

non-embedded clauses. The subjunctive construction and the phenomenon of *do*-support in non-embedded wh-questions provide direct evidence for the empirical foundation of this condition.

The standard analysis of simple main clauses that do not contain an auxiliary is not compatible with the aforementioned condition of licensing and identification. There is, however, a possible structure for non-embedded clauses that fulfills the condition. This is a co-projection structure with the I-projection superposed on the V-projection.

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## HAVE as BE plus or minus

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### 1. The verb HAVE<sup>2</sup> is used both as a main verb and an auxiliary verb

The prototypical use of this main verb is as in (1a), where HAVE appears to be a transitive verb, taking a subject bearing the role of possessor and an object bearing the role of Theme. Yet, apart from this prototypical use, HAVE can be combined with various other complements, as the examples in (1), in which Dutch *hebben* is used, show.

- (1) a. ik heb een fiets  
'I have a bicycle'
- b. ik heb mijn mond open  
'I have my mouth open'
- c. ik heb een auto in de garage staan  
'I have a car in the garage stand'

Not all these subjects are really 'possessors'; as a matter of fact, the car, mentioned in (1c) may easily be possessed by someone else. More accurate would be a description in the following terms: the complement of *hebben* in (1b-c) denotes a state of affairs to which the subject is intrinsically related, but the nature of that relation varies. The example in (1c), for instance, can be used to say that I have a car at my disposal, but it can equally well express that I have no access to my garage because somebody else's car is in it. In either construal, at least one of the elements referred to in the complement must be closely associated to the subject: it is either the subject's car, or the subject's garage. In so far, some notion of possession is still involved, but then rather in the sense of 'intimate connection', a concept closely related to inalienable

<sup>1</sup> For valuable discussion on several aspects of this paper I thank René Mulder and Gertjan Postma. I also thank Jan Kooij for his constructive comments.

<sup>2</sup> I use capitalized HAVE to refer to *have* in English, *hebben* in Dutch, *haben* in German, *avere* in Italian etc. Although these verbs can be considered each other's counterparts, it is quite conceivable that subtle differences exist between them.

possession. The precise formulation of the relevant concept is not easily given, but the examples in (2) may serve as an illustration.

- (2) a. ik heb een Amerikaanse jongen in de klas  
I have an American boy in the class
- b. Mijn tuin heeft een groot grasveld  
My yard has a big lawn
- c. ?? Mijn tuin heeft een tulip  
My yard has a tulip

The sentence in (2a) can only be used by the teacher, not by a classmate: the teacher controls the “possession” of the class, but a member of the class doesn’t (a classmate would say “we have an American boy in the class”). (2b-c) illustrates a different point: my garden does not exert any control in either case, but a lawn can be considered a more or less defining part of the garden, while a tulip cannot. Hence, the lawn can be said to be inalienably possessed by the yard in the sense that its absence would dramatically change the yard. Both HAVE-constructions and pure locative constructions can be said to be locational in a broad sense. If, however, the presence of an object at a particular location is inherent and definitory of the location, the location may be said to HAVE that object.

Should this intrinsic relationship be expressed in the representation of such HAVE-sentences, and if so, how? Guéron (1985) proposes that *avoir* is not a transitive verb, but rather an ergative verb, which is to say that its subject receives its thematic role in the complement *avoir*. More recently, this analysis is further developed in terms of a decomposition of HAVE in terms of BE plus an incorporated element (cf. Den Dikken 1992, Hoekstra 1991, Kayne 1993b). If HAVE should indeed be decomposed into BE plus something, the derived nature of the subject of HAVE causes no surprise. This yields an approximation of the underlying structure of HAVE-sentences as in (3):

- (3) BE [XP DP X YP]

where NP ends up as the subject of HAVE, which itself results from incorporating X into BE, yielding HAVE as its lexicalization. YP is the complement of HAVE. In essence, the problem of whether the subject of HAVE is its thematic subject is now replaced by the problem of whether DP in (3) is the thematic subject of X, or whether its origin is embedded in YP. Kayne (1993b) proposes the latter, taking the DP to originate in YP. The structure in (4) (his [11]) expresses this:

- (4) John<sub>i</sub> has [XP e<sub>i</sub> X [ e<sub>i</sub> three sisters]]

where a movement relationship holds between *John* and the rightmost empty category. Alternatively, this empty category is not a trace, but a pronominal empty element, controlled by *John*, which is itself theta-marked by X. Such an option seems more likely for cases in which the relevant empty category is contained in a prepositional phrase, as in (5), where postulating a transformational relationship runs into conflict with the otherwise valid requirement that movement to an A-position in Dutch is incompatible with P-stranding.

