

Possessive WITH in Germanic: HAVE and the Role of P^{*†}

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Abstract. A central question regarding the syntax-semantics interface is the extent to which semantic primitives correspond one-to-one with syntactic primitives. Den Dikken (1995) proposed that all possession structures can be derived from an underlying locative structure, extending the work of Freeze (1992). This paper argues that such a unified approach is untenable, as there are possession expressions in Icelandic which cannot be derived from locative structures. The Icelandic *vera með* construction, translated as ‘is with’, provides important insight into the nature of HAVE verbs. It is argued, along the lines of Kayne (1993) and Harley (2002), that HAVE is derived from non-locative prepositions like English *with* as in *The man with blue eyes*. A micro-comparative investigation within Germanic supports an analysis whereby the variation in incorporation is correlated with variations in *p* heads. This analysis allows for a more natural account of the differences between HAVE and BE languages beyond Germanic.

1 Introduction

One of the central questions regarding the syntax-semantics interface is the extent to which semantic primitives correspond one-to-one with syntactic primitives. In the literature on cross-linguistic possession structures, Den Dikken (1995) has proposed that all possession structures can be derived from an underlying locative structure, extending the work of Freeze (1992). Such analyses put forth a strong hypothesis, uniting all possession interpretations as being derived from one basic structure. Tied closely to the ‘locative possession’ literature is the question of the contrast between ‘HAVE languages’ and ‘BE languages’ - that is, languages which use a verb like *have* to express predicative possession, and those that lack such a verb, often expressing predicative possession with a form of the copula and a locative preposition. From the perspective of ‘unifying’ analyses, the difference between HAVE and BE languages reduces to a matter of incorporation of a locative preposition - HAVE languages represent in one word what BE languages represent with more.

A canonical example of a locative possession construction is found in the Russian example in (1):

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- (1) U menja byla sestra. Russian
 at 1sg.GEN was sister.NOM
 ‘I had a sister.’

The Possessor argument is realized as the complement of the locative preposition *u*, translated as ‘at.’ Freeze proposes that even in the English *have* construction, where the Possessor is realized as the object of the verb, its underlying source is as the complement of a locative preposition. Den Dikken’s (1995) extension and suggestion that all possession can be derived from such a locative source encounter many apparent challenges beyond this English example, as there are a wide range of surface possession constructions attested, as recently documented by Stassen (2009) and previous work cited there. However, given the possibly complex derivations of such realizations, it is far from obvious whether such a hypothesis can be maintained, and if not, how many different structural and semantic sources possession structures can be reduced to.

Unifying analyses have been called into question by other work, such as Kayne 1993 and Harley 2002, which posits that verbs like English *have* are derived, but not from locative prepositions. One reason that many still adopt a unifying view of possession and a locative analysis of *have* may be that there has been a lack of direct empirical support for the kinds of proposals put forth by Kayne and Harley. In this paper, I aim to fill this empirical gap by adding crucial data from Icelandic to the data base.

In this paper, I will argue based on a micro-comparative examination of predicative possession in Germanic that HAVE¹ verbs in Germanic are **not** derived from locative prepositions, and thus that wholly unified analyses of predicative possession cannot be maintained. I propose instead, along the lines of Kayne 1993 and Harley 2002, that *have* is indeed complex, but that it is derived from a non-locative preposition akin to *with* in (2):

- (2) The man with a beard is fun.

Icelandic provides a possession construction, *vera með*, ‘be with’, which forms a minimal pair with instances of HAVE in Germanic, which are argued to share a similar structure but differ in incorporation. Crucially this incorporation does not involve locative prepositions, which are argued to be structurally distinct. This different structure disallows the kind of incorporation into the copula which would create locative-derived possessive verbs.

This account, whereby possessive *with* incorporates to form *have*, explains the otherwise mysterious fact that English sentences like (3) containing *with* are ungrammatical (with a possessive interpretation), while those such as (4b) with locative prepositions are fine²:

- (3) # The man is with a beard.
 (4) a. The man in the park is fun.
 b. The man is in the park.

This discovery allows for a new perspective on a pervasive question in the HAVE literature - that of why some languages have HAVE and others do not. It also points the way towards an account of that fact that, to my knowledge, there are no verbs of possession across languages in which the

¹ I will use smallcaps to refer to words cross-linguistically, such that HAVE refers to English *have*, German *haben*, French *avoir*, etc..

² Throughout the paper I will use ‘#’ to indicate that a sentence is not grammatical on the relevant reading.

Possessee is the subject and the Possessor is a direct object of the verb. Such a verb would be the equivalent of English *belong*, but without the preposition *to* and with an accusative-marked direct object:

- (5) The bird belongs *(to) Bill.

Also mysteriously unattested, given the locative incorporation analyses, are other verbs formed from BE and a preposition, expressing other locative relations. For example, if *have* in English is analyzed by Freeze (1992) as the combination of the copula and a null locative preposition (as detailed in section 3), we might expect to also find a verb such as *nave* as the result of incorporation of a null ‘near’ into the copula, etc., as illustrated in (6):

- (6) a. Bill has a bird. (meaning according to Freeze (1992), Den Dikken (1998): A bird is P_{LOC} Bill.)
 b. * Bill nas a bird. (intended meaning: A bird is near Bill.)
 c. * Bill las a bird. (intended meaning: A bird is on Bill.)

The proposed answer to these puzzles is that HAVE requires at least two components - a possessive preposition with the argument structure of Icelandic *með*, and incorporation of that preposition into the copula. A theory of preposition incorporation and Case assignment is presented to account for the variation found in this domain within Germanic. I will argue that we find evidence in Icelandic for a little *p* projection within the extended PP that is parallel to little *v* within the *v*P, and that this *p* blocks incorporation into the copula. This *p* is also present with transitive locative prepositions cross-linguistically and thus more broadly blocks such incorporation.

1.1 Defining Possession

One hypothesis put forth by this paper is that not all linguistic expressions encoding predicative possession can be derived from overt or underlyingly locative structures. An important prerequisite for providing evidence in support of such a hypothesis is to define what is meant by ‘possession.’ Possession has been defined in different ways in the literature, towards different ends. Since a central concern in this paper is the relationship of HAVE to other prepositional encodings of possession, the kind of possession that is most relevant is what Stassen (2009) labels ‘temporary possession.’ Although this is not immediately apparent in observing the distribution of *have* in English, Stassen argues that HAVE verbs across languages of different language families minimally encode temporary possession, and only sometimes are ‘extended’ to other kinds of possession.

For his typological study, Stassen outlines four subdomains of possession which can be distinguished from one another by the values of two informal semantic features, which he calls ‘permanent contact’ and ‘control.’ The four subdomains are as follows (Stassen 2009:17):

(7)

POSSESSIVE SUBTYPE	PERMANENT CONTACT	CONTROL
Alienable	+	+
Inalienable	+	-
Temporary	-	+
Abstract	-	-

Alienable possession is the kind of possession which Stassen describes as being most prototypical. The following definition of prototypical possession provides a description of Stassen's usage of the terms 'permanent contact' (in (8a)) and 'control' (in (8b)):

- (8) A prototypical case of possession is characterized by the presence of two entities (the possessor and the possessee) such that
- a. the possessor and the possessee are in some relatively enduring locational relation, and
 - b. the possessor exerts control over the possessee (and is therefore typically human).

Temporary possession, of primary concern here, involves control without permanent contact. Thus, there is a relationship between a possessor and a possessee whereby the former exerts control over the latter, but no entailment of an enduring locative relationship. In English, this can be exemplified with the example in (9):

- (9) That guy has a knife! (Stassen 2009:p.19, ex.24)

In English, *have* can be used for temporary possession, and also for alienable possession (10a), inalienable (10b), and abstract possession (10c):

- (10)
- a. John has a bicycle.
 - b. He has brown eyes.
 - c. Bill has a cold. (Stassen 2009:p.19, ex.25d)

However, according to Stassen (2009), this is not a general property of HAVE verbs. Based on his data, he argues that there are no languages where HAVE instantiates alienable (prototypical) possession where it does not also express temporary possession (Stassen 2009:63). Due to this fact, the data presented in this paper as encoding 'possession' will largely fall into the domain of temporary possession.

2 Non-Locative Predicative Possession in Icelandic

In this section, the data of primary focus from Icelandic will be laid out. It will be shown that the preposition *með* in possessive contexts is a non-locative, accusative-assigning preposition. In section 3 it will be shown how this data fits into the previous literature on possession and HAVE.

Icelandic has three main ways of expressing predicative possession: the verbs *hafa* and *eiga*, and the complex construction *vera með*. *Vera með* is the combination of the verb *vera*, 'to be', and the preposition *með*, roughly translatable as 'with'. The semantic distribution of each "verb" is different, although there is some overlap as to what objects each verb can take. The following classification is based on that of Irie (1997), but modified to conform with the native speaker judgments of my Icelandic informants.

Hafa is similar to English *have* in that it is both a verb of possession and an auxiliary. However, its usage as a possessive verb is much more restricted than *have*. It is used mostly for the possession of abstracts, such as 'time', or as in (11) from Irie 1997, a property:

- (11) Söngvarinn hefur vítt raddsvið.
 singer-the.NOM has wide vocal-range.ACC
 ‘The singer has a wide vocal range.’

As seen in (12), *hafa* can also be used for concrete objects, but seems to require the specification of a location. *Eiga*, is preferred to specify ownership, or *vera með* for temporary possession without a location (see below).

- (12) Jón hefur margar bækur í herberginu sínu.
 John.NOM has many books.ACC in room-the.DAT his
 ‘John has many books in his room.’

In the classification system of Stassen (2009), *hafa* seems to belong to the Abstract category, and the Temporary Possession category when a locative PP is added.

Eiga is often translated into English as ‘own.’ This use is illustrated in (13a). However, it is also the only possession verb that expresses family relations.

- (13) from Irie 1997
- a. Málarinn á mörg málverk.
 painter-the.NOM has many paintings.ACC
 ‘The painter owns many paintings.’ (not necessarily of his own creation)
 - b. Jón á börn.
 John.NOM has children.ACC
 ‘John has children.’
 - c. Jón á strangan föður.
 John.NOM has strict father.ACC
 ‘John has a strict father.’

Eiga, at least in uses such as in (13a), would fall into Stassen’s Alienable domain, which involves permanent contact (the enduring relationship of ownership) and control.

Vera með is used primarily with objects classified by Irie (1997) as portable possessors, body parts, illnesses, and accessories/minor apparel. Examples of these usages are given in (14):

- (14) a. Hún er með bækurnar fimm.
 she.NOM is with books-the.ACC five
 She has five books.
- b. Jón er með kvef.
 John.NOM is with cold.ACC
 John has a cold.
- c. Jón er með gleraugu.
 John.NOM is with glasses.ACC
 John is wearing glasses. / John has glasses.
- d. Jón er með blá augu.
 John.NOM is with blue eyes.acc
 John has blue eyes.

