

Why have-verbs can take bare nominals

For Norwegian (Borthen 2003), Spanish (Espinal & McNally 2010), Brazilian Portuguese (Cyrino & Espinal 2011) and Greek (Lazaridou-Chatzigoga 2011), it has been claimed that verbs having a HAVE component are special in the sense that they can take bare singular objects. We explain this cross-linguistic tendency by showing that the derivation of bare nominals with HAVE verbs is simpler than the one we would need for non-bare nominals. We however start by arguing that HAVE verbs should be distinguished from two other classes of verbs that tend to allow for bare singular objects.

1. HAVE vs. creation and negated verbs

Next to HAVE verbs, we also find that creation and negated verbs are sometimes compatible with bare singulars (examples taken from Borthen 2003 and Renzi et al. 2001):

- (1) Per og Kari lager garasje. NORWEGIAN
Per and Kari make garage
- (2) Non si trovava taxi in tutta la città. ITALIAN
Neg refl found taxi in whole the city

One might consequently be tempted to come up with a unified semantic account for all three verb classes. Two objections lead us to refrain from this enterprise. The first is empirical: if there were a straightforward semantic connection between these types of verbs, we would expect them to pattern alike across languages. This expectation is not borne out though: languages like Catalan and Spanish e.g. do allow for bare singulars with HAVE verbs but not with creation verbs. The second objection is semantic in nature: objects of creation verbs as well as objects occurring in the scope of negation are semantically different from those of HAVE verbs in the sense that they don't have an extension. We make this point on the basis of (3) to (5):

- (3) John is knitting a sweater. It's black.
(4) I don't see a dog. It's black.
(5) I have a dog. It's black.

Insofar as *it* is referring to the object of knitting in (1), it's referring to an incremental theme and not to a black sweater (see McCreedy 2006). For (2), *it* can only refer to a dog if *a dog* scopes over negation. *It* in (5) is different though in the sense that it can be said to straightforwardly refer to an existing dog.

2. Existential HAVE

We propose to link the ability of HAVE to take bare nominals to what has been analyzed as its 'existential' reading, illustrated in (6) (example taken from Partee 1999).

- (6) John has two sisters.

The typical challenge for an analysis of existential HAVE is to account for the fact that *sisters* – a relational noun – seems to combine semantically with *John* before it combines with *two* (see Landman & Partee 1987, Szabolcsi 1994, Partee 1999, Landman 2004, and Saebo 2009). The most elegant analyses that have been proposed of (6) involve either lambda-abstraction at the level of the HAVE verb (Saebo 2009) or subject raising (Szabolcsi 1994). We argue that these complex operations contrast sharply with the simple combinatorics we need for a version in which we assume *two* is not a determiner and – by transitivity – for examples like (7) in which the HAVE verb combines with a bare nominal (example taken from Borthen 2003). We will show that, if we minimize the semantic contribution of HAVE, *two sisters* and *snill storebror* can directly combine with *John* and *Hun* respectively and there is no further need for lambda-abstraction or subject raising. This in turn explains why languages – even if they have generalized the use of determiners to most argument positions – might still allow for bare nominals with HAVE verbs.

- (7) Hun har snill storebror. NORWEGIAN
she has kind big-brother

We first spell out our assumptions about the semantics of HAVE. Note that these are independent of our analysis of 'existential' have in (7). We take HAVE to function as a coercion operator on its complement: it requires the predicate contained in its complement (i) to denote a state and (ii) to be of a type that can combine with the subject (i.e. a type that takes a type *e* expression as input). The first requirement is inspired by the aspectual properties of HAVE (see Landman 2004). The second requirement is inspired by the observation that HAVE verbs can combine with small clauses (example taken from Saebo 2009):

- (8) Most cars have the engine in the front.

Under the assumption that *the engine in the front* is a proposition in itself, there seems to be no more need for *most cars* and we would expect (8) to be semantically deviant. The fact that it is not shows that *have* plays a role. We take this role to be one of abstraction (see also Saebo 2009): if the complement of HAVE doesn't require an argument, we take HAVE to perform lambda-

abstraction over one of the arguments in the small clause. In the case of (8) this would be the implicit argument that corresponds to the possessor of the engine.