- (5) Jan heeft een hoed op (z’n hoofd)  
John has a hat on (his head)
- (6) a. il a les mains sur le dos  
he has the hands on the back “he has his hands on his back”
- b. j’ai mis le bébé sur le dos  
I have put the baby on the back “I have put the baby on its back”<sup>3</sup>

Further problems for a transformational derivation arise in the cases in (6). In (6a), there are two candidates for the underlying position of *il* (cf. Tellier 1990), which makes the structure look like a parasitic gap construction. In (6b), movement of *le bébé* from the NP *le dos* would violate the Θ-criterion, as *le bébé* would receive two Θ-roles. For these cases, then, a pronominal representation of possession seems more adequate, and given its independent availability, we may also assume it in the case of (4). This analysis makes X essentially transitive. But if X is essentially transitive, it is less clear why HAVE should be decomposed in the first place, or, phrased differently, it is unclear what the difference is between HAVE and X. The matter at stake here is similar to the question as to the relationship between the two complement structures found with *give*, i.e. whether there is a transformational relationship between “A book to John” and “John X a book”: *to* and X relate to each other as active and passive (cf. Larson 1988b), but it is unclear whether this relationship should also be captured in a direct fashion.

Passive used to be considered a verbal category, i.e. active verbs (lexical elements) were mapped into the category of passive verbs, signaled by some syncategorematic “morphology.” This conception has long been abandoned in

<sup>3</sup> The French sentence is in fact ambiguous: it also allows the interpretation that I put the child on my back. This shows that the possessive interpretation cannot be ascribed to a property of the construction per se.

favor of a more modular approach, where properties of the superstructure dominating the lexical verb have an inverse effect on the licensing of the arguments of the lexical head. In this modular conception, then, there is no such thing as a passive verb, or a rule of passive applying to a lexical category. A first attempt at a similarly modular approach to auxiliary selection was made in Hoekstra (1984) and Haider (1985b) who argue that a transitive participle is identical in both a perfect tense and a passive construction, the difference following from the interaction with "auxiliaries." The basic idea was that the participle is in itself passive, the passivizing effect being undone by the auxiliary HAVE. The precise mechanism of undoing was left in the dark, as was the exact nature of the "passivizing" effect of the participle. Essentially, the choice between HAVE and BE in the formation of active versus passive participial constructions remained a matter of selection, as Kayne 1993b rightly observes.

Kayne (1993b) presents a theory of auxiliary selection in which the notion of selection plays no role. Rather, it is proposed that main verb HAVE and auxiliary HAVE are non-distinct, the differences in use being determined by an interaction of the properties of HAVE and those of its complement. The analysis of HAVE itself, in turn, is modeled on the structure of possessive constructions in Hungarian. On this basis, Kayne claims that HAVE should be considered a lexicalization of BE plus an element incorporated into it, as stated above. Let us take a closer look at the details of Kayne's proposal.

## 2. Kayne

Kayne, following Freeze 1992 (cf. also Hoekstra and Mulder 1989, Hoekstra 1991), notes that languages vary with respect to the way in which possession is expressed: some languages use a BE-type construction<sup>4</sup>, as in (7a), others use a HAVE-type construction, as in (7b), while other languages alternate, the choice being determined by various factors of the type discussed above in connection with (2):

<sup>4</sup> French similarly has a BE-type construction to express possession, as in "Ce livre est à moi." I am not certain about its similarity to either Latin or Hungarian, though. Both French and Hungarian show a definiteness effect, but of an opposite nature: in French, the possessed object needs to be definite (cf. \*un livre est à moi), where in Hungarian the possessed object must be indefinite (\*nekem van a haza-m (to-me is the house)). In order to express possession of a definite object in Hungarian, which lacks a HAVE verb, a purely locational predication is used (a könyv nalam van (the book at-me is)), which seems more similar to the French "le livre est à moi." Note that in this construction it is impossible to replace à NP by a dative clitic (\*ce livre lui est).