Friðjónsson (1978) provides the following description:

- (15) *Vera með* denotes an inalienable possession pertinent to parts of the body – illness etc. – or that one has something in one’s hands or pockets, with oneself etc. (leaving unspecified whether or not this object is the property of the person “having” it)

However, the examples in (14) don’t match Stassen’s (2009) description of Inalienable possession. Rather, given his delineation of the domains, *vera með* falls most appropriately into the class of Temporary Possession. This class is characterized by possession which does not involve permanent contact, certainly true of glasses and colds, and does involve the asymmetric relationship of control between the possessor and possessee.

The preposition *með* has a life outside of the possession context. While the possessive *vera með* construction is of central importance here, it is important to look at *með* in other environments to properly control for investigation of the correct examples. Many uses of *með* overlap with English *with*, but not all. In its various uses *með* assigns either dative or accusative to its object. The two cases are not interchangeable, however. The accusative is used in the possession cases as seen in (14) above and otherwise to express some sort of ‘control’ relation, or ‘whole’ with respect to a ‘part’ relation, whereby the object is controlled by another argument. No such relation is asserted when the object is dative. A minimal pair is given in (16):

- (16) a. Jón er með barnið sitt.
John is with child-the.ACC his
‘John has his child.’ (i.e., holding baby, baby in a carriage, leading by hand, etc.)
b. Jón er með barninu sínu.
John is with child-the.DAT his
‘John is together with his child.’ (child is accompanying John by free will)

In (16a), the use of the accusative signals that the child is under John’s control, that he is either holding or leading him. This could be considered a case of temporary possession, but I will refer to this more generally as the ‘control’ interpretation. (16b) could describe a scenario in which the child would be perhaps walking by his side, and means essentially the same as the English translation using ‘is (together) with.’ This would be considered a ‘comitative’ or ‘associative’ use of the preposition ³. Because this interpretation involves a ‘symmetric’ relationship between the two arguments, I will refer to it as the symmetric interpretation.

³ For some speakers, there are instances where an apparent Possessee is marked as dative, rather than accusative. Some find both sentences in (1) to be grammatical, and equivalent in meaning:

- (1) a. Bærinn var með torfþaki.
farmhouse-the was with thatched-roof.DAT
‘The farmhouse had a thatched roof.’
b. Bærinn var með torfþak.
farmhouse-the was with thatched-roof.ACC
‘The farmhouse had a thatched roof.’

It appears that, in some cases when the Possessor is inanimate, the Possessee can surface as either dative or accusative. There seems to be a fair amount of variation in judgments of sentences with inanimate subjects, however, so I will not put a great deal of weight on the status of these sentences. For example, one speaker finds both dative and accusative acceptable. One finds only dative acceptable in this example, but only accusative in the equivalent of ‘The table has

The same contrast is found when there is also a main verb instead of the copula *vera*⁴:

(17) (Examples from Halldór Sigurðsson, p.c.)

- a. Hún fór út að ganga með manninum sínum / ? manninn
 she went out to walk with husband-the.DAT her.DAT / husband-the.ACC
 sinn.
 her.ACC
 ‘She went out to walk with her husband.’
- b. Hún fór út að ganga með ? hundinum sínum / hundinn sinn.
 she went out to walk with dog-the.DAT her.DAT / dog-the.ACC her.ACC
 ‘She went out to walk (with) her dog.’

It is this ‘accusative’ usage of *með* that will be of central concern for this paper. Unless otherwise indicated, when *með* is mentioned, it is the accusative-assigning variant that is intended. Of crucial importance is the fact that in possessive contexts, it is always the Possessee argument that is the complement of *með*, never the Possessor. Further, the complement of accusative-assigning *með* is never interpreted as a location, a role which we will see in section 3 has been associated with Possessors by Freeze (1992) and Den Dikken (1998). In English, *with* can be used in what might be called ‘animate location’ contexts:

(18) The child is **with** John.

Here, the object of *with* can be interpreted as a location, as (18) can be an answer to the question, ‘Where is the child?’; it is not an assertion about John’s possessions or properties. However, the equivalent is impossible in Icelandic with accusative-assigning *með*:⁵:

- (19) * Barnið er með Jón.
 child-the.NOM is with John.ACC
 intended: ‘The child is with John.’

Another ‘locative’ use of *with* which is not found in Icelandic is that in (20):

(20) John has the book **with** him.

In the equivalent in Icelandic, another preposition, *á*, would be used:

- (21) Hún var með bækurnar á sér / *með sig.
 she.NOM was with books-the.NOM at self.DAT / with self.ACC
 ‘She had the books with her.’

four legs.’ Another accepts only accusative. I am not able at this point to determine whether this variation correlates directly with regional dialect.

⁴ The notation ‘?’ is used here to indicate semantic infelicity.

⁵ Similarly, the preposition used in such contexts in German is different from *mit*, the preposition which otherwise corresponds to *with* in possession contexts:

- (1) Das Kind ist beim/ *[mit dem] Lehrer.
 the child.NOM is with-the.DAT with the.DAT teacher
 ‘The child is with the teacher.’

Thus, while English *with* is ambiguous between locative and non-locative, accusative-assigning *með* is clearly not a locative preposition, inasmuch as such a term is usually used to refer to prepositions which take locations, or the ‘ground’, as their complement.

In sum, the preposition *með* in the possessive *vera með* construction is not locative and assigns accusative case. In these properties, it is of a very different nature than the prepositions which are argued to underlie HAVE structures in much previous work, including Freeze 1992 and Den Dikken 1998, to be discussed in the next section.

Returning to the possessive cases, given the range of predicative possession possibilities in Icelandic, it seems that it is both a BE language and a HAVE language. Thus, it must have the ingredients necessary to have a HAVE verb, yet in the *vera með* construction something blocks, or fails to motivate, incorporation. It is the *vera með* construction that will be of primary relevance to this paper.

At first glance, the examples in (14) may look very similar to many of the other overt BE+P languages cited in the literature, such as in the following Scots Gaelic example from Freeze 1992:

- (22) Tha peann aig Mairi.
COP pen at Mary
‘Mary has a pen.’

However, upon closer inspection, one can see they are quite different. Most crucially, the Scots Gaelic preposition is a locative preposition, which here takes the Possessor as a complement. In Icelandic it is the Possessee that is the complement of the preposition. Further, in Icelandic the Possessor is nominative and the Possessee is accusative, like a HAVE configuration. In Scots Gaelic and many other similar languages, the Possessor is oblique and there is no accusative case marking. In essence, Icelandic *vera með* looks very much like English *have*, while languages like Scots Gaelic and many others discussed by Freeze (1992) show a different pattern, as summarized in the table below:

(23)

Languages	Locative?	Complement	Complement Case
Icelandic, English	N	Possessee	ACC
Scots Gaelic, Russian	Y	Possessor	OBL

A construction similar to *vera með* in Icelandic is also found in Portuguese, though with a more limited distribution (Freeze (1992) and Stolz (2001) refer to the usage as ‘idiomatic’):

- (24) a. from Stolz 2001
Já estava com medo de...
already be.3SG with fear of...
‘He was already afraid...’ (Lit: ‘He was already with fear...’)
- b. from Freeze 1992
O menino esta com fome.
the child is with hunger
‘The child is hungry.’ (Lit: ‘The child is with hunger’)

Such possession constructions are described in Heine 1997 as ‘Companion’ possession, where the Possessee is the complement of an otherwise comitative preposition. A sampling of some other languages in diverse families which reportedly have Companion possession includes Hausa (Afro-Asiatic), Swahili (Niger-Congo), Mixtepec (Zapotecan), Rotuman (Austronesian), and Yimas (Sepik-Ramu). In contrast, the Scots Gaelic-type possession falls under Heine’s ‘Location’ schema. Languages which have companion possession involving prepositions have been little discussed in the literature on HAVE, despite the fact that these constructions much more closely resemble HAVE. In this paper this similarity will be exploited and the nature of companion possession more closely examined.

3 Icelandic in View of Previous Literature on Prepositions and HAVE

Freeze (1992), Kayne (1993), Den Dikken (1995), and Harley (2002) have all proposed that possessive and auxiliary HAVE decompose into a copular component, BE, and some other element, such as a P. This general idea goes back to at least Benveniste 1966, where it was suggested that *avoir* was an inverted *être-à* (‘be-to’). Such analyses have been motivated by many factors; decomposition of possessive HAVE has primarily been suggested by cross-linguistic evidence, which shows that the overwhelming majority of the world’s (studied) languages express possession overtly as BE+X, X being some functional morpheme, usually a preposition, BE a copula, with both morphemes spelling out separately in overt syntax. More generally, the chameleon nature of *have* in English, where it is not only possessive but also causative and an auxiliary, suggests that the verb is not a lexical verb as such, nor a simplex functional head, but rather a composite of functional items.

In this section I will show that previous analyses do not fully capture the Icelandic data or the similarities between *vera með* and HAVE. First it will be shown that analyses such as that of Freeze (1992) and Den Dikken (1995) which analyze all possession structures as having a locative source cannot account for Icelandic. Then it will be shown that analyses such as that of Kayne (1993) and Harley (2002) which propose a non-locative preposition as the source of possession with HAVE form a foundation for an analysis of Icelandic, but fall short of explaining why *vera með* is a BE construction, rather than a HAVE construction, and thus how Icelandic differs in this respect from closely related languages like English. Understanding this difference proves important to ultimately understanding the difference between locative possession and HAVE more broadly.

3.1 Possession as Location Analyses

3.1.1 Freeze 1992

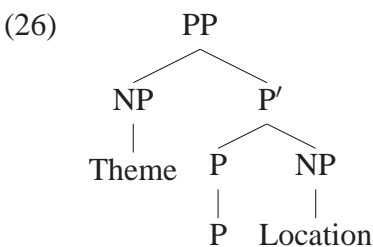
Freeze (1992) aims to derive what he dubs the ‘Locative Paradigm’ from a single maximally simple abstract syntactic structure. The Locative Paradigm is illustrated by the Russian examples in (25):

- (25) a. Predicate Locative:
 Kniga byla **na stole**.
 book.NOM was on table.LOC

- ‘The book was on the table.’
- b. Existential:
Na stole byla kniga.
 on table.LOC was book.NOM
 ‘There was a book on the table.’
- c. Possessive:
U menja byla sestra.
 at 1sg.GEN was sister.NOM
 ‘I had a sister.’

