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Have, with and *without* *

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Abstract The research reported in this paper is part of our attempt to get to a deeper understanding of why *with* and *without* are special prepositions in taking singular bare nouns more easily than other prepositions. The paper focuses on the semantics of existential and incorporation *have*, which we take to be the same and to constitute the verbal counterpart of *with* and *without*. We propose existential/incorporation *have* builds relations: it selects one-place predicates and turns them into two-place predicates.

Keywords: Existential *have*, Incorporation *have*, Bare nouns, *With* and *Without*

1 Introduction

Recent corpus work on bare nouns in PPs in Romance and Germanic has shown that some prepositions are more likely to be followed by bare nouns than others. One preposition pair in particular stands out, *viz. with* and *without* (Le Bruyn, de Swart & Zwarts 2009; Kiss & Roch *to appear*):[1]

(1) without result
(2) met resultaat DUTCH
with result
(3) uten sal NORWEGIAN
without saddle
(4) con baño SPANISH
with bathtub

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[1] In this paper we are abstracting away from the fact that within the *with*/*without* pair, *without* takes bare nouns even more productively than *with*. See Kiss & Roch (*to appear*).

(5) sans témoin FRENCH
without witness

(6) mit Garten GERMAN
with garden

The research reported in this paper is part of our attempt to get to a deeper understanding of why these prepositions are special. We start our exploration in the literature on incorporation *have* (section 2), establish a link with existential *have* (section 3) and propose a new unified analysis of the two (section 4). Section 5 concludes and gets us back to *with* and *without*.

2 *With*, *without* and incorporation *have*

Under the assumption that the appearance of *with* and *without* with bare nouns is not an isolated phenomenon, it is instructive to look at semantically similar cases outside the preposition domain. Le Bruyn et al. (2009) as well as Castroviejo, Oltra-Massuet & Pérez-Jiménez (2012) suggest a link with incorporation *have* (Borthen 2003; Dobrovie-Sorin, Bleam & Espinal 2006; Espinal & McNally 2009, 2011; Lazaridou-Chatzigoga & Alexandropoulou 2013):

(7) Han hadde rød ytterfrakk. NORWEGIAN
he had red coat
'He had a red coat.'

(8) Ion are casă. ROMANIAN
Ion has house
'John has a house.'

(9) María tiene casa. SPANISH
María has house
'María has a house.'

(10) Eho amaksi. GREEK
Have car
'I have a car.'

The examples in (7) to (10) show how a number of languages that in principle require their singular arguments to appear with determiners make an exception for *have*. Even though the counterparts of *have* in languages like English, Dutch and French in general don't take bare nouns, the pattern emerging in (7) to (10) is difficult to ignore and raises the following question: what is special about *have* that makes it compatible with bare nouns?

Before we look into the literature on incorporation *have*, we need to make explicit two simplifications we are building into this paper. The first is that we are

restricting our attention to *have* and its cross-linguistic counterparts even though other semantically related verbs like *to wear*, *to buy*, etc. behave the same way to some extent. The motivation for this comes from the intuition that the *have*-relation is the semantic core of these verbs, which – in the literature – have been dubbed *have* verbs (Borthen 2003). The second simplification is that we will not focus on a number of semantic/pragmatic effects that are sometimes attributed to incorporation *have*: the reduced discourse transparency of its object or the limits on the nouns it can combine with. Our intuition is that the cross-linguistic picture that emerges in (7-10) can only be accounted for if there is a stable semantic reason for incorporation *have* to behave the way it does. We consequently want to avoid zooming in on semantic/pragmatic effects that – at least in part – vary cross-linguistically.

With the above simplications in mind, we can take a closer look at the literature on incorporation *have*. The most advanced analysis we are aware of is the one proposed by Espinal & McNally (2011) for Catalan and Spanish. They propose a lexical rule by which verbs denoting situations that depend on the existence of a *have*-relation can be shifted from verbs taking e-type objects to verbs taking <e,t>-type objects. By restricting the application of this lexical rule to verbs involving a *have*-relation, Espinal & McNally nicely capture the class of verbs that allow for bare singular arguments in Catalan and Spanish.

Despite its empirical coverage as well as its theoretical contribution to the literature on incorporation, the analysis Espinal & McNally propose leaves an important question unanswered. Indeed, their analysis presupposes that *have* is special, but it doesn't explain what it is that sets *have* apart from other verbs. In this paper we want to take the analysis of *have* one step further before returning to the preposition domain. This is what we will do in sections 3 and 4.