- (7) a. Mihi liber est Latin  
me-DAT book-NOM is  
b. Ik heb een boek Dutch  
I-NOM have a book-ACC

In Hoekstra (1991), I argue that this is similar to the alternation in the complement of ditransitive verbs, where in some languages the possessor has dative case, with the object receiving a structural case (accusative instead of nominative), which I refer to as a BE-pattern, whereas in other languages structural accusative is assigned to the possessor, providing the possessed object with case in a different fashion, a HAVE-pattern, as in (8):

- (8) BE-pattern: GIVE DP DP  
<dat> <acc>

- HAVE-pattern: GIVE DP DP  
<acc> <acc/obl>

Many languages show an alternation in the complement of GIVE between a double object and a prepositional dative construction (the so-called Dative alternation), often signaled by some morphological addition to the verb in the double object construction, sometimes referred to as applicative. Baker (1988) considers this applicative morpheme to be an incorporated element, corresponding to the element assigning dative case in the BE-alternant. It seems likely, therefore, that an analysis of the primary HAVE/BE alternation of the type in (7) should carry over to this secondary HAVE/BE alternation in ditransitive complements. This is essentially Kayne's proposal.

The structure of a possessed noun phrase in Hungarian is given in (9). There is an agreement morpheme attached to the possessed noun, drawn from an agreement series also found with prepositions and transitive verbs in the so-called definite paradigm. The agreement is either determined by a nominative DP occupying the SPEC of an AgrP, following the determiner as in (9a), or by a dative DP in the SPEC of the determiner, as in (9b).

- (9) a. az en haza-m  
the me-NOM house-1sg "my house"  
b. nek-em a haza-m  
DAT-1sg the house "my house"  
c. [DP SPEC [D a] [AgrP DP Agr [NP haza]]]

Kayne suggests that the dative case in (9b) is provided by the determiner element, a suggestion which seems reasonable in view of the fact that such dative possessors in the SPEC of DP are certainly not unique to Hungarian, as witnessed by e.g. German, as in "Dem Peter seine Schuhe" (the Peter-DAT his shoes). A possessive sentence in Hungarian is constructed, in Kayne's analysis, on the basis of a possessed DP, the dative subject moving out across the verb *van* 'be', as in (10)

- (10) nek-em; van [DP  $\in_i \emptyset_D$  haza-m]<sup>5</sup>  
 DAT-1sg is house-1sg  
 to me is a house = "I have a house"

A HAVE-type possessive sentence is argued to have basically the same derivation, differing from (10) in having the dative-assigning element D incorporating into BE, the combination BE+D yielding a lexicalization in HAVE. Hungarian happens not to have such an outcome, just like English happens not to have a BE-type outcome.

Kayne further argues that auxiliary verb HAVE can equally be seen as a composite of BE plus such an incorporated Determiner element, with the AgrP-complement of this incorporee replaced by whatever is the correct structure for a participial phrase, i.e. as in (11):

- (11) DP<sub>i</sub> BE [DP  $\in_i$  D [..... [VP  $\in_i$  V DP]]]

where DP<sub>i</sub>, the external argument of the verb, raises to the subject position of BE, into which the D-element incorporates, yielding HAVE. The difference between auxiliary HAVE and main verb HAVE thus reduces to having a nominal complement, versus a participial complement.

### 3. Beyond Kayne

There is one point to which Kayne does not seem to pay much attention: while in the BE-type construction nominative case is assigned to the possessed object, nominative case is used to license the possessor in the HAVE-type construction. This raises the question as to whether and how the possessed object receives

case in HAVE-type constructions. The most likely answer to this is that this case is assigned by HAVE, not as a lexical property of HAVE, obviously, as there is no such lexical element, but rather as a consequence of the incorporee, which provides the compound with case assigning capacity, while at the same time allowing the complement of the incorporee to be governed by HAVE as a consequence of Baker's (1988:64) government transparency corollary. Yet, if HAVE receives case assigning potential, we may wonder whether and how this potential is utilized in constructions involving "auxiliary" HAVE.