All three sentences contain nearly the same constituents, with minor differences in features or word order. The predicate locative has a locative PP with the preposition *na*, ‘on.’ The subject is *kniga*, ‘book.’ In (25b), the same locative PP appears at the beginning of the sentence, and this gives rise to an existential interpretation without the addition of any lexical items. In the possessive structure, the ‘location’ is animate, a first person singular pronoun, and is the object of the preposition *u*, ‘at’, which licenses genitive case on the Possessor. Similarly to the existential, the PP is at the beginning of the sentence. The object of *u*, being animate, is interpreted as a Possessor, and the nominative *sestra* as a Possessee.

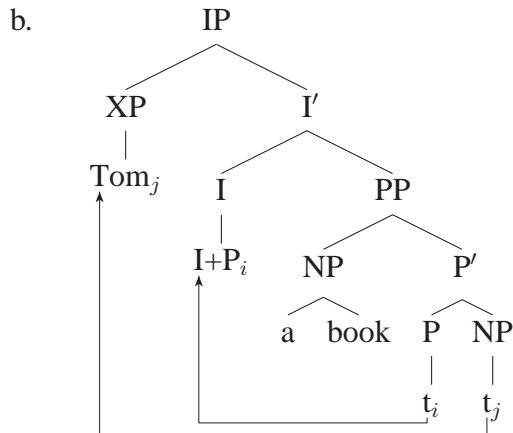
Freeze unites all of these structures under one umbrella, noting a systematic correspondence between the three in various languages. For example, many languages pattern the same as Russian, having the same structure for the existential and possessive, modulo animacy features on the ‘location’ argument, with a different ordering of arguments for the predicate locative structure. Freeze argues that these include at least Finnish, Hindi, Tagalog, and Yucatec. He derives the three members of the paradigm from an initial structure as in (26):



Freeze argues that definite Themes (equivalent to Possesseees in the possession structure) move to subject position, resulting in a Predicate Locative. An indefinite Theme will remain low while the locative P' moves to subject position, giving an Existential. Possessive structures involve movement of the [+human] P'. In his structure, the preposition selects both the Theme and Location arguments, since the Location is in the complement and the Theme in the specifier.

Freeze’s (1992) compositional analysis of English *have* is motivated by a desire to extend the analysis discussed above for Russian-type languages and unify those possession structures with languages such as English, which have verbs of possession. Freeze argues that all subjects of possessive HAVE should be Locations, and thus share the property of Possessor = Location shown in the other languages he addresses. He thus posits the following structure for English *have*:

- (27) a. Tom has a book.



This P is an empty locative preposition which moves up to join with the copula in IP, where $I+P_i$ spells out as *have*. The null locative preposition posited has a structure similar to that of *at*, with the Possessor/Location in its complement and the Possessee/Theme in its specifier. The English derivation differs from that of Russian, where the Possessor remains in the complement of the locative preposition, which does not incorporate. The two are, however, argued to be derived from the same base structure.

Constructions like *vera með* pose a problem for a Freeze-type analysis, since *með* is not locative, and its object is not interpreted as the Possessor, but rather as the Possessee. Compare the Russian locative-type possession with Icelandic:

- (28) [U **menja**] byla sestra. (Russian)
 at 1sg.GEN was sister.NOM
 ‘I had a sister.’

- (29) Jón er [með **blá augu**]. (Icelandic)
 John.NOM is with blue eyes.ACC
 ‘John has blue eyes.’

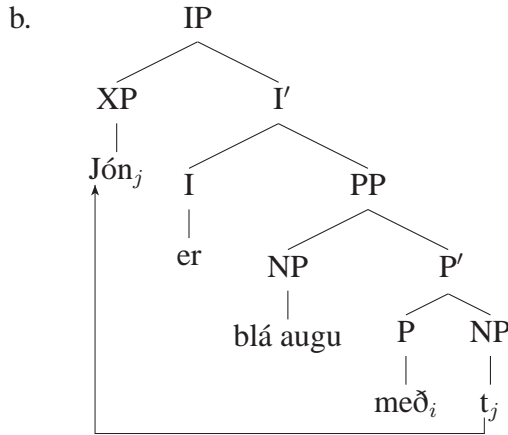
In the Russian example, the Possessor is the object of the preposition, while in Icelandic, the Possessee is the object. In Icelandic, the arguments are configured as in a HAVE sentence, but without the incorporation of the preposition which was needed to derive HAVE.

Freeze discusses similar cases from Portuguese and Chichewa:

- (30) O menino esta com fome. (Portuguese)
 the child is with hunger
 ‘The child is hungry.’ (Lit: ‘The child is with hunger’)
- (31) Ka-mwa-ana k-anga ka-li ndi njala. (Chichewa)
 12-1-child 12-my 12SB-be with 9-hunger
 ‘My small child is hungry.’ (Lit: ‘My small child is with hunger’)

He argues that such cases are similar to HAVE, except that P remains in situ. That is, he suggests that the prepositions are locative, taking the Location/Possessor as an object, and the Possessee only appears to be the object of the preposition due to movement. The structure would then be as in (32), using a more familiar Icelandic example:

- (32) a. Jón er með blá augu. (Icelandic)
 John.NOM is with blue eyes.ACC
 ‘John has blue eyes.’



There is a basic word order problem with this analysis, as, barring other movements which Freeze does not discuss, the preposition would have the appearance of a postposition. Even setting aside this problem with word order, the analysis makes the wrong predictions regarding Case assignment in these languages.

Freeze proposes that accusative Case can be assigned to the apparent complement of these prepositions because P is reanalyzed with I under adjacency. Thus, Freeze’s analysis also predicts that such argument reordering and Case assignment are only available when IP is present. Again setting aside the fact that, given the structure in (32), I and P will not actually be adjacent, we can see in Icelandic that adjacency with I cannot be a requirement for this Case assignment.

For one, in Icelandic, negation can intervene between the copula and the preposition, while accusative case is still assigned to the Possessee:

- (33) Skrímslið er **ekki** með augu. (Irie 1997:ex.20c)
 monster-the.NOM is not with eyes.ACC
 ‘The monster doesn’t have eyes.’

Further, in Icelandic (and, as will be shown in section 4.3, English and German), there are structures lacking IP, or any verbal layer, that still have an accusative-marked Possessee complement. There are counterparts to the possession expressions with *vera* above that are formed with essentially the same constituents, minus the verbal element, *vera*. Thus possession of typical *vera með* class objects is expressed as in (34):

- (34) [Maðurinn **með skeggið**] er skemmtilegur.
 man-the.NOM with beard-the.ACC is fun.NOM
 ‘The man with the beard is fun.’

Here *með* is within the subject nominal. Note that this is not an accidental correspondence; this *með* is restricted to the same class of objects as its verbal counterpart. So, family relation, which must be expressed by the verb *eiga* rather than *vera með*, also cannot be expressed with *með* in an attributive context:

- (35) * [Stelpan með fimm systur] er mjög þreytt.
 girl-the.NOM with five sisters.ACC is very tired.NOM
 intended: ‘The girl with five sisters (as relations) is very tired.’

One potential cause for concern as to the parallelism between *með* in these attributive contexts and *vera með* is the presence of the definite article on the Possessee in (34). The definite article on the Possessee is not grammatical in this context in a verbal environment:

- (36) * Maðurinn er með skeggið.
 man-the.NOM is with beard-the.ACC
 ‘The man has the beard.’

However, the definite article seems to appear in attributive contexts like (34) as a sort of ‘definiteness concord’ which does not give rise to any interpretive difference in comparison with the verbal environment. The examples in (37) show that an indefinite Possessor is only compatible with an indefinite Possessee:

- (37) a. Menn með skegg eru skemmtilegir.
 man.NOM-PL with beard.ACC is fun.NOM-PL
 ‘Men with a beard are fun.’ (i.e., Bearded men are fun.)
 b. * Menn með skeggin eru skemmtilegir.
 man.NOM-PL with beard-the.ACC-PL are fun.NOM-PL
 ‘Men with the beard are fun.’

Note that a similar phenomenon is present in English, where a definite article occurs on the complement of *with*:

- (38) The man with **the** beard is funny.

As in Icelandic, this is not possible when the Possessor is indefinite:

- (39) * A man with **the** beard is funny.

The main difference between English and Icelandic in this respect is that Icelandic speakers seem to require this definiteness concord, since in English (40a) is also acceptable, but most Icelandic speakers find (40b) considerably degraded:

- (40) a. The man with **a** beard is funny.
 b. ?* Maðurinn með skegg er skemmtilegur.
 man-the.NOM with beard.ACC is fun.NOM
 ‘The man with a beard is fun.’

Again, note that there is no apparent interpretative difference between (38) and (40a).

Modulo definiteness concord, possession with *með* is parallel between attributive and predicate contexts. So, we see that in attributive possession, the possessive preposition is used in the same fashion as in predicative contexts, and that predicative possession with *vera með* appears to be compositional, informally speaking. Thus the predictions of Freeze’s analysis are falsified by

the Icelandic data which show that Possessor > Possessee argument ordering is possible without incorporation, reanalysis or the presence a tensed element.

The analysis in Den Dikken 1995 and Den Dikken 1998 encounters a similar stumbling block with the Icelandic data based on the assumption that all possession structures are derived from locative structures with an underlying Possessee > Possessor order.

3.1.2 Den Dikken 1998

Den Dikken (1998)⁶ argues that HAVE sentences are instances of Predicate Inversion. An example of Predicate Inversion is given in (41):

- (41) a. A picture of a politician was the cause of the riot.
b. The cause of the riot was a picture of a politician.

Den Dikken cites Moro (1993, 1997) and Hoekstra and Mulder (1990) as arguing for a predicate inversion analysis deriving phrases such as (41b) from those like (41a). He argues that this Predicate Inversion involves A-movement of a small clause predicate, in this case, *the cause of the riot*, to the sentential subject position across the small clause subject, here *a picture of a politician*. The derivation of (41b) would be as in (42):

- (42) $[[_{FP} \text{ the cause of the riot } [_{F'} \text{ X+F=was } [_{XP} \text{ a picture of a politician } [_{X'} \text{ t}_X \text{ t }]]]]]$
-
- The diagram shows a horizontal line with an upward arrow from the middle of the line to the phrase 'the cause of the riot' in the first part of the structure, and another upward arrow from the middle of the line to the phrase 'a picture of a politician' in the second part of the structure. This represents the movement of the predicate 'the cause of the riot' over the small clause subject 'a picture of a politician'.

