## Licensing by modification in two classes of verbs

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Superficially, evaluative verbs (e.g. *like*) resemble habitual verbs (e.g. *eat*) in that they both give specific readings of their singular indefinite arguments and they both can be modified to license a non-specific reading of said argument. In this paper we highlight the resemblance between evaluative verbs and desiderative verbs in order to expose their ability to take a null *HAVE*-clause argument and their intensional status.

#### 1 Introduction

In this paper we examine evaluative verbs, focusing on the evaluative verb *like* as in (1).

(1) Greta likes cookies.

We find that, in certain respects, evaluatives pattern closely with habitual verbs, as shown in (2) and (3). In (2), both habituals and evaluatives give a specific reading of their singular indefinite argument *a cookie*.

(2) a. #Greta eats a cookie.

(habitual)

b. #Greta likes a cookie.

(evaluative)

c. Greta wants a cookie.

(desiderative)

However, as shown in (3), both habituals and evaluatives can be modified to license a non-specific reading of their singular indefinite argument.

(3) a. Greta eats a cookie after dinner.

(habitual)

b. Greta likes a cookie after dinner.

(evaluative)

c. Greta wants a cookie after dinner.

(desiderative)

In Section 2 we propose that both habituals and evaluatives license this non-specific reading via a modifier that allows for low binding of the singular indefinite (cf. Rimell 2004, Ferreira 2005a, Ferreira 2005b).

For the bulk of this paper, however, we will focus on what evaluatives have in common with desideratives, not habituals. We do this through emphasizing two features of desiderative verbs: their ability to take null *HAVE*-clause argument (see paraphrase in (4)) and their intensional status (see example in (5)).

- (4) Greta wants a cookie.  $\approx$  Greta wants to have a cookie.
- (5) Greta wants a unicorn.

(cf. Zimmermann 1993)

The literature provides us with classes of verbs as in (6). Some verbs, like Intensional Transitive Verbs (ITVs) are intensional, while others are not. Some

verbs, like the *need*-type subclass of ITVs and Double Object (DO) constructions (Harley 2002, Harley 2004), take phonologically-null *HAVE*-clause complements, while others do not. We focus on the class of verbs which are both intensional and take *HAVE*-clause complements, specifically *need*-type ITVs, which includes the desiderative *want*.

		+HAVE	-HAVE
	+intensional	want, need,	look for, seek,
(6)		(need-type ITVs)	(look-for-type ITVs)
	-intensional	get, give,	eat, drink,
		(DO constructions)	(habituals)

We argue that evaluatives likewise are intensional and take *HAVE*-clauses, but we propose treating evaluatives not as *need*-type ITVs but rather as what we term 'defective' *need*-type ITVs: they are intensional, but not quite as intensional as *need*-type ITVs, and they take a *HAVE*-clause, but not as consistently as *need*-type ITVs.

		+HAVE	$\pm HAVE$	-HAVE
	+intensional	want, need,		look for, seek,
		(need-type ITVs)		(look-for-type ITVs)
(7)	±intensional		<i>like</i> , <i>hate</i> , (evaluatives)	
			(evaluatives)	
	-intensional	get, give,		eat, drink,
		(DO constructions)		(habituals)

We conclude by relating the behavior in (3) to other cases of licensing by modification, emphasizing that all are paraphrasable as conditionals, hinting at a unified analysis.

# 2 Licensing a non-specific reading

# 2.1 Licensing with habituals

The contrast between (2a) and (3a) has been explored in previous literature (e.g. Rimell 2004, Ferreira 2005a, Ferreira 2005b).

(2a) #Greta eats a cookie.

(simple habitual)

(3a) Greta eats a cookie after dinner.

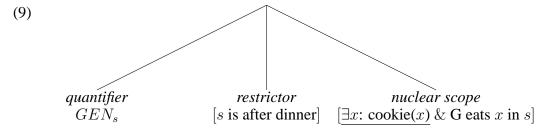
(overtly quantified habitual)

Under Rimell (2004)'s analysis, simple habituals (with no overt quantifier or restrictor) are treated as different from overtly quantified habituals (with an overt quantifier and/or restrictor). In simple habituals like (2a), the singular indefinite obligatorily Quantifier Raises (QRs) to a wide-scope position<sup>1</sup>, resulting in a specific reading, as shown in (8).