The relevance of this question becomes apparent once we inspect the verb *get*. The first thing to be said is that *get* in and of itself may be taken to strongly support the non-lexical analysis of *have* advocated by Kayne, in that *get* functions as an ingressive counterpart of both BE and HAVE, as the following examples illustrate. There is, however, one gap in the paradigm, which is surprising under the modular approach to *have*, now extended to *get* as a lexicalization of an ingressive component, plus BE, plus optionally the incorporee relevant to HAVE. This gap is illustrated in (13c):

- (12) a. John was/got ill
- b. John was/got killed
- (13) a. John had/got a bicycle
- b. John has/gets his windows cleaned once a week
- c. John had/\*got killed Bill

The complement of BE/GET in (12a) does not involve the D-element providing dative case<sup>6</sup>. We may therefore assume that the complement is a plain Agr-projection, as is standardly assumed in the analysis of small clauses. (12b) confirms the idea that there is no reason to distinguish between main verb BE and auxiliary verb BE, as this difference reduces to a difference in internal structure of the Agr-phrase in the complement. This leads to the structure in (14) as the representation of the structures in (12):

- (14) DP<sub>i</sub> BE [AgrP  $\in_i$  Agr XP]

where XP is an adjectival projection in (12a), and a participial projection in (12b). This participial projection itself is "passive" in the sense that the external argument is "suppressed" as in passive sentences. Although the analysis of the notion of passive is not the topic of this paper, I would like to

<sup>5</sup> This sentence is only used with emphasis on the possessor, i.e. the appearance of a pronoun is motivated under the same conditions as an overt pronoun in pro-drop languages generally. I nevertheless use a pronominal possessor as the third person agreement marker happens to be zero.

<sup>6</sup> Such an element may be involved in constructions of the type "mir ist kalt" (me-DAT is cold) in German and many other languages.

suggest the following. In accordance with recent proposals on the top structure of clauses, I assume the representation in (15), with VP dominated by two Agr-projections, O(object)Agr (cf. Kayne 1985, 1989a) and S(subject)Agr (cf. Chomsky 1991, 1993), separated by an intervening Tense (Aspect)<sup>7</sup>, adopting the Split-INFL-hypothesis (Pollock 1989):

- (15) [... S-Agr [... T [... O-Agr [... V....]]]]]

The Burzio-generalization, as relevant to passive, can be implemented by representing the passive morpheme as blocking the O-Agr position, making structural objective case unavailable, and therefore causing passive geometry (cf. Postma 1992 for similar ideas and discussion). Postma in fact proposes that the prefix *ge-* in Dutch, just like the reflexive morpheme in so-called reflexive passives as in e.g. the Romance languages, instantiates this blocking morpheme. English has an empty counterpart to this morpheme. Taking the *-ed* suffix of the participle to instantiate T, we arrive at the representation in (16) as relevant to (12b)<sup>8</sup>:

- (16) NP<sub>i</sub> BE [Agr  $\underline{e}_i$  [T -ed] [O-Agr  $\emptyset$  [VP  $\underline{e}$  V  $e_i$ ]]]

After this analysis of the cases in (12), we may turn to those in (13), taking our lead in Kayne's analysis of HAVE as BE-plus, and starting with (13a). As we need the additional case, the Agr-projection of (14) should be dominated by the case-providing D-element, yielding (17):

- (17) John<sub>i</sub> BE [  $\underline{e}_i$  D [AgrP  $\underline{e}_i$   $\emptyset$  [QP a bicycle]]]

As before, BE-plus will provide case to the AgrP, which in this situation may be utilized to case-license *a bicycle*. This assumption is not entirely without problems, as is evident when we turn to (13b): it would seem reasonable that the relevant case of BE-plus is assigned to the subject of the Agr-projection, i.e. to *his windows*, as in (18):

- (18) John<sub>i</sub> BE [  $\underline{e}_i$  D [AgrP his windows<sub>j</sub>  $\emptyset$  [T -ed] [O-Agr  $\emptyset$ ] [VP  $\underline{e}$  clean  $e_j$ ]]]