As Den Dikken points out, this movement of the predicate over the small clause subject looks like a potential Minimal Link Condition (Chomsky 1993) violation, since it is A-movement and the SC subject is in an A-position⁷. However, movement of the head of the small clause, X, to form a complex head with F is meant to be a domain-extending operation which creates an equidistance configuration. Den Dikken argues that such an incorporation would be necessary in all cases of predicate inversion for the same reasons, and that the result of this X to F movement is the spellout of X+F as some form of copula. This is argued to account for the contrast illustrated in (43), where the copula is obligatory in the Predicate Inversion structure, but optional in the non-inverted structure:

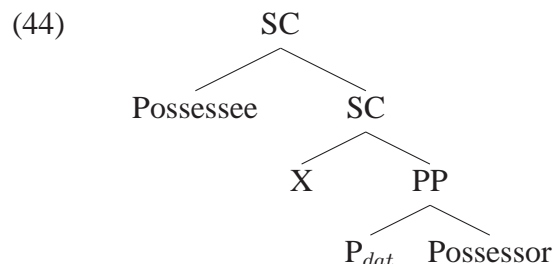
- (43) a. I consider a picture of a politician (to be) the cause of the riot. (non-inverted)
b. I consider the cause of the riot *(to be) a picture of a politician. (inverted)

Thus the presence of a copula is a mandatory feature of such Predicate Inversion structures. Den Dikken analyzes HAVE as another instance of such a copula, but instead of being X+F, it is P+X+F, a more complex head which also has a preposition incorporated⁸. This preposition originates in the PP predicate of the small clause, and is argued to be a 'dative' preposition, which takes a Location complement like Freeze's locative prepositions. The structure in the tree in (44) is argued to be the source structure for all possession cross-linguistically, both at the clausal and nominal level:

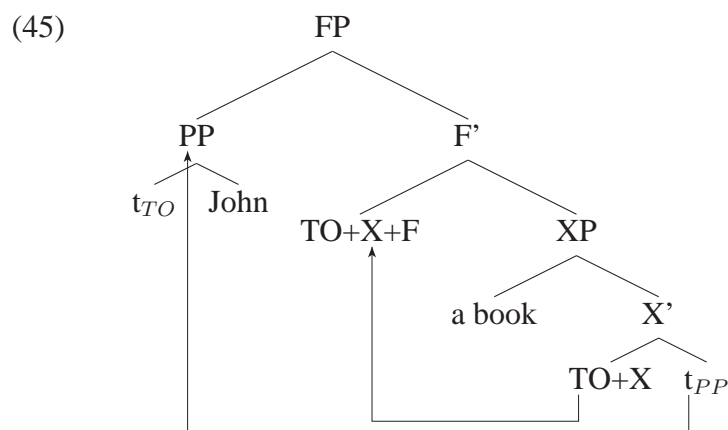
⁶ Den Dikken 1995 presents essentially the same analysis of HAVE and possessive preposition as Den Dikken 1998, but since the latter is more explicit in the analysis, I will refer primarily to that work in this section.

⁷ Den Dikken 2006 reformulates both these constraints on movement and the analysis of Predicate Inversion in the context of phase theory. I do not believe the differences in formulation make different predictions for the possession structures discussed here, so I will use the older terminology in which his older theory of possession is couched.

⁸ In the terminology of Den Dikken 2006, X here would be a 'Relator', while F would be a 'Linker.'



It is the dative preposition which moves to X, which then moves to F, ultimately spelling out as the ‘copula’ HAVE. The derivation of the sentence *John has a book* would be as in (45):



The dative preposition in English is argued to be a null variant of *to*, which I have represented as TO. TO moves out of the PP to merge with X, and then to F. After this domain-extending head movement, the predicate, the PP t_P *John*, is able to move across the small clause subject, *a book* and land in Spec,FP. The complex head TO+X+F is spelled out as *have*, giving *John has a book*.

There are several problems with this extension of predicate inversion to HAVE sentences. One critical problem is that there is an inconsistency between Den Dikken’s arguments that certain tests indicate the presence of a Predicate Inversion structure, and the failure of HAVE sentences to pass these tests; that is, they are grammatical where the analysis predicts they should be ungrammatical. Some of these tests are given in (46) and (47) (following Den Dikken, the subjects of the small clauses are italicized):

- (46) Extraction of the subject is blocked (Moro 1990, 1997)
- * *Which picture of a politician_i* do you think the cause of the riot was t_i ?
 - Which picture of a politician_i* do you think John has t_i ?
- (47) A'-extraction from the subject is blocked (Moro 1990, 1997)
- * *This politician_i*, I think the cause of the riot was *a picture of t_i* .
 - This politician_i*, I think John has *a picture of t_i* .

What these diagnostics are meant to illustrate is that the subjects of inverted predicates are frozen with respect to A'-movements. The grammaticality (b) examples illustrates that sentences with *have* do not pattern with predicate inversion sentences in this way. While Den Dikken argues that the Possessee is the subject of the small clause which undergoes Predicate Inversion, the restrictions which apply to other such subjects do not apply in HAVE sentences. Thus these structures do

not meet Den Dikken's (1998) own criteria for being analyzed as Predicate Inversion structures. Den Dikken (2006:121) continues to assert that "all Predicate Inversion constructions behave entirely alike when it comes to A'-extraction of the postverbal subject - it is impossible throughout." Thus these tests indicate that *have* sentences are not, in fact, inverted. That is, they are not inversions of locative structures, but base-generated possession structures where the possessee argument is the complement of the possessive preposition.

This is clear evidence that *have* is not a canonical case of predicate inversion. However, even if these diagnostics of predicate inversion were found to be somehow faulty, other problems crop up in trying to account for the Icelandic data as involving inversion. Since Den Dikken proposes that all possession structures are derived from locative structures, *vera með* should be accounted for somehow within this analysis. However, possessive *með* does not correspond directly to the postulated English TO or Den Dikken's dative preposition more generally. As was shown in section 2, possessive *með* takes a Possessee complement, rather than Possessor or Location, and at least in cases where the Possessor is animate, *með* assigns accusative case to its complement. Thus we cannot simply plug *með* into the P position of the structure given above. That would have the arguments ordered opposite of what is actually found in the language:

- (48) a. *Gleraugu er með Jón.
 glasses.ACC is with John.NOM
 intended: 'John has glasses.'
 b. [_{SC} gleraugu [_{SC} X [_{PP} með Jón]]]

Den Dikken (p.c.) has suggested as a possible solution to this problem that *með* in these contexts may be a complex head which itself contains a TO head. This would in effect be similar to Freeze's proposal that such prepositions only appear to take the Possessee argument as a complement. However, without major modifications to the theory, this analysis would still not account for the Icelandic data. The key syntactic problem for deriving *vera með* via predicate inversion is that Icelandic exhibits the same argument order as HAVE languages, but lacks the domain-extending movement which is at the core of the analysis. I see two possible ways to implement such a solution. One way would be to analyze *með* as an element within the small clause, as realizing the X head itself (Den Dikken's (2006) Relator). The structure where X is realized as *með* (without various possible movements) would be as in (49):

- (49) a. intended: Jón er með gleraugu.
 b.

```
graph TD
    F_prime[F'] --- F[F]
    F_prime --- meðP[meðP]
    meðP --- gleraugu[gleraugu]
    meðP --- með_prime[með']
    með_prime --- með[með]
    með_prime --- ToPP[ToPP]
    ToPP --- TO[TO]
    ToPP --- Jón[Jón]
```

One problem with this structure that cannot be resolved given Den Dikken's assumptions about movement is that the word order is incorrect - the preposition *með* would follow the Possessee

argument *gleraugu*. This cannot be resolved by moving *með* to F because this would result in the spellout of the copula.

The cases of attributive possession in Icelandic are again relevant, as these make clear that the Possessor (Den Dikken's small clause predicate) must always occur higher than the Possessee, regardless of the absence of the copula, as in (50):

- (50) Maðurinn með skeggið er skemmtilegur.
 man-the.NOM with beard-the.ACC is fun.NOM
 'The man with the beard is fun.'

The other alternative would be to analyze *með* as a preposition which takes the full locative small clause as its complement. This is represented in (51):

- (51) a. Jón er með gleraugu.
 b.
-
- ```

graph TD
 F_prime[F'] --- F[F]
 F_prime --- meðP[meðP]
 meðP --- með[með]
 meðP --- XP[XP]
 XP --- gleraugu[gleraugu]
 XP --- X_prime[X']
 X_prime --- X[X]
 X_prime --- ToPP[ToPP]
 ToPP --- TO[TO]
 ToPP --- Jón[Jón]

```

In the terms of Den Dikken 2006, here *með* would be a Linker. This analysis does allow for the domain extending movement necessary to re-order the Possessor and Possessee, as TO could move to the X/Relator head. However, it crucially relies on *með* taking a small clause complement, which goes counter to the claim of Kayne (1985) that prepositions never take small clause complements. There is no independent reason in Icelandic to doubt that status of *með* as a preposition. Further, in this case what is 'difficult' to generate is the verbal environment for *með*. In order to derive a copula, X should move to F; however, in this structure, that movement would have to proceed via the *með* head, resulting in a TO+X+P+F complex, which should be realized as a HAVE verb on Den Dikken's theory. Thus we cannot adapt Den Dikken's analysis of predicate inversion and domain extension to the Icelandic data.

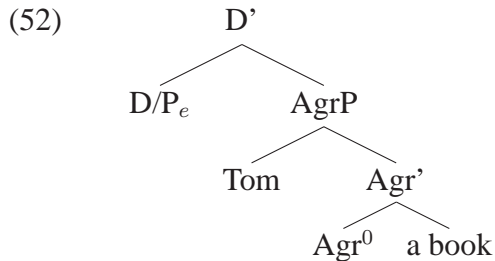
In sum, we have attempted to push the hypothesis that all possession is derived from a locative structure, and seem to have reached the limit; under current, standard assumptions, there is no way to account for the Icelandic data as being derived in such a way.

### 3.2 Non-Locative Possession Analyses

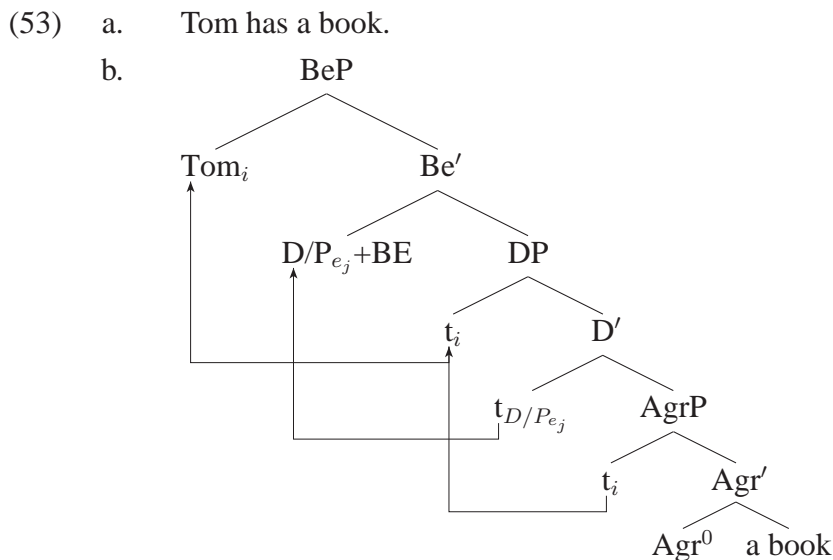
Not all previous compositional analyses of HAVE have treated the verb as derived from a locative structure. Szabolcsi (1981, 1983) gives an analysis of possession in the Hungarian DP which draws parallels with the CP and also characterizes such possession as distinct from the locative. Kayne (1993) extends this view in several directions to account for English and Romance languages.