(8) 
$$\exists x : \operatorname{cookie}(x). \ \exists_{sufficient} s : G \text{ eats } x \text{ in } s$$

<sup>&</sup>lt;sup>1</sup>According to Rimell, generalization in simple habituals is due to a scopally inert affix of the matrix verb, which is a generalization operator ( $\exists_{\text{sufficient}}$ ) over stages of individuals; the singular indefinite QRs to take scope above this affix.

Overtly quantified habituals like (3a) have a tripartite logical form in which the singular indefinite **does not** take wide scope, allowing it to avoid a specific reading, as shown in (9).



To summarize Rimell's analysis, without an overt quantifier or restrictor, the indefinite QRs which forces a specific reading of the singular indefinite. An overt quantifier or restrictor results in a tripartite structure which does not force a specific reading of the singular indefinite.

# 2.2 Extending licensing to evaluatives

The same pattern from above with habituals is seen with evaluatives.<sup>2</sup>

- (2a) #Greta eats a cookie. (2b) #Greta likes a cookie.
- (3a) Greta eats a cookie after dinner. (3b) Greta likes a cookie after dinner.

We therefore extend Rimell's analysis for habituals to evaluatives. This move is supported by a number of other similarities between habituals and evaluatives. Notably, both habituals and evaluatives involve generalization, where *like* generalizes over situations in which the judge experiences the object of evaluation positively. Furthermore, both habituals and evaluatives involve quantification that has less than universal force ( $\exists_{\text{sufficient}}$ , not  $\forall$ ; cf. (10) and (11)). For example, it can be true that Greta likes cookies, even if she is not positively disposed toward them at every moment.

- (10) Greta likes cookies.

  ≈'There are sufficient Greta-moments that like cookie-moments for us to generalize to Greta herself'
- (11) Greta eats cookies.  $\approx$  'There are sufficient Greta-moments that eat cookie-moments for us to generalize to Greta herself'

By extending Rimell's analysis from habituals to evaluatives, the tripartite structure for (3b) should be as in (13), similar to the structure of the evaluative (3a) in (12).

- (12)  $GEN_s$  [s is after dinner]  $[\exists x : cookie(x) \text{ and } G \text{ eats } x \text{ in } s] = (3a)$
- (13)  $GEN_s$  [s is after dinner]  $[\exists x : cookie(x) \text{ and } G \text{ likes } x \text{ in } s] \stackrel{!}{=} (3b)$

<sup>&</sup>lt;sup>2</sup>This is observed at least as early as Carlson (1980); Diesing (1992) discusses this class of verbs in conjunction with quantificational adverbs like *usually*.

However, while (12) is a good representation of (3a), (13) does not represent the most natural interpretation of (3b). The problem with (13) is a matter of 'fickleness': general preferences should stay relatively constant (or have a good reason for changing). This can be seen rather clearly in examples like (14).

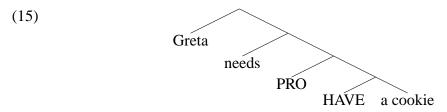
#### (14) # I like the president when it's raining.

Now note that (13) indicates that Greta's preferences change depending on whether or not it is after dinner. In the most natural interpretation of (3b), Greta's general preferences are constant. In the next section we address this issue of 'fickleness' by likening evaluatives not to habituals, but rather to *need*-type ITVs.

## 3 HAVE-clause complements

## 3.1 The structure of *need*-type ITVs

*Need*-type ITVs (including desideratives like *want*) take a covert *HAVE*<sup>3</sup>-clause argument (McCawley 1974, Ross 1976, Larson *et al.* 1997, Schwarz 2008, a.o.), as in (15).



Evidence for this structure can be found through attachment ambiguities. The sentence in (16), for example, is ambiguous between the readings shown in (16a) and (16b).

- (16) Greta needed a cookie after dinner.
  - a. There was a time after dinner at which Greta needed a cookie.
  - b. Greta's need was to have a cookie after dinner.

Other verbs, including habituals and even *look-for*-type ITVs, lack this ambiguity.

- (17) Greta ate a cookie after dinner.
  - a. There was a time after dinner at which Greta ate a cookie.
  - b. *NA*

- (i) a. I need (?to have) a shower.
  - b. I want ?(to have) a blast.