The thing to note here is that the external argument of the participial verb is not identical to *John*, nor does John seem to have a place internal to the AgrP from where it is moved to the subject position. That is the essential difference between "main verb" *have* with a participial complementation, and "auxiliary" *have* with a participial complementation, as in (13c). It would suggest that the differences between auxiliary HAVE and main verb HAVE indeed result from differences in the nature of the complement, only the latter featuring the D-element in Kayne's terms. If this is correct, however, auxiliary HAVE cannot be regarded as a lexicalization of BE plus this D-element, as it would essentially be lacking.

Before we go into the difference between (13b) and (13c), we need to digress a little. The clause structure representation in (15) forces us to rethink our earlier conception of case assignment. Earlier, assignment of objective case was regarded as a property of the verb itself, rather than of a functional category external to it. With respect to passive structures, I suggested that this functional category which provides objective case, is blocked, whereas it is available in regular transitive active geometry. Extending this to basic ergative verbs, one would be led to say that their lack of case assigning potential similarly results from the non-availability of O-Agr. This is evidently the case in "reflexive" ergatives found in Romance, where, as in "reflexive passives," O-Agr may be occupied by the *se*-morpheme. More or less following a suggestion by Pesetsky (1992), we may postulate a zero counterpart to *se* in other ergative constructions, to which Pesetsky refers as the ambient argument, similarly blocking O-Agr, and hence objective case, thereby yielding the passive geometry of ergative constructions.

Under such a conception, it is not immediately evident how to interpret the idea we began with, i.e. to say that BE-plus (HAVE) has case-assigning potential as a result of incorporation, while BE itself has none. We would in fact be led to regard BE as HAVE-minus, rather than HAVE as BE-plus, where plus and minus refer to the availability of O-Agr. BE, then, should make OAGR unavailable, like ergative verbs, whereas OAGR is available in the case of HAVE. BE yields a passive geometry, which is to say a geometry with only S-Agr available, while HAVE has the regular options of both S-Agr and O-Agr available, and hence, is, in this particular syntactic sense, transitive. Looked at in this fashion, BE may be said to be the passive counterpart of HAVE. This is not surprising, as Postma notes, when we look at the difference between (7a) and (7b): in two participants situations with one human participant, it is

<sup>7</sup> In joint work with Guéron we argue that the distinction between Tense and Aspect as used to refer to the tense opposition in the finite verb and the temporal interpretation of the (auxiliary plus) participle is a function of the relationship which the Tense-node entertains with a Tense-operator which we situate in COMP: a T-node is interpreted as Tense if directly bound by a Tense operator, and as Aspect otherwise.

<sup>8</sup> According to this analysis, participial agreement in Romance instantiates the category S-Agr, rather than O-Agr. This makes sense in that French normally has no object agreement, and in that the relevant agreement morphology is peripheral to the tense-morphology of the participle.

normally the human participant which is the subject, as in (7b); passive reverses this relation, as in (7a). Note that this perspective is the opposite to the "passive"-like approach to the dative alternation proposed by Larson (1988b), which derives [Mary X a book] from [a book X to Mary] through a passive operation on the lower VP-shell<sup>9</sup>.

The considerations offered above suggest that the structure in (18) may be configurationally correct, but with a somewhat different labeling. What is labeled D in (18), and in previous structures, is very strongly determined by the particular model chosen for the analysis, viz. Hungarian. Kayne (1993b) in fact labels the position as D/Pe, where Pe stands for empty preposition. The D-labeling may, as I said, be correct for Hungarian. For HAVE-type constructions I shall label the position as X. This X occurs in the complement of 'main verb' HAVE, but not in that of 'auxiliary verb' HAVE, just like the D-element may, but need not occur in the complement of BE.