He discusses HAVE primarily in terms of its relation to BE and the nature of auxiliary selection, attempting to integrate Szabolcsi's work with some of the basic ideas of BE+P incorporation found in Freeze 1992.

The initial structure proposed for a possessive usage is as in (52), where D/P is a prepositional determiner:

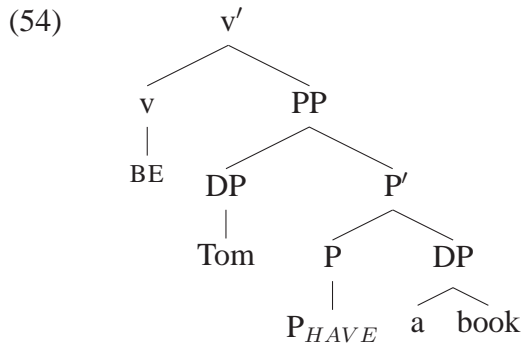


Note that, contrary to the structures given in Freeze 1992 and Den Dikken 1998, here the Possessor initially c-commands the Possessee. Instead of a locative structure, a DP-internal possession structure is the source of the possession relation. After subsequent movement, the structure for a *have*-sentence would be as in (53a):



If we assume that *með* is an instance of the relevant D/P category, then it is fairly straightforward to account for the Icelandic data in parallel with the analysis for English *have*. The shortcoming of this analysis is not in the structure itself, but in the motivation of the movement of the D/P head to the position of BE. Kayne argues that this movement of D/P to BE is in order to essentially convert Spec,DP into a A-position, allowing the Possessor to move through that position and higher to Spec,BeP. This explanation, however, incorrectly predicts that in possessive *vera með* sentences, where there is no such movement, the Possessor should not be able to reach the subject position. The analysis also predicts that, in the absence of BE, there is no way for the specifier of the DP to host the Possessor, and thus for the Possessor to move to a position where it will precede the preposition. This prediction is also falsified by Icelandic, where we can see in attributive possession contexts that the Possessor precedes *með* regardless of the presence of the BE.

The decompositional analysis of HAVE in Harley 2002 (stemming from Harley 1995) is motivated not primarily by the syntax of HAVE itself, but rather as a means for explaining the typology of the double object construction. Thus there is no in-depth analysis of HAVE presented for any language. However, like Kayne, Harley proposes that HAVE is built from a non-locative preposition which starts with the argument ordering Possessor > Possessee, paralleling the order of arguments on the sentential level. However, this order is not established DP-internally, but rather by a preposition which she labels  $P_{HAVE}$ . The base structure of a simple HAVE sentence would be as in (54):



The Icelandic *vera með* construction seems to fit quite transparently into Harley's proposed structure for HAVE, if we assume that *með* is an overt instantiation of  $P_{HAVE}$ . However, this analysis, like that of Kayne (1993), does not capture the lack of a HAVE verb in these contexts for Icelandic. Nor does it provide a clear means for developing such an account.

In sum, neither Kayne (1993) nor Harley (2002) run into the 'locative' problem of Freeze (1992) and Den Dikken (1998), as they separate HAVE from locative constructions, as in Szabolcsi's analysis. However, in part due to the scope of their analyses, they do not provide a comprehensive alternative to the locative theories. Neither paper identifies an overt preposition such as *með* which can provide insight into the behavior of non-locative possessive prepositions, and it is not clear in these accounts how to explain the variation in incorporation between languages like English and those like Icelandic.

In the next section, I propose an analysis in which *með* is in essence an overt instance of  $P_{HAVE}$ . However, the structure of the PP will need to be fleshed out in order to account for the Case assignment and variation in incorporation found with various realizations of  $P_{HAVE}$  across and within languages. In section 4.3 I further propose that  $P_{HAVE}$  is sometimes spelled out on its own in English as *with*. Then in section 5 I will argue that the variation in incorporation between languages like Icelandic and English can be accounted for as a consequence of differences in PP structure.

## 4 The Structure of Possessive WITH and HAVE

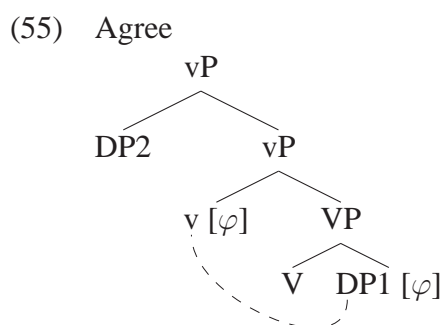
In this section, I will present an analysis of possessive *með* in Icelandic, in both predicative and attributive environments. The attributive environment will be considered in order to illustrate the parallels between possessive *með* and English possessive *with*. The analysis of Icelandic will then be extended to English, inspired by the parallel between Harley's (2002)  $P_{HAVE}$  and the preposition *with*. In section 5 I then address the question of how English and Icelandic ultimately

differ in minimal respects. Before laying out the analysis of Icelandic, I will first present the basic assumptions necessary for the analysis regarding Case and incorporation.

## 4.1 Assumptions

### 4.1.1 Agree and Case in PP

Since matters of Case will play an important role in the analysis, I will introduce here my assumptions and initial proposals regarding Case assignment. In keeping with minimalist theory, I assume that the mechanism for Case assignment is Agree (Chomsky 2000, 2001). A sketch of Case assignment in the vP within this vein is given in (55), where the dashed line represents an Agree relation, rather than movement:



In this configuration, because of the Agree relation, DP1 will be assigned structural Case by v.

There has been little discussion in the literature on the precise mechanisms for assignment of Case to the object of a preposition. Den Dikken (2003) and Noonan (2004) present analyses of Case within spatial PPs, extending the work on the extended PP in Koopman 1997. However, these accounts are closely tied to Path and Place projections, which, while seemingly motivated for spatial PPs, do not seem *a priori* justified for prepositions such as *with* and *með* in non-locative interpretations. Thus I will present an alternative analysis which instead draws upon certain parallelisms found between Case in the verbal domain and Case in the prepositional domain, arguing for a *pP*, in the style of *vP*. This in turn may ultimately be relatable to spatial PPs, but I will leave that matter aside for the purposes of this paper.

I will assume, along the lines of Den Dikken 2003, that all case is in some sense structural, insofar as it involves an Agree relation. The difference between what is typically called ‘structural’ and what ‘inherent’ Case on this account would have to relate to a difference between Agree matching with a verbal (structural) probe versus prepositional or nominal (inherent) probe.

### 4.1.2 Incorporation as Head Movement

*Incorporation*, à la Baker (1988), will also play an important role in the analysis presented here. Incorporation as employed here is formally no different from standard head movement. However, the term incorporation is typically used when two morphemes which seem to occur ‘free’ in some environments appear to be one syntactic unit in others. The most common examples are noun-incorporation, as in (56), and preposition-incorporation, as in (57):

- (56) Noun Incorporation in Mohawk (from Baker 1988)



- a. Ka-rakv ne sawatis hrao-nuhs-a?  
3N-white DET John 3M-house-SUF  
'John's house is white.'
- b. Hrao-nuhs-rakv ne sawatis.  
3M-house-white DET John  
'John's house is white.'

(57) Preposition Incorporation (Applicative) in Chichewa (from Baker 1988)

- a. Mbidzi zi-na-perek-a msampha **kwa** nkhandwe.  
zebras SP-PAST-hand-ASP trap to fox  
'The zebras handed the trap to the fox.'
- b. Mbidzi zi-na-perek-**er**-a nkhandwe msampha.  
zebras SP-PAST-hand-to-ASP fox trap  
'The zebras handed the fox the trap.'

The analysis in Baker 1988 is couched in the framework of Government and Binding Theory. In more recent minimalist theory, Chomsky (2000) has suggested that head movement may be motivated by PF-related factors, serving to resolve the affixal (or null) nature of morphemes. This would be in contrast to phrasal movement, which is motivated by occurrence (OCC) features. I will assume such a motivation for head movement here.

#### 4.1.3 Incorporation and Case

Baker (1988) observes that incorporation seems to affect the case on the prepositional object, such that it is different in incorporation contexts than otherwise. An example of such an apparent change in case due to incorporation is found the example above from Chichewa applicatives (Baker 1988:229), repeated here:

- (58) a. Mbidzi zi-na-perek-a msampha **kwa** nkhandwe.  
zebras SP-PAST-hand-ASP trap to fox  
'The zebras handed the trap to the fox.'
- b. Mbidzi zi-na-perek-**er**-a nkhandwe msampha.  
zebras SP-PAST-hand-to-ASP fox trap  
'The zebras handed the fox the trap.'

In (58a), the object of *kwa* receives Case from the preposition. However, when the preposition incorporates as an applicative affix on the verb, *er*, its object is able to receive structural Case from the verb.

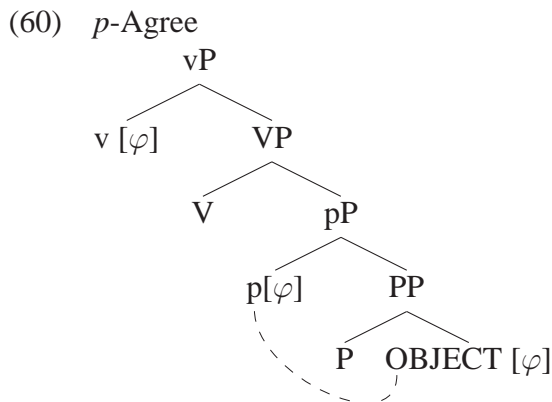
Baker's Government Transparency Corollary is an attempt to explain such situations:

- (59) Government Transparency Corollary (p.64): A lexical category which has an item incorporated into it governs everything which the incorporated item governed in its original structural position.

What this means is that a verb which is the landing site of an incorporated preposition will govern whatever the preposition governed. In the above example then, the verb assigns structural Case after the preposition has incorporated.