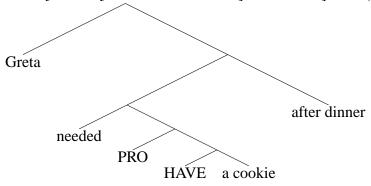
Schwarz (2008) suggests treating it as a contextually-supplied relation *R*. For simplicity, we will continue to refer to this as *HAVE*.

 $<sup>^3</sup>$ Note that this covert verb need not be *have* exactly (Schwarz 2008, Marušič & Žaucer 2006, a.o.).

- (18) Greta looked for a cookie after dinner.
  - a. There was a time after dinner at which Greta looked for a cookie.
  - b. NA

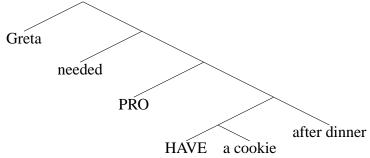
This ambiguity has been accounted for by positing that *need*-type ITVs have a structure like (15), such that adverbials have both a high and a low attachment site. The reading in (16a) results when the adverbial attaches high to the ITV.

(16a) Greta [needed [PRO HAVE a cookie] after dinner] (high attachment)



The reading in (16b) results when the adverbial attaches low to HAVE.

(16b) Greta needed [[PRO HAVE a cookie] after dinner] (low attachment)



Want is a need-type ITV and thus shows the same ambiguity.

- (19) Greta wanted a cookie after dinner.
  - a. There was a time after dinner at which Greta wanted a cookie. (high)
  - b. Greta's desire was to have a cookie after dinner. (low)

Now observe that *like* shows this ambiguity as well.

- (20) Greta liked a cookie after dinner.
  - a. There was a time after dinner at which Greta liked a cookie. ('high')
  - b. Greta was positively disposed toward having a cookie after dinner.

(low)

In what follows, we will use this ambiguity to argue that evaluatives can take *HAVE*-clause complements, and we use this to explain the non-'fickle' readings available in sentences like (3b).

#### 3.2 The structure of evaluatives

To account for the attachment ambiguity shown by *like* in (20), we propose that *like* takes a null *HAVE*-clause complement, like *need*-type ITVs. The non-'fickle' reading of (3b) can now be recognized as the low-attachment reading (20b), with the appropriate representation given in (21).

(21) 
$$GEN_s$$
 [s is after dinner]  $[\exists x : cookie(x) \text{ and } G \text{ likes}(G \text{ HAVE } x \text{ in } s)] = (3b)$ 

Here the overt restrictor (*after dinner*) results in a tripartite structure which gives rise to a non-specific reading of the singular indefinite. This structure provides a non-'fickle' reading because low attachment restricts *HAVING*, not *liking*, allowing Greta's preferences to stay constant.

However, *like*'s behavior is not identical to that of a *need*-type ITVs: unlike *need*-type ITVs, which require a *HAVE*-clause complement, *like* merely **allows** a *HAVE*-clause complement. One case where no *HAVE*-clause shows up is with proper name objects, as in (22) (cf. (23)).

- (22) Greta likes John. (≉ Greta likes to *HAVE* John.)
- (23) Greta wants John. ( $\approx$  Greta wants to *HAVE* John.)

This can also be seen in the 'high' attachment reading from (20a), which is roughly what was given in (13). When *like* is the target of modification, it appears to give a specific interpretation of the indefinite with **no** *HAVE*-clause (hence the scare quotes around *high*).<sup>4</sup>

This behavior contrasts with that of habituals. Recall that they showed no ambiguity in (17), suggesting that unlike evaluatives they do not take *HAVE*-clause complements. Note also that paraphrases like (24) are impossible.

(24) Greta eats a cookie. ≉ \*Greta eats to have a cookie.

#### 3.3 Summary

To summarize what we have seen so far, this section discussed *HAVE*-clause complements and how *need*-type ITVs always take *HAVE*-clauses, habituals never take *HAVE*-clauses, and evaluatives **sometimes** take *HAVE*-clauses.

$$(25) \begin{array}{c|cccc} & +HAVE & \pm HAVE & -HAVE \\ \hline want, need, ... & like & look for, seek, ... \\ get, give, ... & eat, drink, ... \\ \end{array}$$

In Section 2, we discussed how a non-specific reading of a singular indefinite is licensed, where *need*-type ITVs always license (cf. (2a)), and habituals and evaluative license through overt quantifier and/or restrictor (cf. (3a), (3b)). In the next section, we will look more closely at intensionality as a dimension along which these verbs differ.