3 From existential *have* to incorporation *have*

The basic question we will be answering in the present and the next section is why *have* is more likely than other verbs to take bare singular objects. As we have seen in section 2, this question hasn't been raised in the literature on incorporation *have* but there's an ironic inverse of this question in the literature on existential *have* (Landman & Partee 1987; Partee 1999; Landman 2004; Sæbø 2009):

(11) Mary has a sister.

(12) *Mary has the sister.

The intuition about (11) is that it is not about Mary 'having' a sister but rather about a sister relation holding between someone and Mary. Accounting for this intuition has been at the heart of the literature on what is known as existential *have*, a name inspired by its apparent restriction to indefinite objects (compare

(11-12)). The basic strategy all analyses pursue is to turn Mary into the first argument of the relational object noun. The challenge then is to circumvent both the indefinite article and *have*.

In this section we zoom in on Landman's analysis, in which circumventing the indefinite article effectively boils down to rendering its presence superfluous. Even though we will ultimately reject his analysis, it does provide a very good starting point for our own.

Landman's analysis is embedded in his adjectival analysis of indefinites according to which indefinite DPs are generated as predicates. In this analysis of indefinites, the indefinite article makes no semantic contribution.

For reasons of space, we will give a simplified version of Landman's *have*:

(13) [[have]] = $\lambda\mathbf{R}\lambda v\exists z(\mathbf{R}(v)(z))$
Where **R** is of type <e,<e,t>>

What (13) does is select a relation, keep its first argument available for the subject to bind, and existentially close its second argument.

The derivation of (11) is worked out in (14):

(14) [[sister]] = $\lambda x\lambda y(\textbf{sister of}\ (x)(y))$
[[a sister]] = $\lambda x\lambda y(\textbf{sister of}\ (x)(y))$
[[have a sister]] = $\lambda\mathbf{R}\lambda v\exists z(\mathbf{R}(v)(z))\quad(\lambda x\lambda y(\textbf{sister of}\ (x)(y)))$
$\lambda v\exists z(\lambda x\lambda y(\textbf{sister of}\ (x)(y))(v)(z))$
$\lambda v\exists z(\textbf{sister of}\ (v)(z))$
[[Mary have a sister]] = $\exists z(\textbf{sister of}\ (\text{Mary})(z))$

With the assumptions about *a* and *have* in place, the derivation is straightforward. The end result is as desired: the sentence is true as soon as there is an individual who stands in the *sister*-relation to Mary.

Abstracting away from the details, the main insight Landman has is that *have* is a unique verb in that it mediates between relations at the nominal and at the sentence level. The role of the indefinite article is consequently void: *have* selects relational objects and turns them into the main predicate of the sentence, a process in which the indefinite article has no semantic role to play.

Now that we have established how the indefinite article can be superfluous for existential *have*, we can ask the question whether we can extend the analysis in (13) to incorporation *have*. The short answer is yes. Indeed, there is no formal reason that would prevent us from doing so. The only assumption we have to make is that the object nouns in (7-10) have all been reinterpreted as relational. This assumption comes at a very low cost given that the transitivisation operation underlying this reinterpretation has been independently motivated in the literature on possession (see Barker 2011):

(15) [[transitivise]] = λPλxλy(P(y)&**R**(x)(y))
where **R** is a free pragmatically controlled variable standing for a relation

What (15) does is select a one-place predicate and turn it into a two-place predicate. We follow Sæbø (2009) in assuming that the pragmatic specification of **R** typically involves basic relations like the *own*- or the *part of*-relation. A predicate like *house* could then come out as in (16) where we have interpreted **R** as the *own*-relation.

(16) λxλy(house(y)&**owned by**(x)(y))

When combined with Landman's version of existential *have*, this leads to the following semantics for (9):

(17) [[María tiene casa]]= ∃z(house(z)&**owned by**(Mary)(z))

As desired, *María tiene casa* will turn out to be true in case there is a house that Mary owns.

The conclusion we arrive at is that existential *have* and incorporation *have* can both be analysed as in (13). The special characteristic of *have* that makes it compatible with bare nouns is consequently that it mediates between relations at the object and at the sentence level.