In current minimalist theory, there is no notion of government. Instead, structural Case assignment is viewed as an instance of Agree, as discussed in section 4.1. From this perspective, a theory where the process of incorporation licenses Case is incoherent; the probe closest to a matching goal will match features with that probe, and Case will as a result be ‘assigned.’ Future movement of the probe cannot cancel out the agreement which has already taken place so that another probe could assign Case to the same argument. The Case-assigned object would not be available to match features with a second probe, since those features would have been deleted after the first match.

More concretely, if there are two probes,  $v$  and  $p$ , only the one closer to the DP,  $p$ , will be able to assign Case.



Once this Case is assigned, it cannot be ‘overridden’ by Agree between  $v$  and the DP, because the DP’s  $\varphi$ -features have already been deleted after matching with  $p$ , and no new Agree relation can be established.

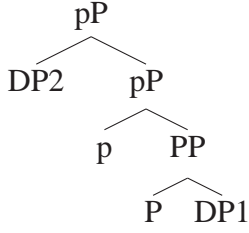
One must therefore capture Baker’s empirical observation with a new formulation that is consistent with Agree and current minimalist assumptions. I propose that, in the case of preposition incorporation, where the object introduced by the incorporated preposition ultimately bears structural Case (different from that otherwise assigned by the preposition), the structure of the PP in such environments is actually impoverished. This impoverishment results both in (a) lack of assignment of Case to the object of P, and (b) incorporation of the ‘weak’ P to a higher head position. This notion of impoverishment can be related to the notion of deficiency which Wurmbrand 1998 and subsequent work argues is the source of the special behavior of restructuring infinitives. An impoverished PP in our terms is one that has an affixal P and is lacking a  $p$  layer. In such a PP, there is no PP-internal probe with Case features.

## 4.2 Icelandic Possession

### 4.2.1 Structure of the *Með* pP

In order to discuss the analysis of *vera með*, first we must start with the prepositional component, *með*. As discussed in section 4.1, I propose that little  $p$  ‘assigns’ Case within the extended PP, just as  $v$  is associated with Case in the extended VP. So, I propose the following schematic structure for a prepositional phrase with *með*:

(61) Case-Assigning PP with External Argument



DP1 is the internal argument of the P head, while DP2 is an external argument selected by *p*, like that introduced by *v*.

Given that the preposition *með* can have either a dative- or accusative-marked complement, this means that there must be two different *p* heads, with different Case features. It was shown in section 2 that this Case difference corresponds generally with a difference in whether there is a control relation interpreted with respect to the arguments within the prepositional phrase. When the complement is accusative, then there is a control relation between it and another argument. When the complement is dative, there is a symmetric relation between it and another argument. Thus I posit the following non-exhaustive inventory of *p* heads for Icelandic:

(62)

| head          | Case feature | argument relations           |
|---------------|--------------|------------------------------|
| $p_{control}$ | accusative   | control/temporary possession |
| $p_{sym}$     | dative       | symmetry/accompaniment       |

There is no evidence in Icelandic that *með* itself, a P, has any Case features, nor any features relating to a control or symmetrical relation, since it is always embedded under a *p* head. Semantically, *með* can be analyzed as introducing stative, accompaniment-related semantics, while the *p* heads determine whether the accompaniment is symmetrical or one of control and thus temporary possession of the argument in the complement of *með* by the argument merged in the specifier of  $p_{control}$ . This can be formalized as follows, where type ‘e’ is used for individuals or entities and type ‘s’ is used for stative eventualities:

- (63) a.  $\llbracket með \rrbracket = \lambda x_e \lambda e_s. accompaniment(e) \ \& \ theme(e, x)$   
 b.  $\llbracket p_{control} \rrbracket = \lambda P_{\langle s, t \rangle} \lambda y_e \lambda f_s. P(f) \ \& \ controller(f, y)$   
 c.  $\llbracket p_{sym} \rrbracket = \lambda P_{\langle s, t \rangle} \lambda y_e \lambda f_s. P(f) \ \& \ companion(f, y)$

Given these primitives, the step-by-step syntactic derivation of a possessive *með*-PP would work as follows :

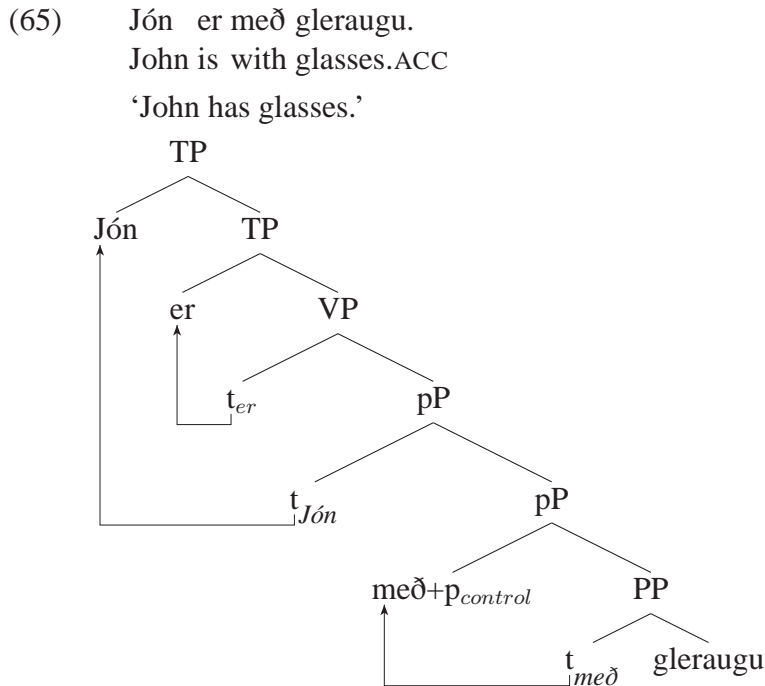
- (64) a. *með* merges with DP1  
 b.  $[ með [ DP1 ] ] \rightarrow p_{control}$  merges, selecting PP  
 c.  $[ p [ með [ DP1 ] ] ] \rightarrow með$ , being affixal, head-adjoins to  $p_{control}$   
 d.  $[ með + p_{control} [ t_{með} [ DP1 ] ] ] \rightarrow p_{control}$  selects an external argument +control wrt DP1  
 e.  $[ DP2 [ með + p_{control} [ t_{með} [ DP1 ] ] ] ]$

I assume that *P* moves up to *p*, as *V* is assumed to move to *v*. This is due to a weakness, or affixal nature, of *P* which will be further motivated for prepositions in Germanic in section 5.

This structure for *með* and the reasoning for it has a parallel in Icelandic in the verbal domain, as argued by Svenonius (2002). In that paper, Svenonius argues that the presence of an accusative vs. dative object in Icelandic is dependent upon the event structure; this event structure is reflected in the type of *v* present in the structure, and thus is similar to the proposal here, which suggests that the Case of a prepositional object correlates with the type of *p*, and then that the type will affect the properties of the second argument introduced by that *p* head. However, the different kinds of *p* heads do not seem to be related to event structure, but rather other conceptual structure represented by the extended PP.

#### 4.2.2 Icelandic Predicative Possession

In order to derive *vera með* predicate possession sentences, we start with the *pP* structure as given above, and then merge it with the *VP*, which brings in *vera*:



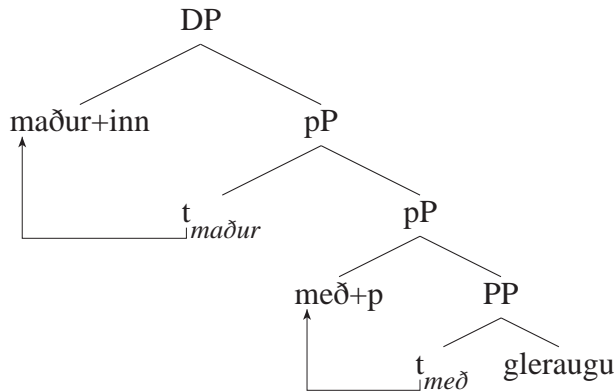
There is no need to posit a *vP*, as Case is assigned to the DP in the *pP*, and all arguments are also introduced within that domain.

Since in Icelandic, *með* is always embedded within a *pP*, it's behavior is consistent across verbal and nominal environments. That is, the affixal nature of the preposition itself can be resolved within the *pP*, rather than depending on higher lexical or functional material. In the next section it will be shown how this *pP* can be embedded in a nominal environment to produce an 'attributive' possession expression.

### 4.2.3 Icelandic Attributive Possession

The structure for attributive possession starts out with the same basic small clause structure, but instead of *V* merging, I assume that *D* merges instead, essentially nominalizing the small clause.<sup>9</sup>

- (66) maðurinn með gleraugu ...  
 man-the.NOM with glasses.ACC  
 ‘the man with glasses...’



This analysis shares certain properties with reduced relative clause analysis of predicative adjectives in Kayne 1994. Kayne’s raising analysis for non-reduced relatives has the relative clause CP as the complement of a  $D^0$ . The so-called ‘head’ of the relative clause (not to be confused with X-bar theoretic ‘head’), moves out of its position within the CP and to spec,CP as in (67):

- (67) Kayne 1994 Analysis of Relative Clauses:  
 $[_{DP} D^o [_{CP} \text{Head DP } [_{CP} C^o [_{IP} t_{\text{Head}} ] ] ] ]$

Reduced relatives are analyzed as similar structures where *C* takes a small clause complement, rather than *IP* complement. An example in English of an adjectival reduced relative is *a recently arrived letter*, which would have the underlying structure according to Kayne (1994):

- (68)  $[_{DP} a [_{CP} \text{recently arrived } [_{CP} C^o [_{SC} \text{letter } [_{AP} t_{\text{recently arrived}} ] ] ] ] ]$

The presence of the null  $C^o$  here provides a landing site for *recently arrived*. However, in the current cases, there is no particular evidence for a *C*, since the ‘head’ of the phrase would be the higher argument in any case - such a movement would be string vacuous. Thus, lacking motivation for a *C* level, I only propose that the small clause is selected by a determiner. Thus the parallelism between the structures may simply be that in both cases, a *D* selects a non-NP constituent and enables that constituent to function as a nominal. Or, it may be that there is a *C* layer in these cases as well which may be supported by other evidence beyond the data available here.

## 4.3 English Possession

In section 2, the translations of many of the Icelandic sentences with *með* used the English preposition *with* in its place. In this section, it will be argued that *with* in its possessive usage closely

<sup>9</sup> This is an oversimplification of the structure of the post-nominal definite article in Icelandic, which is outside of the scope of this paper.

resembles possessive *með*, and that the primary difference between *vera með* and *have* is one of incorporation. This can explain why the notable exception to straightforward translation between Icelandic and English is in the translation of predicative context. In English, rather than *be with* for predicative possession, there is *have*. Here the parallel between the languages seems to fail, even though the possessive *með* in **attributive** possession can be translated as *with*. In this section, we will take a closer look at attributive uses of *with*, and then return to the question of *have* and its relation to *vera með*.