<sup>&</sup>lt;sup>4</sup>This suggests the generalization that only non-specific objects license HAVE-clauses for evaluatives.

		+HAVE	$\pm HAVE$	-HAVE
(6)	+intensional	want, need,		look for, seek,
	-intensional	get, give,		eat, drink,

## 4 Complements, intensionality, and verb classes

*Like* can take a *HAVE*-clause complement similar to *need*-type ITVs, although *like* does not always take such a complement, as was seen in (22). This partial similarity leads us in this section to ask whether *like* can be appropriately included in the class of *need*-type ITVs.

#### 4.1 Intensional behavior

One crucial determinant in classifying *like* as a *need*-type ITV is intentionality. Following Forbes (2010), there are three behaviors exhibited by ITVs: as described in (26), they lack replaceability ( $i_1$ ), they lack a specific reading ( $i_2$ ), and/or they lack an existence requirement ( $i_3$ ).

## (26) $i_1$ . Lack of replaceability, cf. (27)

"substituting one expression for another that is coreferential with it in the complement of the verb can change the truth-value of the sentence in which the VP occurs," Forbes (2010)

#### i<sub>2</sub>. Lack of a specific reading, cf. (28)

"the VP admits of a special 'unspecific' reading if it contains a quantifier, or a certain type of quantifier," Forbes (2010)

## i<sub>3</sub>. Lack of an existence requirement, cf. (29)

"the normal existential commitments of names and existential quantifiers in the complement are suspended even when the embedding sentence is negation-free," Forbes (2010)

In (27)-(29) the ITV want is contrasted with non-ITVs on each of these behaviors. In (27) want, but not drink, is non-synonymous for extensional synonyms like water and  $H_2O(i_2)$ . In (28) want allows a non-specific reading of the indefinite object  $(i_2)$ , but saw is non-ambiguously specific. And in (29) the sentence with want can be true in the actual world where there are no unicorns  $(i_3)$ , but the sentence with ride cannot.

[Louisa believes that water  $\neq$  H<sub>2</sub>O s.t. water is potable but H<sub>2</sub>O is poisonous]

	a. b.	Louisa wants water, she does not want $H_2O$ . #Louisa drinks water, she does not drink $H_2O$ .	$(+i_1)$ $(-i_1)$
(28)		John wanted a doctor. John saw a doctor.	$(+i_2)$ $(-i_2)$
(29)		Greta wants a real live unicorn. Greta rides a real live unicorn.	$(+\mathrm{i}_{\it 3}) \ (-\mathrm{i}_{\it 3})$

## 4.2 Intensionality in evaluatives

In (30)-(32) we compare the ITV *want* to evaluatives and habituals on the three behaviors for intensionality enumerated in (26).

(30) Lack of replaceability (i<sub>1</sub>) [Louisa believes that water  $\neq$  H<sub>2</sub>O s.t. water is potable but H<sub>2</sub>O is poisonous]

u	ouisa wants water, she does not want $H_2O$ .	$(des + i_1)$
b. L	ouisa likes water, she does not like $H_2O$ .	$(\text{eval} + \mathbf{i}_1)$

c. #Louisa drinks water, she does not drink  $H_2O$ . (hab  $-i_1$ )

(31) Lack of a specific reading  $(i_2)$ 

a.	Louisa wants a cookie.	$(des + i_2)$
b.	#Louisa likes a cookie.	$(\text{eval } -i_2)$
c.	#Louisa eats a cookie.	$(hab -i_2)$

(32) Lack of an existence requirement  $(i_3)$ 

L	Eack of an existence requirement (13)			
a.	Louisa wants a real live unicorn.	$(des + i_3)$		
b.	#Louisa likes a real live unicorn.	$(\text{eval } -\mathbf{i}_3)$		
c.	#Louisa rides a real live unicorn.	$(hab -i_3)$		

We see in (30) that both *want* and the evaluative *like* are intensional in the first sense: with these verbs, extensionally synonymous objects do not lead to identical truth conditions. The habitual *drink* differs from *want* and *like* in this regard: even though Louisa may believe water and  $H_2O$  to be different, drinking one is drinking the other. In (31) and (32), however, the evaluatives and habituals pattern together: without modification both give rise to a specific reading, and both require that their objects exist.