4 *Have* some more

In section 3, we said that there was no formal reason that would prevent us from analysing incorporation *have* along the same lines as existential *have* in Landman's analysis. Doing so would, however, make an important prediction, *viz.* that relational nouns and nouns with a clear relational interpretation are the preferred type of noun for incorporation *have* to combine with. A quick study of the singular bare nouns combining with the Spanish counterpart of *have* in the *Corpus del Español* however reveals that this prediction is not borne out, neither in synchrony nor in diachrony. The proposal to extend Landman's analysis of existential *have* to incorporation *have* consequently loses an important part of its appeal.

In this section, we propose a new analysis of incorporation *have* that builds on Landman's analysis of existential *have* (4.1.). We furthermore show that it can be extended to existential *have* (4.2) and how it can even solve a potential problem for Landman's analysis (4.3). At the end of this section, we will be in a position to give our final answer to the question why *have* is more likely to take bare singular objects than other verbs (4.4.). In section 5 we will then translate this insight to the preposition domain.

4.1 From a relation mediator to a relation builder

The gist of our proposal is that instead of being a relation mediator, *have* actually builds relations: where Landman makes *have* select two-place predicates, we propose it selects one-place predicates and transitivises them:

(18) [[have]] = λPλz∃n(transitivise(P)(z)(n))

To show the effect of (18), we work out the derivation of (9). From now on we will add letters to the different steps of the derivations in order to be able to comment on some of the details.

(19) [[María tiene casa]] =
[[casa]] =
a. λy(casa(y))
[[tiene casa]] =
b. λPλz∃n(transitivise(P)(z)(n)) (λx(casa(x)))
c. λz∃n(transitivise(λy(casa(y)))(z)(n))
d. λz∃n(λxλy(casa(y)&**R**(x)(y))(z)(n))
e. λz∃n(λxλy(casa(y)&**owned by**(x)(y))(z)(n))
f. λz∃n(casa(n)&**owned by**(z)(n))
[[María tiene casa]] =
g. ∃n(casa(n)&**owned by**(María)(n))

Tiene selects the <e,t> predicate *casa* and applies transitivisation to it (see 19d). As before, we pragmatically specify the relation **R** that comes with this transitivisation as the *own*-relation (see 19e). *Tiene* is furthermore parallel to Landman's *have* in that it existentially closes the second argument of the transitivised predicate while keeping its first argument available for binding by the subject. The end result is truth-conditionally equivalent to the one we obtained through Landman's analysis. However, by making sure incorporation *have* does not select relational predicates, we no longer make the prediction that relational nouns or nouns with a clear relational interpretation are its preferred type of object.

We are now in a position to give a first sketch of an answer to our leading question, *viz.* why it is that *have* is more likely to combine with singular bare objects than other verbs. The answer is that *have* – and in particular incorporation *have* – is special in that it comes with a built-in transitivisation operation that takes one-place predicates as its input. Transitivisation consists in adding a two-place predicate **R** that takes the argument of the input predicate as its second argument.

We indicated before that we assume the default specification of **R** will involve basic relations like the *own*- or the *part of*-relation. In sections 4.2. and 4.3. we will see that this default can be overruled as soon as there are contextually salient relations. This will prove crucial in extending our analysis of incorporation *have* to existential *have*.

4.2 From incorporation *have* to existential *have*

In this section we show how our analysis of incorporation *have* can be extended to existential *have*.

If incorporation and existential *have* are indeed the same verb, this means they should also select the same type of arguments. Given our assumption that incorporation *have* selects <e,t> predicates, we consequently expect existential *have* to do the same. What this amounts to is that the relational nouns that are typically taken to combine with existential *have* cannot maintain their relational nature in the process. As a consequence, we expect relational nouns like *sister* – at least at some point in the derivation – to have the following detransitivised semantics:

(20) $\lambda x \exists y(\textbf{sister of}(y)(x))$

What we have done in (20) is to existentially close the first argument of *sister*, thus ending up with the set of individuals who are sisters of someone. For this paper, we remain neutral as to whether we should take (20) to be the lexical entry of *sister* or whether we should take it to be the result of a type-coercion operation. It should be clear, though, that the relation-building nature of *have* makes most sense if it turns out to be a necessary ingredient to transitivise nouns.