Let us now turn to the difference between (13b) and (13c). There are various differences between these constructions. First, as already noted above, HAVE alternates with *get* only in (13b). Secondly, as is well-known, HAVE in (13c) may move across the negation in English, with subsequent further possibilities, whereas HAVE in (13b) in general may not so move, as is illustrated in (19):

- (19) a. John didn't have his car stolen/\*hadn't his car stolen  
       b. John hadn't stolen his car

Following Pollock (1989) we might suggest that the reason why HAVE in (13b) may not raise has to do with its association with the assignment of thematic roles. If so, we are again let to consider main verb HAVE as auxiliary HAVE plus something additional, responsible for Θ-role assignment.

A third difference between main verb HAVE and auxiliary HAVE becomes apparent in Dutch, as discussed in Hoekstra (1984). The sentence in (20) is ambiguous, as indicated by the two translations. Note that the first translation features HAVE as in (13b), while the second involves HAVE as in (13c):

<sup>9</sup> In fact, the *to*-phrase in the *to*-dative variant patterns with adjuncts rather than with complement predicates in Dutch in that they may occur in post-verbal position, a position which is not open to predicative complements (cf. Den Dikken 1992, Mulder 1992 for discussion). Under a passive-like view as suggested here, the *to*-dative is in fact a chômeur in the same sense as the *by*-phrase in regular passive constructions.

- (20) dat wij onderduikers verstoppt hebben  
       a. that we have fugitives hidden  
       b. that we have hidden fugitives

In Dutch, disambiguation is possible by reversing the order of *hebben* and the participle. This reversal of the order is standardly considered the result of movement of the participle to a structurally superior position, i.e. V-raising. We might likewise assume that the participle in the English rendering of the reversed Dutch order, viz. (20b) has moved to a position superior to the position it occupies in (20a).

A solution to the problem of HAVE, then, would be to not assume that auxiliary HAVE is somehow derivative of main verb HAVE. Indeed, considering main verb HAVE as auxiliary HAVE plus something additional responsible for Θ-assignment in possessive constructions, would yield a structure of the type in (21):

- (21) .... OAGR HAVE [XP DP X [...]]

where X is an empty head, similar to the D-element of Hungarian, but now taken as assigning the Θ-role of possessor to its DP-subject. X has the semantics of main verb HAVE. Attribution of this meaning to HAVE itself is a consequence of the general invisibility of X. Similarly, English has a causative verb HAVE, of which we would now be led to say that it is the same verb HAVE as the one in (21), with X an empty causative element, rather than a possessive one. Note that from this perspective, it does not make sense to postulate empty HAVE in HAVE-type ditransitives: such ditransitive feature possessive X, an empty possessive predicate, which may also occur embedded under HAVE.

#### 4. A dative-nominative alternation

A dative-nominative alternation found in the expression of possession as in (7) is also found in modal constructions. Consider (22):

- (22) Hungarian  
       a. Janos-nak kellet meni-e a piac-ra  
           John-DAT must go-INF-3sg the market-to  
           "John must go to the market"

French

- b. il lui faut faire cela  
it him-DAT must do that  
“he must do that”

The dative argument in Hungarian and French is rendered by a nominative argument in the English translations. Before discussing this variation it will be useful to examine the semantics of modal constructions in somewhat greater detail. The Dutch modal verbs *kunnen* and *moeten* may occur in sentences which are in principle four-way ambiguous<sup>10</sup>. Consider the examples in (23) and (24).<sup>11</sup>

- (23) Jan kan mee spelen
  - a. it is possible that John plays along
  - b. it is permitted that John plays along
  - c. it is permitted to John that he plays along
  - d. John has the ability to play along
- (24) Jan moet Engels spreken
  - a. it has to be the case that John speaks English
  - b. it is required that John speaks English
  - c. it is required of John that he speaks English
  - d. John insists on speaking English

These ambiguities can be understood in the following way. The a-readings, corresponding to the traditional concept of epistemic modality, involve the circumstances as the source of either the possibility (in (23)) or the necessity (in (24)) of what is denoted by the complement. A more adequate rendering would perhaps be “According to the available evidence, an option is that X/no other option is available than that X.” The source in the b-reading is different: it is localized in some person, which may be added in Dutch in an overt *van*-phrase as in (25) (cf. English: ‘he got permission from his father’).