With our assumptions about HAVE in place we can work out the analysis of (7). We take relational nouns to be of type $\langle e, \langle e, t \rangle \rangle$ (De Bruin & Scha 1988). *Storebror* can then be represented as follows:

$$(9) \quad \lambda x_e \lambda y_e (\text{big-brother-of}(y_e, x_e))$$

The semantics of *snill* is that of a modifier and if we allow for flexible types, its semantic contribution can be represented as follows (on its $\langle \langle e, \langle e, t \rangle \rangle, \langle e, \langle e, t \rangle \rangle \rangle$ interpretation):

$$(10) \quad \lambda R_{\langle e, \langle e, t \rangle \rangle} \lambda x_e \lambda y_e (R_{\langle e, \langle e, t \rangle \rangle}(y_e, x_e) \& \text{big}_{\langle e, t \rangle}(y_e))$$

The semantics of *snill storebror* follows straightforwardly:

$$(11) \quad \lambda x_e \lambda y_e (\text{big-brother-of}(y_e, x_e) \& \text{big}_{\langle e, t \rangle}(y_e))$$

The next step is to combine (11) with *har*. Crucially, the semantic contribution we assume for HAVE makes sure that the output of this combination is identical to (11). Indeed, *snill storebror* already has a type that can combine with the subject and – even though we didn't represent it explicitly as a state – standing in a relation to someone does qualify as one. The contribution of *Har* is then effectively minimized to that of an identity predicate.

The next step is to combine (11) with *Hun* that we represent as the constant k (of type e):

$$(12) \quad \lambda y_e (\text{big-brother-of}(y_e, k_e) \& \text{big}_{\langle e, t \rangle}(y_e))$$

We thus end up with an expression of type $\langle e, t \rangle$. This is of course not yet the semantics of (7). The way we proceed from here depends on the type of data we want to account for. If we restrict ourselves to truth conditions we can get the final semantics by applying standard existential closure to (12). If we however also want to account for the fact that anaphoric pick-up is typically not allowed for bare singular objects of HAVE, we can also reformulate standard existential closure as applying the entity correlate of (12) to the predicate *instantiate* (see McNally 1992). This ensures that we don't have explicit existential quantification over y – a move that has been interpreted as being equivalent to not introducing a discourse referent and thus blocking anaphoric pick-up (see Espinal & McNally 2010, Aguilar-Guevara & Zwarts 2010).

In the preceding, we have shown that all we need to combine *storebror*, *nill*, *har* and *hun* is their basic semantics and standard function application. This is in sharp contrast with analyses of (6) that assume *two* is a determiner and have to resort to lambda-abstraction or subject-raising. We take the simplicity of the analysis we proposed to explain the possibility for languages to allow for bare nominals with HAVE verbs as a less costly alternative to full DPs.

3. Some challenges treated from a Spanish perspective

The analysis we proposed in 2. crucially relies on the assumption that any relational noun can occur as the object of HAVE verbs and that any bare nominal that occurs as the object of HAVE verbs is a relational noun. This is less obvious than one might want it to be: Spanish HAVE verbs e.g. (i) combine with nouns like *coche* ('car') that are not straightforwardly relational and (ii) barely combine with some prototypical relational nouns like *hermano* ('brother'). The first problem is less serious than it might seem in the sense that any noun can be reinterpreted as relational (Löbner 2010). The second problem suggests that what the Spanish facts show is that the analysis in 2. should not be seen as an analysis of present-day Spanish but should be interpreted from a diachronic perspective: it explains why HAVE verbs **at some point in history** allowed for bare singular complements. If we look at Spanish HAVE verbs from this perspective, it's not surprising to see that the tension that exists between the generalization of determiners and the resistance to determiners with HAVE verbs has resulted in a number of idiosyncracies. We furthermore make a prediction about the acceptability of *tener hermano* in earlier stages of Spanish, *viz.* that it should have been acceptable. This prediction is borne out: despite the fact that we don't find any examples of *tener hermano* or *tener hermana* ('have brother/sister') in the 18th till 20th century part of the *Corpus del Español* (except after negation), we do find them up to the 17th century.

4. A note on Brazilian Portuguese, *with* and *without*

The account developed in 2. allows for straightforward extensions to recently discussed data. Cyrino & Espinal (2011) demonstrate that bare singulars occurring with HAVE verbs in Brazilian Portuguese are NPs as long as they don't occur with small clauses or secondary predicates. As soon as they do combine with these, bare singulars project an empty D. What these authors don't explain is why bare nominals wouldn't project a D in the absence of small clauses or secondary predicates. The analysis proposed in 2. offers an elegant explanation: without the determiner, the derivation is less complex, both from a syntactic and a semantic perspective. Another phenomenon that has recently caught attention is the fact that *with* and *without* cross-linguistically combine with bare singular nouns more easily than other prepositions (see de Swart 2012). Under the assumption that these prepositions have a semantics similar to that of HAVE (see Stassen 2009), the account in 2. offers a straightforward explanation of this generalization.