In order to show that our analysis of incorporation *have* derives the correct semantics for (11), we work out and discuss its derivation:

(21) Mary has a sister

[[a sister]] =

a. $\lambda P \exists x \exists y(\textbf{sister of}(y)(x) \& P(x))$

[[have a sister]] =

b. $\lambda P \lambda z \exists n(\text{transitivise}(P)(z)(n))\ (\lambda P \exists x \exists y(\textbf{sister of}(y)(x) \& P(x)))$

[type-clash]

c. $\lambda P \lambda z \exists n(\text{transitivise}(P)(z)(n))\ \ (\lambda x \exists y(\textbf{sister of}(y)(x)))$

[BE]

d. $\lambda z \exists n(\text{transitivise}(\lambda x \exists y(\textbf{sister of}(y)(x)))(z)(n))$

e. $\lambda z \exists n(\lambda v \lambda x \exists y(\textbf{sister of}(y)(x) \& \textbf{R}(v)(x))(z)(n))$

f. $\lambda z \exists n(\exists y(\textbf{sister of}(y)(n) \& \textbf{R}(z)(n)))$

[transitivisation and λ-conversions]

g. λzꓱn(ꓱy(**sister of**(y)(n)&**sister of**(z)(n)))

[pragmatic specification of **R**]

[[Mary have a sister]] =

h. ꓱn(ꓱy(**sister of**(y)(n)&**sister of**(Mary)(n)))

The crucial observation is that this derivation ends up with the right analysis. It derives that *Mary has a sister* is true as soon as someone stands in the *sister*-relation to Mary. There are, however, two peculiarities that deserve closer attention. The first is to be found in (21b) and (21c) where we see that the type of *a sister* clashes with the type requirement of *have*: *have* needs an <e,t> argument where *a sister* is of type <<e,t>,t>. This type-clash is resolved by a standard BE type-shift that undoes the contribution of the indefinite article. The second peculiarity is to be found in g. where we pragmatically specify **R** as the contextually salient *sister*-relation. This raises two questions. The first is whether our analysis is not too weak: if we had not specified **R** as the *sister*-relation, we would have ended up with an interpretation according to which Mary need not have a sister. Interestingly though, this is as desired. Indeed, even though *Mary has a sister* typically means that there is a *sister*-relation between someone and Mary, the sentence is also felicitous in a context in which Mary belongs to a group of individuals who have to take care of other people's sisters. **R** would then be specified as *having to take care of*. This suggests that our analysis is not weaker than Landman's and that by relegating the specification of **R** to pragmatics we improve on its empirical coverage. The second question our specification of **R** raises is concerned with the apparent redundancy we are creating. As becomes clear in (21g), our analysis specifies twice that *n* stands in the *sister*-relation to someone. We get back to this in section 4.4. where we will argue that – rather than being an unwarranted redundancy – this double specification constitutes another improvement on Landman's analysis.

Given that the derivation in (21) leads to the desired interpretation, we take it to be established that our analysis of incorporation *have* can be extended to existential *have*. Before we formulate our final answer to the question why *have* – and in particular incorporation/existential *have* – is more likely than other verbs to take singular bare objects, we briefly show how our analysis avoids a potential problem Landman's analysis faces. This is the topic of section 4.4.

4.4 A problem for Landman

In this section we work out a problem Landman's analysis of existential *have* seems to face and show how it disappears if we assume our analysis. We leave it to the reader to check that other classic analyses like Partee 1999 and Sæbø 2009

face the same problem as Landman (see also Le Bruyn, de Swart & Zwarts, *submitted*).

The problem pops up in the analysis of sentences like (22):

(22) Mary has the only lazy sister.

If we were to follow the standard theoretical intuition according to which Mary functions as the first argument of *sister*, the sentence would read as *Mary has a single lazy sister*. This interpretation does not correspond to the one we typically get for (22), *viz.* that Mary is the only person who has a lazy sister. The crucial difference between the two is that the former would allow other people than Mary to have lazy sisters whereas the latter does not allow for this possibility. In what follows we develop our argument by working out two derivations: one following Landman's analysis of *have* and one following our own.

We start by fixing the semantics we assume for *the* and *only*. Given that the two analyses of *have* we will be working with come with different type requirements, we present type variants for each of them, starting with *the*.