## 4.3 Categorizing evaluatives

While some ITVs, such as *want* and *look for* exhibit all three of the intensional behaviors in (26), not all ITVs do. *Need*, for example, shows lack of a specific reading and lack of an existence requirement, but is transparent under replaceability.

(33) #Louisa needs water, she does not need  $H_2O$ .

This shows a gradation in intensionality among verbal predicates. Purely extensional verbs do not show any of these intensional behaviors  $(-i_1, -i_2, -i_3)$ , evaluatives are intensional on replaceability  $(+i_1, -i_2, -i_3)$ , verbs like *need* are intensional on specificity and existence  $(-i_1, +i_2, +i_3)$ , and verbs like *want* and *look for* show all three intensional behaviors  $(+i_1, +i_2, +i_3)$ .

Returning to evaluatives, recall that we have seen mixed evidence for treating them as *need*-type ITVs. Three pieces of data were presented in favor of treating evaluatives as *need*-type ITVs. First, both can take a *HAVE*-clause argument, as discussed in Section 3. Second, both lack replaceability in their object, as shown in (30a) and (30b).<sup>5</sup> Third, both can avoid a specific reading of their object, as shown

<sup>&</sup>lt;sup>5</sup>Lack of replaceability is parasitic on judge-dependence. Therefore the judge-dependent predicates *want* and *like* lack replaceability, while the non-judge-dependent predicate *eat* does not.

in (31a) and (3b).6

This last point, however, highlights a way in which evaluatives and *need*-type ITVs do **not** behave the same: *want* always licenses non-specific indefinites while *like* needs support to license a non-specific indefinite. This is shown in the lack of parallel between (31a) and (31b). A further difference is that *like*, but not *want*, requires that its object exists, as shown in (32a) and (32b).

Some of these differences between evaluatives and *need*-type ITVs, it turns out, are to be expected. Evaluatives' failure to allow lack of existence follows from the fact that evaluating an object requires previous experience with that object (Beller & Zaroukian in press), which requires that the object exist. Thus the infelicity of (32) and failure to lack an existence requirement. Evaluatives' frequent lack of a specific reading follows from the fact that evaluatives' non-specific readings seem to require a *HAVE*-clause reading. Since the *HAVE*-clause can be absent in some cases (e.g. (22)), it is not surprising that the non-specific reading can also be absent.

We consider evaluatives to be what we call 'defective' *need*-type ITVs. Evaluatives are not fully +*HAVE* because there are cases where they do not take a *HAVE*-clause. Additionally they sometimes are unable to lack a specific reading because they require support to license non-specific singular indefinite, and they cannot lack an existence requirement because they require prior experience with the object of evaluation.

Note that the selectional and intensional properties of evaluatives are not shared by habituals like *eat*. Habituals never take *HAVE*-clause arguments, and the only way they act intensional is when they are part of a larger overtly quantificational construction, e.g. (3a). It is this larger quantificational structure which allows a lack of a specific reading, not the habitual verb itself. This contrasts with evaluatives which can sometimes license non-specific readings without an overt quantifier or restrictor (See Zaroukian & Beller (2011) for analysis).

- (34) You know what I learned about myself today?...
  - a. I want a challenge.
  - b. I like a challenge.
  - c. I create a challenge #(every day).

Another contrast between evaluatives and habituals can be seen in their behavior as subjunctive predicates. The combination of the subjunctive modal *would* with an evaluative results in pure *need*-type ITV behavior: it now requires a *HAVE*-clause, lacks a specific reading, and lacks an existence requirement. This same behavior is not observed when adding a subjunctive modal to a habitual. Instead, this results in a counterfactual (i.e. not an ITV).

- (35) a. Louisa would like a real live unicorn.
  - b. Louisa would eat a real live unicorn (if one existed).