In the previous sections, it was shown that the Icelandic *vera með* construction cannot be derived from a locative source. Thus there must be at least two different sources of predicative possession structures cross-linguistically. Given this fact, it begins to look desirable to analyze HAVE structures not as derived from a locative base, but from a +control comitative/companion base such as that found with *með*, especially considering the parallels between English *have* and Icelandic *vera með* noted in (23), repeated here:

(69)

| Languages             | Locative? | Complement | Complement Case |
|-----------------------|-----------|------------|-----------------|
| Icelandic, English    | N         | Possessee  | ACC             |
| Scots Gaelic, Russian | Y         | Possessor  | OBL             |

The proposal I am arguing for is that these English and Icelandic constructions vary minimally in that *with* must incorporate into BE while *með* does not, and cannot.

#### 4.3.1 English Attributive Possession

In attributive expressions of possession, English looks very much like Icelandic. Compare (70a) with (70b):

- (70) a. The man **with** the beard is fun.  
 b. Maðurinn **með skeggið** er skemmtilegur.  
 man-the.NOM with beard-the.ACC is fun.NOM  
 ‘The man with the beard is fun.’

The difference that at first obscures the similarities is that such sentences in a predicative environment translate into English with *have* rather than as *be with*:

- (71) # The man is with a beard.  
 (72) The man **has** a beard.

In Icelandic, *vera með* wholly corresponds to *með* in attributive contexts, whereas in English *have* systematically corresponds to *with* in attributive contexts. Thus all of the following are possible with a possessive interpretation:

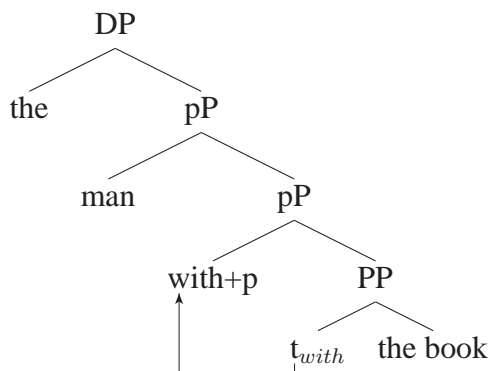
- (73) a. The man with two sisters...  
 b. The woman with brown hair...  
 c. The neighbor with a big dog...  
 d. The patient with a headache...



Contrast (73a) with the impossibility of using *með* to express family relations, as seen in (35). *With* has a wider distribution than *með*, and accordingly, *have* has a wider distribution than *vera með*. In Icelandic, there are three ‘verbs’ - *hafa*, *eiga*, and *vera með* - which slice up the Possessee types all taken as objects by English *have*.

I will therefore consider *with* to be a possessive preposition on par with *með* which does not spell out as such in predicative possession, for reasons to be further detailed in section 5. Considering the parallelism between languages in attributive contexts, I analyze *with* as having the same basic structure as *með*. Thus, in attributive contexts, the structure would be as in (74):

(74) The man with the book. . .



The properties of the heads involved in this structure will be expanded upon in section 5, with help from further German data.

#### 4.3.2 English Predicative Possession

Now we return to the peculiar fact that, although *with* behaves like *með* otherwise, (75) is ungrammatical in English, while the equivalent is perfect in Icelandic:

(75) \* The man **is with** a beard. (control/temporary possession)

This fact is additionally puzzling when we see observe that most attributive uses of prepositions in English can occur with *be*:

- (76) a. The man near/by/on/under the table is strange.  
b. The man is near/by/on/under the table.

Also somewhat peculiar is the fact that the combination of *be* and *with* in English can be grammatical, but only with a symmetric interpretation, not a control/possessive one. In this way it corresponds with dative-licensing *með* in Icelandic:

(77) John **is with** the mayor this afternoon. (symmetric / \* control)

(78) John **is golfing with** the mayor this afternoon. (symmetric / \* control)

As a +control preposition, *with* can appear with BE or another verb, but in neither case is possession involved.

To account for these otherwise unexpected facts, I propose that, while incorporation of *vera* and *með* is impossible in Icelandic, incorporation is obligatory for *be* and possessive *with* in English,

and *be+with=have*<sup>10</sup>. Further, given the overgeneration problems faced by locative analyses of HAVE posed in the introduction, I suggest that no instances of HAVE are derived from locative prepositions. This provides for a straightforward means of ruling out incorporation in the many locative-based possession structures across languages, by uniting all locatives as not incorporating into BE. One potential way of explaining this non-incorporation will be proposed in section 5.2, after the foundations are established for Germanic in section 5.1.

## 5 To HAVE or not to HAVE in Germanic

It was proposed above that English and Icelandic vary minimally in that *with* must incorporate into BE while *með* does not. *Með* in fact **cannot** incorporate. This can be illustrated with the fact that there are Possessee types which can only be the object of *með*, and they cannot be the object of any other possessive verb, which might have otherwise been analyzed as the incorporation of *vera* and *með*:

- (79) a. Jón er með blá augu.  
John.NOM is with blue eyes.ACC  
'John has blue eyes.'
- b. \*Jón hefur blá augu.  
John.NOM has blue eyes.ACC  
'John has blue eyes.'
- c. \*Jón á blá augu.  
John.NOM has blue eyes.ACC  
'John has blue eyes.'

Since this object type is impossible with the possessive verbs *hafa* and *eiga*, we must conclude that these verbs do not result from *með* incorporation. If these are to be analyzed in a fashion parallel to English *have* in section 4.3.2, they would have to result from the incorporation of other prepositions, which we can call  $P_{hafa}$  and  $P_{eiga}$ .

I propose that the difference in incorporation between Icelandic and English can be correlated with a difference in the complexity of the extended prepositional phrases these lexical prepositions are embedded within, and therefore with the preposition interpretation and Case assignment. More specifically, I propose that prepositions embedded directly under Case-assigning functional heads do not need to incorporate into higher verbal or other functional heads, while those that lack such structure within the prepositional phrase do. It is this incorporation of 'bare' prepositions which leads to the realization of HAVE verbs.

Above it was shown that in Icelandic, Case within the *með*-PP is assigned via two different *p* heads. One *p*, called  $p_{control}$  assigns accusative Case, and has a control interpretation. The other,  $p_{sym}$ , assigns dative Case and gives rise to a symmetrical interpretation of the arguments of *p* and P. Given the data that will be explored in the following sections, I propose that in English, *with* does

<sup>10</sup> The focus of this paper is on possessive HAVE, and thus this claim is intended only for that usage. I have no evidence to suggest that *with* is to be implicated in causative *have* constructions, for example. However, it is quite possible that the spellout *have* is underspecified for the the element incorporated into *be*, and that other uses of *have* involve the incorporation of another functional element, prepositional or otherwise.

not combine with the same *p* heads. Rather, it is the preposition itself that is ambiguous between a control and an underspecified interpretation. When *with* is +control, no Case is assigned within the PP, as there is no *p* head. Although this Case difference is not apparent in English, it can be shown in German, which exhibits overt case morphology but otherwise patterns like English.

## 5.1 German Possession

In order to see that there is a case contrast between *with* and *með* which correlates with the contrast in incorporation, we must look to another incorporating language, German, which patterns with English but also exhibits overt morphological case on DPs. German *mit* corresponds roughly to English *with* and Icelandic *með*, in that it is a possessive preposition and shares several other common uses. Like *with*, it is the attributive counterpart to HAVE, taking the same Possessee objects as *haben*, the German equivalent of *have*:

- (80) Die Frau            **mit** der        blauen Bluse ...  
       the woman.NOM with the.DAT blue    shirt  
       ‘The woman with the blue shirt. . .’
- (81) Die Frau            **hat** eine     blaue Bluse.  
       the woman.NOM has a.ACC blue    shirt  
       ‘The woman has a blue shirt. . .’

German patterns with English in disallowing an unincorporated preposition in predicative possession contexts:

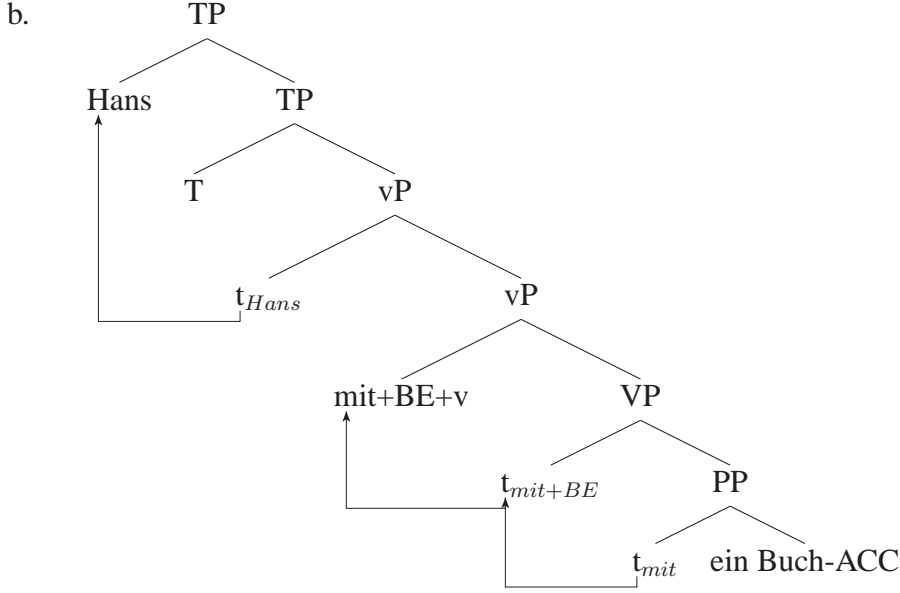
- (82) \* Die Frau            ist mit der        blauen Bluse.  
       the woman.NOM is with the.DAT blue    shirt  
       Intended: ‘The woman has the blue shirt.’

Thus German exhibits the same incorporation pattern as is found with English *with* and *have*. Contrary to Icelandic, German has dative objects in attributive possession, as can be seen in (80) above. There is no context in German where *mit* assigns accusative case. However, the verb *haben* assigns accusative case to its object, as can be seen in (81). It is this ‘shift’ in case between attributive and predicative possession contexts which I posit is correlated with incorporation, along the lines of Baker’s (1988) Government Transparency Corollary, and thus is central to explaining the variation in incorporation in predicative possession constructions.

