent to the  $P^o$  of Freeze (1992).

In the languages where [Spec, DP] is unable to license Case, the  $DP_{Possessor}$  is forced to move higher for case reasons. Following Szabolcsi (1981, 1983)’s idea that (possessive) DPs are similar to CPs, Kayne assumes that [Spec, DP] is an  $A'$  position. This movement is therefore a case of improper movement (movement from an  $A'$  to an  $A$ -position). To amnesty this movement, the incorporation of the  $D/P_e$  is forced into the *be* giving us *have*. [Spec, DP] becomes an  $A$ -position (in the spirit of Baker’s Government Transparency Corollary) making the movement from [Spec, DP] to an  $A$ -position in the *be*-domain licit. Consequently, the languages that can license Case in their [Spec, DP] have oblique possessors and do not force incorporation of the  $D/P_e$  into *be* - these are the *be*-possession languages. The languages that cannot license Case in their [Spec, DP] force incorporation of the  $D/P_e$  into the *be* - these are the *have*-possession languages. Kayne is now able to extend his analysis to handle auxiliary *have*. His analysis is shown below (for simplicity, the functional projections intervening between

the underlying VP and the DP complement of *BE* - Agr<sub>S</sub>P, TP, and Agr<sub>O</sub>P - are omitted)

(35) John has eaten an apple.



## 7.2 Requirements the desired structure for the obligational construction should meet

The structure should be such that the subject of the obligational construction does not have to be the bearer of an obligation (see §3.1). I have shown earlier for English that the subject of an obligational construction does not have to be the bearer of an obligation. Similarly, in Hindi, the dative-marking on the subject of (36) does not indicate that it is the film which has the obligation to make lots of money.

(36) is film\*(-ko) bahut paisa banaa-naa hai, (nahĩ to maĩ barbaad ho  
 this film(-Dat) lots money make-Ger be.Prs NEG then I ruin be  
 jaũũgaa)  
 GO-fut

‘This movie has to make lots of money (or else I’ll be ruined).’

I adopt an extension of Kayne (1993)’s analysis of possessives over Freeze (1992)’s analysis. In Freeze’s analysis, there is a thematic relationship between the case-marker and the NP it appears with.

(37) [<sub>IP</sub> [<sub>P'</sub> [<sub>NP</sub> Ram] [<sub>P</sub>ko]]<sub>i</sub> [<sub>I'</sub> [<sub>PP</sub> [<sub>NP</sub> bukhaar] [<sub>P'</sub>t<sub>i</sub>]] [<sub>I</sub><sup>o</sup> hE]]]

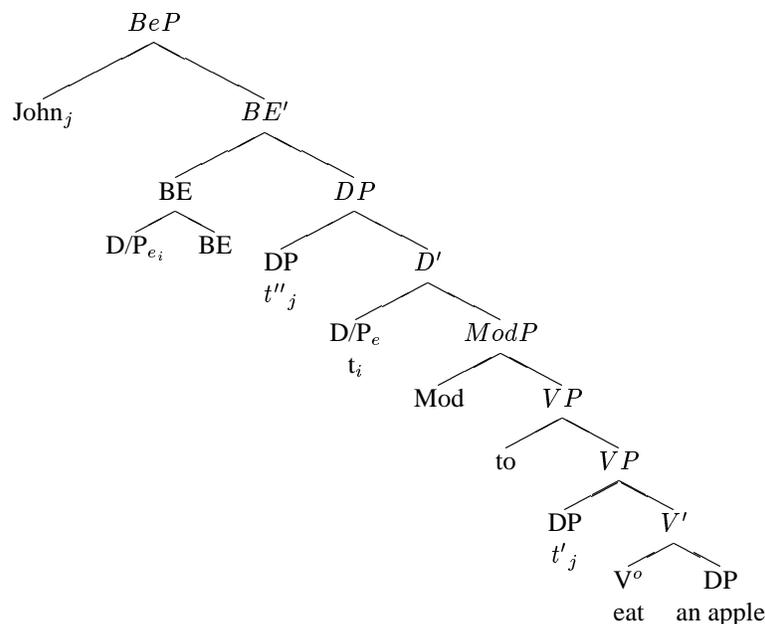
Ram Dat fever be.Prs

‘Ram has fever.’



reflects the concerns discussed in §7.2. The subject *John* starts off in the subject position of *eat an apple*. It has to raise for reasons of Case. *Mod* and *to* may or may not project specifier positions. If they do, *John* will pass through them but not stop there on its way to [Spec, DP] because [Spec, Mod] and [Spec, to] are not Case-licensing positions. Following Szabolcsi (1982) and Kayne (1993) among others, I assume that (i) [Spec, DP] is an *A'*-position and (ii) In English, Case is not licensed in [Spec, DP]. Therefore, *John* needs to move further into the extended projection of *be* to get Case-licensed. However, since [Spec, DP] is an *A'* position, such a movement would constitute an example of improper movement. This would lead to ill-formedness. In order to amnesty this movement, the  $D/P_e$  head incorporates into *be*. This incorporation (in the spirit of Baker's Government Transparency Corollary) leads to [Spec, DP] becoming an *A*-site. The hitherto improper movement now becomes proper. *have* is the spellout of *be* with the  $D/P_e$  incorporated.

(39) John has to eat an apple.



The infinitival *to* is treated as an auxiliary verb cf. Zwicky and Pullum inter alia.