Altogether, this data suggests that rather than patterning with habituals, evaluatives are closer to being *need*-type ITVs with which they share both selectional and intensional characteristics. Their selectional and intension characteristics, however,

<sup>&</sup>lt;sup>6</sup>Recall that specific readings with *like* are easier to avoid in contexts like (34).

are not identical, leading use to label evaluatives as 'defective' need-type ITVs.

#### 4.4 Lexical entries

In (36)-(37) and (40)-(41) we provide rough sketches of denotations to capture the contrasts discussed in this section<sup>7</sup>. The optionality of *HAVE*-clauses with *like* is captured in two separate entries. The first, (36), takes an individual as an argument while the second, (37), takes an event as an argument.

- (36) [[like]] =  $\lambda w \lambda x \lambda y . \forall w' \in \text{EPIST}_y(w) : y \text{ has experienced } x \text{ and judged it positively in } w'$   $(-HAVE, x \in D_{individuals})$
- (37)  $[\![ \mathbf{like} ]\!] = \lambda w \lambda e \lambda y. \forall w' \in \mathtt{EPIST}_y(w) : y \text{ has experienced } e \text{ and judged it positively in } w' (+HAVE, e \in D_{events})$

The entry in (36) is the *like* that shows up in sentences like (38), which expresses evaluation without possession and shows no attachment ambiguities when modified.

(38) Greta likes John.

The entry in (37) selects an overt/covert *have/HAVE*-clause and shows up in sentences like (39), which does show attachment ambiguities.

(39) Greta likes a cookie after dinner.

This also captures evaluatives' variable behavior with respect to specificity. Only HAVE-having/event-selecting *like* can be felicitous restricted in a tripartite structure, so only this *like* allows a non-specific reading. The fact that *like* does not show intensional behavior with respect to lack of existence ( $i_3$ ) is reflected in the requirement that the subject has had prior experience with the object (y has experienced x/e).

Entries for the non-intensional habitual verb *eat* and the ITV *want* are shown below for comparison.

- (40)  $[\mathbf{eat}] = \lambda x \lambda y. y \text{ eats } x$
- (41)  $[\![\mathbf{want}]\!] = \lambda w \lambda e \lambda y. \forall w' \in \mathtt{EPIST}_y(w) : y \ \mathtt{judges} \ e \ \mathsf{to} \ \mathsf{be} \ \mathsf{superior} \ \mathsf{to} \ \mathsf{salient}$  alternatives in w'

Note that *like* and *want* both involve judgment and are both opaque to replaceability  $(+i_1)$ . *Eat*, which does not involve judgment, is transparent to replaceability  $(-i_1)$ . This suggests a tie between judgment and lack of replaceability. In support of this connection, recall that the ITV *need* is also transparent to replaceability, as demonstrated in (33). *Want* and *like*, which lack replaceability, involve internal judgments of the agent. *Need*, on the other hand, often involves external (deontic) judgments, which appears to render *need*  $-i_1$  and suggests that internal judgment leads to  $+i_1$ .

<sup>&</sup>lt;sup>7</sup>For habitual/general reading, these will also include Rimell's scopally-inert affix.

#### 5 Conclusion

We began this paper by pointing out two ways in which evaluatives behave like habituals: they give a specific reading of singular indefinite object, shown in (2), and they license a non-specific reading of this singular indefinite through modification, shown in (3).

- (2) a. #Greta eats a cookie.
  - b. #Greta likes a cookie.
  - c. Greta wants a cookie.
- (3) a. Greta eats a cookie after dinner.
  - b. Greta likes a cookie after dinner.
  - c. Greta wants a cookie after dinner.

Despite these similarities, we argued that evaluatives have much in common with desideratives (i.e. need-type ITVs): they take a HAVE-clause complement and are intensional. We stopped short of calling evaluatives full-fledged need-type ITVs because, unlike need-type ITVs, they do not universally select a HAVE-clause complement, and while they are intentional in that they lack replaceability ( $i_1$ ), they fail to lack an existence requirement ( $i_3$ ) and their lack of specificity ( $i_2$ ) is dependent on their selecting a HAVE-clause complement. Because of this, we referred to them as 'defective' need-type ITVs.