- (25) Jan kan/moet meespelen van z'n vader  
John can/must along-play from his father  
“his father makes John play along”

<sup>10</sup> A type of modality also occurs with HAVE in various languages, as in “You have to do this” and Dutch “je hebt dat te doen.” Although very interesting in itself, and certainly relevant to the issues dealt with in this paper, I have to refrain from discussing this type of modality.

<sup>11</sup> I am grateful to Sjef Barriers for discussion of these readings, even though my approach is radically different from his.

This option is less acceptable in the case of *kunnen*, as the verb *mogen* (may) is a better alternative for this reading.<sup>12</sup> The b-reading differs from the c-reading with respect to the recipient of the permission or obligation. (23) might be an answer to John’s request to play along, or to a request made by e.g. the coach of John’s team. Note that the b-reading is the only one available if the subject of *kunnen/moeten* is not an adequate recipient of permission or obligation, as in the examples in (26):

- (26) a. het doelpunt kan gemaakt worden in de tweede helft  
the goal can scored become in the second half  
“the goal may be scored in the second half”
- b. er moet gescoord worden van de trainer  
there must scored become from the trainer  
“The trainer insists that a goal be scored”

Finally, in the d-reading, the source and the recipient fall together: the option of playing along is permitted to John on account of his own capacities (cf. note 12). The obligation to speak English is placed upon John by himself. These readings may be said to be reflexive.

What this four-way ambiguity illustrates is that a basic distinction between deontic and epistemic modality, as is traditionally made in studies of modality, underdetermines the range of options. Also evident is the fact that the variation in meaning is not so much located in the modal verbs themselves, but rather in the nature of the source and availability of the recipient roles.

The traditional distinction between deontic and epistemic modality would have it that epistemic modals are raising verbs, i.e. verbs that select no external argument, while deontic modals are control verbs, assigning a thematic role to their subject which controls the non-overt subject of the infinitival complement, and are hence considered transitive in the same sense as main verb HAVE. This doesn’t seem to be the right distinction. Apart from a large number of problems in the execution of this idea, the hypothesis is hampered by the fact

<sup>12</sup> The stem of *mogen* is the only one used in nominal constructions involving existential modality (i.e. possibility). Actually, there are two nouns, *mogelijkheid* (possibility) and *vermogen* (capacity), where the second clearly involves the reflexive deontic modality, whereas the former involves epistemic modality, in the sense we are using these terms. The prefix *ver-* may also be used in a verbal construction, as in (i), where we are dealing with reflexive deontic modality:

(i) ik vermag dat niet in te zien  
I VER-may that not into see  
“I am unable to understand that”

that deontic modals in French and Hungarian take an expletive subject, something which is unexpected under a control-view on deontic modal verbs. The distinction between epistemic and deontic modality in these cases seems to be the availability of a recipient argument, corresponding with the c- and d-readings of (23) and (24). I shall reserve the term deontic to refer to these readings, with the d-readings then as reflexive deontics.

From the perspective on these dative arguments in Hungarian developed by Kayne, we would be led to postulate (27) as the structure underlying these deontic modals:

- (27) MOD [ DP X YP]

where MOD is the modal verb (*kellet, falloir*) and X corresponds to the dative assigning determiner in Hungarian, and to the element providing dative in French (Kayne's Pe). YP is the complement, an infinitival construction, with a PRO-subject, controlled by DP. In Dutch and English, on the other hand, X does not provide dative case to DP, and therefore DP raises to the subject position of the sentence, bearing nominative case.

In this analysis, then, modal verbs are always ergative verbs in the sense that they do not select an external argument.<sup>13</sup> Yet, they may appear to be two-place verbs in that their complement may either involve a single clausal argument (YP in (27)), or a more complex complement, involving some "recipient" DP in addition. The analysis of (23) under the b- and c-reading is then as in (28a) and (28b) respectively:

- (28) a. Jan<sub>i</sub> kan [ t̄i meespelen]  
       b. Jan<sub>i</sub> kan [ t̄i X [ PRO meespelen]]

(28a) is indeed a one-place predicate, while (28b) is a two-place predicate, as is brought out by the two different patterns, shown in (29):

<sup>13</sup>It is interesting to note that "epistemic" possibility in French may involve *se*, as in (i):

(i) il se peut qu'il pleuve  
     it SE can that it rains  
     "it may rain"

(I am grateful to Jenny Doetjes for drawing my attention to this fact). This harks back to our earlier remarks about ergative verbs, the role played by *se* in blocking AgrO, and Pesetsky's supposition that ergatives in general involve the ambient *it* argument.