The derivation of the obligatory construction for Hindi-like languages follows the following route: The Hindi-like languages are the *be*-languages. [Spec, DP] is a Case-licensing position. Consequently, the underlying subject is able to get Case-licensed in [Spec, DP] and does not need to move higher. The incorporation of  $D/P_e$  into *be* is not forced and hence does not take place by economy. The Hindi-like languages are all head-final so we get the expected order (cf. 40).

- (40) [<sub>BeP</sub>[<sub>DP</sub>[ Ram-ko]<sub>i</sub> [<sub>DP</sub> [<sub>VP</sub> t<sub>i</sub> seb khaa-naa] Mod] D]] hai]  
 Ram-Dat apple eat-Ger be.Prs  
 ‘Ram has to eat the apple.’

## **8 Some Other Issues**

In the following subsections, I will mention briefly some issues related to the obligational construction which I have not discussed so far.

### **8.1 Differential Case-marking in possessive and obligational constructions**

There is great cross-linguistic similarity in the marking of obligation and possession, however, there is no isomorphy. While in the *have* possession languages, the case on the subject of the possessive construction and the case on the subject of the obligational construction is always the same, nominative, this is not the case with the *be*-possession languages.

The examples in §1 are somewhat misleading because for reasons of simplicity, I have only considered examples from languages where the subjects of the possessive construction and of the obligational construction get the same case. These are not the only cases, however. In Russian, the possessor gets locative case while the subject of the obligational construction gets dative case. In Bengali, while all possessors get genitive case, the subject of the obligational construction can appear in either dative or genitive case. Other languages where the case-marking on the subject of the obligational construction can be different from the case-marking on the subject of the possessive construction include Punjabi, Delhi Hindi, Nepali, and Assamese (cf. Masica 1990).

While I cannot explain why the case-marking on subject of the obligational construction is different from the case-marking on the subject of the possessive construction in the languages mentioned above, I will relate this phenomenon to another widely-attested phenomenon.

Consider the schema in (41).

- (41) a. John-Case<sub>1</sub> *BE* an apple/two arms/a brother. (*be*-possession languages)  
 b. John *HAVE* an apple/two arms/a brother/a headache. (*have*-possession languages)

In the *have*-possession languages, the kind of possession such as alienable/ inalienable/ experiencer does not seem to affect the case assigned to the possessor, which is always nominative. However, in the *be*-possession languages, the difference between the various kinds of possession is often reflected by the case-marker used (Case<sub>1</sub> in (41)). Cf. the following paradigm from Hindi.

- (42) a. Ram mē pratibhaa hai  
 Ram LOC talent be.PRS  
 ‘Ram has talent’ (Possession)

- b. Ram ke-paas ek kitaab/\*har kitaab hai  
Ram Gen-NEAR one book/every book be.PRS  
'Ram has a book/\*every book.' (Alienable Possession)
- c. Ram ko bukhaar/sirdard/cancer hai  
Ram Dat fever/headache/cancer be.PRS  
'Ram has fever/a headache/cancer.' (Experiencer Possession?)
- d. Ram kii do/\*sab betiyāā hai  
Ram Gen.f two/all daughters be.PRS  
'Ram has two/\*all daughters.' (Inalienable Possession)

Different postpositions are used to mark different notions of possession - thus the locative postposition *me* 'in' marks possession of a talent (42a), another locative *ke paas* 'near' marks alienable possession (42b), the dative *ko* marks experiencer possession (42c), and the genitive *kaa/ii/e* marks inalienable possession (42d). Since the possessive construction in the *be*-possession languages allows the subject to have a variety of different cases depending upon the kind of possession involved, it is not surprising that the subject of the obligational construction can have yet another case. Consider the paradigm in 43.

- (43) a. munde-ne jaa-ṅaa ai  
boy-Erg go-Ger be.Prs  
'The boy has to go.'
- b. munde-nūū jaa-ṅaa pīaa hai  
boy-Dat go-Ger should be.Prs  
'The boy ought to go.'

(43a) is an instance of the obligational construction with a covert modal. The subject gets ergative case and the obligation is interpreted as one where the subject has some control. (43b) is an instance of the obligational construction with an overt modal *pīaa* - here the subject gets dative case and the obligation is interpreted as totally external. The subject has no control.

This correlation between the kind of obligation and the case on the subject is similar to the one seen in (42) between the kind of possession and the case of the subject. This is not an explanation, but we can reduce the problem of the case-marking on the subject of the obligational construction to the problem of the case-marking on the subject of a possessive construction.

## 8.2 Availability of obligational construction, covert modality

Finally, I will briefly mention a problem about which I do not have much to say. All languages have some means or the other to express possession. Most languages have non-finite constructions. However, it does not seem to be the case that if a language has (a) non-finite construction(s), the combination of the means

for marking possession in combination with a non-finite construction will yield a non-finite construction. For e.g. both Korean and Swedish have non-finite constructions but do not have the obligational construction. Is there some independent aspect of the grammar that constrains the availability of this construction or is it just an arbitrary fact? Does the availability of the Obligational Construction in a language correlate with some other properties of that language?

A related but slightly different question can be asked in languages which have the obligational construction. Why is it that the covert modality does not occur everywhere i.e. why does 'John ate the pizza' not mean 'John must eat the pizza'? Why does the covert modality only seem to be licensed in the syntactic frame *D [Mod [IP ? I will leave these questions to be answered by further research.*

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