The fact that the definite article appears to be allowed with existential *have* seems to come as a surprise given the unacceptability of (12). The thought that some uses of *the* actually do co-occur with existential *have* has consequently never really entered the discussion. Most authors, including Landman, have accordingly tried to come up with ways to exclude the definite article from combining with existential *have*. Interestingly though, Partee's and Sæbø's use of the predicate *exist* only blocks the presuppositional version of the definite article from appearing with existential *have* whereas its non-presuppositional version is expected to be fine. It's this version that we will adopt. In (23) we present the standard generalized quantifier analysis of non-presuppositional *the*, in (24) its adjectival counterpart, and in (25) its adjectival relational counterpart:

(23) $[\![\text{the}]\!] = \quad \lambda P \lambda Q \exists x(P(x) \& \forall z(P(z) \rightarrow x=z) \& Q(x))$

(24) $[\![\text{the}_{\text{adj}}]\!] = \quad \lambda P \lambda x(P(x) \& \forall z(P(z) \rightarrow x=z))$

(25) $[\![\text{the}_{\text{adj/rel}}]\!] = \quad \lambda \mathbf{R} \lambda x \lambda y(\mathbf{R}(x)(y) \& \forall z(\mathbf{R}(x)(z) \rightarrow y=z))$

We will use (24) as a shorthand in combination with our version of *have*. This is identical to assuming (23) with an application of BE after combining the determiner with its complement. For Landman's *have* we will use (25). This is necessary to implement his intuition that *have* mediates between relations at the object and at the sentence level.

DP-internal *only* has received fairly little attention in the literature. The two accounts we are aware of are the ones by McNally (2008) and Coppock & Beaver (2012). Both accounts – glossing over some details – give the lexical entry in (26), which we will adopt in its basic version for our analysis of *have* and in its relational version in (27) for Landman's analysis:

(26) [[only]] = $\lambda P \lambda x(P(x) \& \forall z(P(z) \rightarrow z=x))$

(27) [[only$_{rel}$]] = $\lambda \mathbf{R} \lambda y \lambda x(\mathbf{R}(y)(x) \& \forall z(\mathbf{R}(y)(z) \rightarrow x=z))$

Given that the semantic effects of *only* are included in *the*, we will take the semantics of *the* in (24) and (25) to be our shorthand for the semantics of *the only*.

With the above lexical entries in place, we can work out both Landman's and our analysis of (22). We start by spelling out Landman's:

(28) [[Mary has the only lazy sister]]=

a. [[sister]]=

$\lambda x \lambda y($**sister of**$(x)(y))$

b. [[lazy sister]]=

$\lambda x \lambda y($**sister of**$(x)(y) \& lazy(y))$

c. [[the only lazy sister]] =

$\lambda x \lambda y($**sister of**$(x)(y) \& lazy(y) \& \forall z((\mathbf{sister\ of}(x)(z) \& lazy(z)) \rightarrow y=z))$

e. [[have the only lazy sister]] =

$\lambda x \exists y($**sister of**$(x)(y) \& lazy(y) \& \forall z((\mathbf{sister\ of}(x)(z) \& lazy(z)) \rightarrow y=z))$

f. [[Mary have the only lazy sister]] =

$\exists y($**sister of**$(Mary)(y) \& lazy(y) \& \forall z((\mathbf{sister\ of}(Mary)(z) \& lazy(z)) \rightarrow y=z))$

The problem in this derivation is most obvious in the truth conditions it ends up with: rather than stating that Mary is the only person who has a lazy sister, it states that Mary has a single lazy sister. The reason we end up with this interpretation is to be found in the fact that the universal quantifier does not quantify over individuals who are lazy sisters but over individuals who are lazy sisters of Mary. This means the problem is to be found in the fact that we specify Mary as the first argument of *sister*.[2]

In (29) we work out our proposal in which we start from our analysis of incorporation *have* and a detransitivised version of *sister*.

(29) [[Mary has the only lazy sister]] =

a. [[sister]] =

$\lambda y \exists x($**sister of**$(x)(y))$

b. [[lazy sister]] =

$\lambda y \exists x($**sister of**$(x)(y) \& lazy(y))$

c. [[the only lazy sister]] =

[2] In Le Bruyn, de Swart & Zwarts (submitted), we explain why we think playing around with the scope of *only* would not save Landman's analysis. We do however agree that a scope trick might work for sentences with superlative objects that – at first sight – seem to constitute a similar problem for Landman.