### 5.1.1 German Predicative Possession

The proposal is that in predicate contexts in German and English, V merges with a PP that has no *p*-layer. Without this *p*, no Case is licensed on the Possessee within the PP. Instead, Case on the Possessee DP must be licensed by a *v* head, merged above. Since the P does not have a *p* to affix to, it must instead move to incorporate with BE. The V complex, *mit*+BE, then moves to *v*. In German, this complex is pronounced as a form of the verb *haben*, while in English it would be a form of *have*.

- (83) a. Hans hat **ein** Buch.  
 Hans has **a.ACC** book  
 ‘Hans has a book.’



Step-wise:

- (84) a. *mit* (+control) selects the Possessee *ein Buch* as complement (**no Case is assigned**)  
 b. [ *mit* [ *ein Buch* ] ] → the copula/BE is merged  
 c. [ BE [ *mit* [ *ein Buch* ] ] ] → *mit*, as a weak, affixal head, moves, adjoining to V  
 d. [ *mit+BE* [  $t_{mit}$  [ *ein Buch* ] ] ] → merger of an accusative-assigning, introducing *v*.  
**Case is assigned to *ein Buch***  
 e. [ *v* [ *mit+BE* [  $t_{mit}$  [ *ein Buch* ] ] ] ] → V moves up and adjoins to affixal/null *v*  
 f. [ *v+mit+BE* [  $t_{mit+be}$  [  $t_{mit}$  [ *ein Buch* ] ] ] ] → *v* introduces the Possessor argument in its spec  
 g. [ *Hans* [ *v+mit+BE* [  $t_{mit+be}$  [  $t_{mit}$  [ *ein Buch* ] ] ] ] ] → merger of T  
 h. [ T [ *Hans* [ *v+mit+BE* [  $t_{mit+be}$  [  $t_{mit}$  [ *ein Buch* ] ] ] ] ] ] → the Possessor, the highest DP, moves to subject position, spec,TP  
 i. [ *Hans* [ T [  $t_{Hans}$  [ *v+mit+BE* [  $t_{mit+be}$  [  $t_{mit}$  [ *ein Buch* ] ] ] ] ] ] ] ]

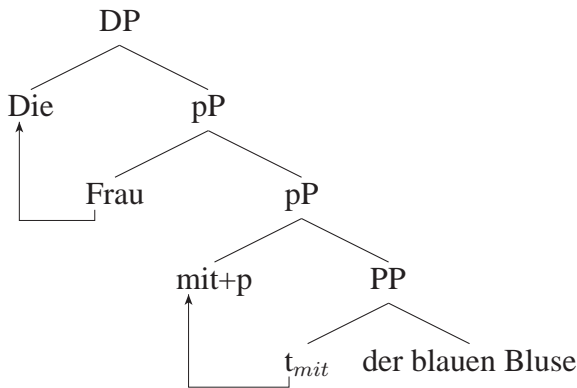
In a HAVE context, since the PP selected by V has no *p*, Case is not assigned PP-internally, and the Possessee receives structural accusative Case from *v*. This *v* also introduces the external argument which cannot be merged in a PP lacking a *p* head. The affixal nature of the P also drives the incorporation of *mit*, giving *haben*.

### 5.1.2 German Attributive Possession

Unlike Icelandic, German and English possessive with-PPs vary in realization between verbal and predicative contexts. This can again be attributed to the fact that the PPs are ‘impoverished’, in that the environment will determine what they must affix to. In the verbal environment they affix

to V, producing a HAVE verb, but in the attributive context, there is no verbal projection. Rather, there must be an argument-introducing, Case-assigning head of a different category, perhaps a kind of *p*, which licenses the Case on the DP object. This Case-assigning element is clearly not the same one as found in the verbal environment, since in German we can see that attributive contexts with *mit* produce a dative-marked object, rather than the accusative-marked one found with *haben*. Thus, in attributive contexts,  $D^o$  selects a *pP* containing *mit*, where *p* assigns dative Case. *p*, or some comparable functional head, must be present, since in this environment it must introduce the Possessor argument. This derivation is exemplified in (85):

- (85) Die Frau mit **der** blauen Bluse ...  
 the woman.NOM with **the**.DAT blue shirt  
 ‘The woman with the blue shirt. . .’



Step-wise:

- (86) a. *mit* selects the Possessee *der blauen Bluse* as complement (**no Case is assigned**)  
 b. [ *mit* [ *der blauen Bluse* ] ] → merger of an dative-assigning, argument introducing *p*.  
**Case is assigned to *der blauen Bluse***  
 c. [ *p* [ *mit* [ *der blauen Bluse* ] ] ] → *mit* head-moves to null/affixal *p*  
 d. [ *mit+p* [ *t<sub>mit</sub>* [ *der blauen Bluse* ] ] ] → *p* introduces Possessor argument in its spec  
 e. [ *Frau* [ *mit+p* [ *t<sub>mit</sub>* [ *der blauen Bluse* ] ] ] ] → merger of D  
 f. [ *Die* [ *Frau* [ *mit+p* [ *t<sub>mit</sub>* [ *der blauen Bluse* ] ] ] ] ]

English patterns the same as German with respect to incorporation, and thus it seems that English *with* is parallel with German *mit* in the relevant respects. There is no distinction between dative and accusative morphological case in English. However, this analysis predicts that there is a contrast in Case assignment in English all the same - namely that the object of *have* is assigned Case by *v*, while the object of *with* in attributive possession is assigned Case by a *p* that is absent in predicative contexts.

The Case-assigning head in this environment is different from the *p* heads in Icelandic, as it does not seem to determine the interpretation. That is, a dative-marked object of *mit* could be interpreted as either being in a symmetrical relation or a control relation. I propose the following inventory of elements for German (with comparable elements in English as well):

(87)

| head                          | Case feature | argument relations           |
|-------------------------------|--------------|------------------------------|
| $\text{mit}_{\text{control}}$ | -            | control/temporary possession |
| $\text{mit}_{\text{sym}}$     | -            | symmetry/accompaniment       |
| $p_{\text{dat}}$              | dative       | underspecified               |

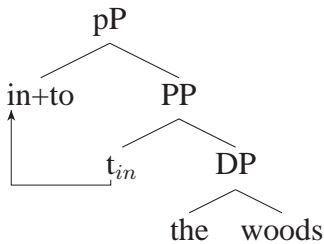
- (88) a.  $\llbracket \text{mit}_{\text{control}} \rrbracket = \lambda x_e \lambda y_e \lambda e_s. \text{accompaniment}(e) \ \& \ \text{theme}(e, x) \ \& \ \text{controller}(e, y)$   
b.  $\llbracket \text{mit}_{\text{sym}} \rrbracket = \lambda x_e \lambda y_e \lambda e_s. \text{accompaniment}(e) \ \& \ \text{theme}(e, x) \ \& \ \text{companion}(e, y)$   
c.  $\llbracket p_{\text{dat}} \rrbracket = \lambda P_{\langle e, \langle s, t \rangle \rangle} \lambda z_e \lambda f_s. P(z)(f)$

In sum, German and English, it is the selection of a PP rather than a *pP* which drives incorporation in predicative possession contexts. In Icelandic, there is no such incorporation. This indicates that *með* is always embedded within a *pP* in Icelandic, which is consistent with the fact that it assigns the same Case in both attributive and predicative contexts in the language. In Icelandic it appears that the *p* which selects *með* can itself assign accusative Case.

## 5.2 Further Evidence and Extensions

Above, I alluded to the fact that further evidence would be proposed for the incorporation of *P* to *p* in *pP* structures. This evidence comes from the behavior of morphologically complex prepositions. For one, to my knowledge, complex prepositions in Germanic never incorporate. Based on what I have proposed regarding incorporation, this could mean that complex prepositions are never lacking a *p* projection; thus, like Icelandic *með*, they are never able to incorporate. Combining the fact that these prepositions must have a *p*, and the fact that they have an additional morpheme as well, I propose that this additional morpheme is the spellout of a *p* head. For example, English *into* would have the following structure:

- (89) into the woods



If *to* is a realization of *p*, then we have a straightforward way to explain that such PPs cannot incorporate; in essence, they are always ‘strong.’

Another such complex preposition is *without*, which is essentially the negative counterpart of possessive *with*. As this analysis predicts, in contrast with *with*, *without*, and the corresponding preposition in German, *ohne*<sup>11</sup>, do not incorporate in predicative contexts. Thus (90) and (91) are OK:

<sup>11</sup> *Ohne* seems to only spellout the higher head, equivalent to English *out*. Interestingly, according to Tom Leu (p.c.), child speakers of Swiss German make the ‘mistake’ of saying the equivalent of *mitohne*. Marcel den Dikken (p.c.) reports that Dutch children do the same.



- (90) John has been without a job for a long time.
- (91) Hans ist schon seit längerem ohne Arbeit.  
 Hans is already since long-time without work  
 ‘Hans has been without a job for a long time.’

Although these are not the most natural sentences, since sentential negation with *have* is more commonly used for such expressions, they contrast clearly with the variants with simplex *with* and *mit*:

- (92) \* John has been with a job for a long time.
- (93) \* Hans ist schon seit längerem mit Arbeit.  
 Hans is already since long-time with work  
 ‘Hans has had a job for a long time.’

Thus we have further evidence for the correlation between the complexity of PP and incorporation. When the possessive preposition is the negated complex *without*, English and German look like Icelandic, where *með* is always complex.

Given this analysis, a straightforward way to account for the lack of incorporation in locative-based possession structures is to posit that all such locative structures with complements contain a Case-assigning *p*, and thus are strong and do not incorporate. This would be consistent with recent analyses of locative PPs as complex and containing Path and Place projections, as in Koopman 1997, Den Dikken 2003 and Noonan 2004.

## 6 Conclusion

The data and analysis presented in this paper show that not only is a non-locative approach to HAVE tenable, it is superior to locative accounts in explaining possession in Germanic and the variation in preposition incorporation within Germanic and beyond. Identifying Harley’s (2002)  $P_{HAVE}$  with the overt preposition *með* and others like it provides a means for exploring the question of incorporation in a way that is not possible otherwise. For one, it shows that incorporation correlates with a shift in Case assignment that is not found in non-incorporation environments. This provides a locus for explaining the lack of incorporation found in languages like Icelandic which otherwise have the ingredients necessary for HAVE, namely the presence of a Case-assigning *p* head and incorporation. This analysis further points to a way to account for the non-incorporation into BE of locative prepositions in both BE and HAVE languages as being due to the additional complexity required by such prepositions. This analysis provides further support for the extended PP in the vein of Koopman 1997, but also shows that not all PPs contain a *p* head, and predicts consequences for Case assignment and incorporation based on this contrast.

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