- (29) a. dat kan/moet     "that can/must"     epistemic  
       b. Jan kan/moet dat     "John can/must that"     deontic

In French, such "reduced" forms come out as:

- (30) a. ça se peut / il le faut     epistemic  
       b. il le peut / il le lui faut     deontic

In either case the a-sentences only have epistemic modality, while the b-sentences are exclusively deontic.

There is no reason to label X relevant in these modal constructions as HAVE; in fact, we encounter here another distribution of the element X which we argue occurs in HAVE's complement, which then qualifies as main verb HAVE. Its non-auxiliary-like behavior can be accounted for if we assume that X incorporates into HAVE, deriving a complex element with Θ-assigning relevance. If movement of HAVE in English is possible only if HAVE is not assigning Θ-roles, i.e. if nothing incorporates into HAVE, the difference in (19) follows. Similarly, if HAVE embeds a causative empty head, which similarly incorporates, it will behave as a main verb.

## 5. The nature of auxiliary HAVE

The question remaining then is what the nature is of auxiliary HAVE. The conclusion from the above is that this HAVE itself is not different from main verb HAVE, apart from the lack of incorporation of some Θ-assigning element X. Analogous to the distinction between epistemic and deontic modals, then, the complement of HAVE may or may not feature X:

- (31) a. John<sub>i</sub> HAVE [ t̄i X [ .. -en ... [ VP pro steal his car]]]  
       b. John<sub>i</sub> HAVE [ ...-en... [ VP t̄i steal his car]]

Neither auxiliary nor main verb HAVE should be considered to derive from BE: rather, both BE and HAVE are non-theta assigning elements with different case properties, i.e. with different functional superstructure, HAVE having both O-Agr and S-Agr and BE only having S-Agr. This difference interacts with the choice of a D-like element in complement position: as D provides dative case to the DP in its Spec, D is compatible with BE. Since HAVE has O-Agr in addition, it does not require an independent case-assigning element like D.

## 6.

At the end of this paper I would like to point out that X does not appear to be limited to verbal projections involving modals, HAVE and ditransitive verbs: in fact, the ambiguity of the complement of HAVE has a direct counterpart in nominal phrases, which brings us back to the problem we mentioned in connection with (4), i.e. whether the thematic role of the subject is determined by X or by the lexical complement of X. Consider in this connection the interpretation of the nominal construction in (32):

(32) John's picture

This phrase is three-way ambiguous: *John* may either be thematically dependent on *picture*, as either the object or the subject, or it may be the possessor of the picture, without bearing a thematic role determined by *picture*. In the latter case, we may postulate X, to be identified with POSS as found in various recent studies on the internal structure of noun phrases (cf. Szabolcsi 1992, a.o.), as the provider of a thematic role of possessor, taking the full noun phrase as its complement. In the former two interpretations, X is absent, and the thematic role of *John* is directly determined by the head noun *picture* itself. Assuming now that the *of*-rendering is possible only for arguments of the noun, we may explain why "A picture of John" allows the two interpretations for *John* determined by the noun itself, but not the interpretation determined by X, i.e. the possessor.

## 7. Conclusion

I conclude this paper by summarizing the main points. I have argued that main verb HAVE and auxiliary verb HAVE may indeed be regarded as one and the same element. The possessive meaning of the former arises as a result of HAVE dominating an empty predicate X, which assigns the thematic role of possessor to its subject. I showed that X also occurs in the complement of modal verbs, yielding deontic modals, while absence of X characterizes epistemic modals, and that X may likewise occur internal to nominal arguments, as the provider of the possessor role. I furthermore argued that HAVE should not be considered a derivative of BE, with some element from its complement incorporated. Rather, BE relates to HAVE by lacking an available O-Agr projection to license objective case. Some languages nevertheless allow BE in the expression of possessive sentences because they have an additional case-licensing element, like the determiner in Hungarian.

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