λy(∃x(**sister of**(x)(y)&lazy(y)&∀z(∃v(**sister of**(v)(z)&lazy(z))→y=z))

d. [[have the only lazy sister]] =

λu∃y(∃x(**sister of**(x)(y)&lazy(y)&∀z(∃v(**sister of**(v)(z)&lazy(z))→y=z)
&**sister of**(u)(y))

e. [[Mary have the only lazy sister]] =

∃y(∃x(**sister of**(x)(y)&lazy(y)&∀z(∃v(**sister of**(v)(z)&lazy(z))→y=z)
&***sister of****(Mary)(y)*)

Despite the fact that the formulas became slightly more complex because of the uniqueness requirement of *the only*, the derivation in (29) is parallel to that in (21). In particular, it states twice that y is a sister of Mary. We can now explain why this double specification is crucial. The first specification (not italicized in 29e) makes sure that y is the only lazy sister in the model while the second specification (in italics in 29e) relates y to Mary. The analysis we end up with thus states that there is a single lazy sister and that it is Mary's. This is as desired.

If we had conflated the two sister specifications we would have ended up with the same problem as Landman's analysis, *viz.* that the sentence would have been about the only lazy sister of Mary rather than about the only lazy sister of anyone. The double specification thus turns out to be a crucial improvement rather than an unwarranted redundancy.

On the basis of the preceding, we conclude that extending our analysis from incorporation *have* to existential *have* and thus giving a unified analysis of the two is not only theoretically attractive but might also have empirical advantages.

4.4 The special nature of *have*

We have now come to the point where we can give our final answer to the question why it is that *have* is more likely to combine with bare singular objects than other verbs. The answer lies in the fact that – at least on its incorporation/existential interpretation – *have* is unique in being a relation-building expression: it selects one-place predicates and turns them into two-place predicates. Adding an indefinite article would consequently be a mere complication of the derivation.

One question that could be raised is why we analyse *have* as a verb containing a transitivisation operator that selects expressions of type <e,t> rather than expressions of type e. If an analysis of the latter type were feasible, we would lose our insight into why *have* easily combines with bare singular objects. One indication that suggests that *have* selects expressions of type <e,t> rather than of type e is to be found in another theoretical intuition of Landman's (2004). Unlike Partee (1999) and Sæbø (2009), Landman builds existential quantification over the second argument of the relational noun into the verb. We follow him in this

strategy by building existential quantification over the second argument of the transitivised predicate into the verb and consequently predict it to always take narrow scope.[3] This seems to be in accordance with our intuitions:

(30) John doesn't have a sister.

The most straightforward interpretation of (30) is that John does not have any sister. A similar observation has been made for incorporation *have* (Espinal & McNally 2011):

(31) Juan no tiene casa.
John not has house
'John doesn't have a(ny) house.'

(31) can only be interpreted as stating that John doesn't have any house. If we had analysed incorporation/existential *have* as a verb taking e-type objects, we would have expected its objects to be able to outscope the negation in (30) and (31). If our intuitions are on the right track, we consequently have ground to assume that *have* selects <e,t>-type rather than e-type objects.

A complicating factor for checking our intuitions is the potential polysemy of *have* that might make it hard to restrict scopal research of its objects to incorporation/existential *have*. We take this to be a challenge for future research.

5 Summary and conclusion

The research reported in this paper was part of our attempt to get to a deeper understanding of why *with* and *without* are special prepositions in taking singular bare nouns more easily than other prepositions. We mainly focused on the verbal domain, proposing and defending a new – unified – analysis for incorporation and existential *have*. The basic intuition underlying the analysis is that *have* builds relations: it selects one-place predicates and turns them into two-place predicates. Returning now to *with* and *without*, our proposal is that they constitute – at least on one of their readings – the counterparts of *have* in the preposition domain. In the same way as *have* triggers relationality for its objects, *with* and *without* trigger it for their complements. In (32), we work this out for *without result*:

(32) a. [[without]] = $\lambda P \lambda z \neg \exists n(\text{transitivise}(P)(z)(n))$
b. [[without result]] = $\lambda z \neg \exists n(\text{result}(n) \& \textbf{Present with}(z)(n))$

(32) presents *without* as the negated preposition counterpart of *have*: it selects a one-place predicate, turns it into a two-place predicate while keeping the first

[3] This is a classic way to force narrow scope. See e.g., Carlson 1977 and Van Geenhoven 1998.

argument of the transitivised predicate available for binding and existentially closing its second argument.

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