		+HAVE	$\pm HAVE$	-HAVE
	+intensional	want, need		look for, seek,
		(need-type ITVs)		(look-for-type ITVs)
(7)	±intensional		like	
			(evaluatives)	
	-intensional	get, give,		eat, drink,
		(DO constructions)		(habituals)

A number of questions, however, remain. For one, what is the relation between *HAVE*-clause complements and intensionality? We know that taking a *HAVE*-clause is not a sufficient condition for being an ITV, since DO constructions take *HAVE*-clauses but are not intensional. We also know that taking a *HAVE*-clause is not a necessary condition for being an ITV, since *look-for*-type ITVs are intensional but do not take *HAVE*-clause complements. Yet for evaluatives, the presence of a *HAVE*-clause is tied to the availability of a specific reading. This conflicts with Rimell's analysis wherein adverbials should license non-specific readings regardless of presence/absence of *HAVE*-clauses.

Another question concerns the licensing contrast between evaluatives and habituals shown in (34). Here both *want* and *like* allow a non-specific reading even in the absence of modification. Without modification the habitual verb *create* admits only a specific reading of its object.

- (34) You know what I learned about myself today?..
  - a. I want a challenge.
  - b. I like a challenge.
  - c. I create a challenge #(every day).

Why can evaluatives contextually license non-specific readings while habituals require overt modification?

A final question that we raise here is how the licensing data discussed in this paper relates to other cases of licensing by modification (e.g. Giannakidou 2001, Dayal 2004, Menéndez-Benito 2005). One such case is subtrigging, in which an otherwise infelicitous occurrence of free-choice *any* is remedied by the presence of modification, as shown in (42) from Dayal (2004:220).

- (42) a. \*Any student signed the petition.
  - b. Any student who went to the event signed the petition.
  - c. Any student at the meeting signed the petition.
  - d. Any student there signed the petition.

Another case discussed by Dayal (2004:221), is the licensing of a generic reading of a plural definite. The unmodified plural definite in (43a) is interpreted to refer to a particular group of students, but with the addition of a relative clause modifier, as in (43b), a generic reading is available.

- (43) a. The students are successful. (\*generic)
  - b. The students who work hard are successful. (✓ generic)

This second sentence, unlike in the unmodified case, can be true without there being any successful students.

It is interesting to compare this last case with the licensing seen with evaluatives in e.g. (3b). Both show an alternation between specific and generic interpretations of the nominals. This unifies what are otherwise rather different cases of modification. With the definite plural in (43b) the modification is a relative clause embedded within the DP itself.

(43b) The [students who work hard] are successful.

In the evaluative case the modification is a temporal adjunct that modifies an event predicate within the sentence, it is external to the DP.

(3b) Greta likes [[HAVE a cookie] after dinner].

This contrast is clearer in (44) where the plural definite is the object of an evaluative verb. Here the same licensing of a generic interpretation is obtained by modifying the object DP with a relative clause.

(44) a. I like the students. (\*generic)

(√generic)

b. I like the students who work hard.

Notice again that this second sentence, unlike in the unmodified case, can be true without there existing any students that the speaker likes. Due to evaluatives' need for prior experience with the object evaluation, such students must have existed at some point, but they need not currently exist.

The same pattern obtains for licensing a non-specific interpretation with singular indefinites.

(45) a. I like a student.
b. I like a student who works hard.
(\*non-specific)
(√non-specific)

With both the definite article and the indefinite article the unmodified nominals are understood to be picking out specific individuals. When modified they no longer pick out specific individuals, but are instead understood as conditions under which the predication to hold. That is, both of the modified sentences are well paraphrased by a conditional structure like that in (46).

(46) If x is a student who works hard, I like x.

Quer (2000) and Giannakidou (2001) use similar conditional paraphrases of subtrigged *any* sentences to support a concealed conditional analysis of subtrigging. On this analysis the relatives clauses in (42) act as restrictors to a conditional operator. Thus a sentence like (47) will have a structure like (48).

- (47) That night John talked to any woman who came up to him. (Giannakidou 2001:711)
- (48)  $\forall w, x [[\mathbf{woman}(x, w) \land \mathbf{came-up}(x, j, w)] \rightarrow \mathbf{talk-to}(j, x, w)]$  (Giannakidou 2001:714)

We observe that such structures provide a good translation of the sentence in (44b) with the generic plural definite. This translation is given in (49) below.

(49)  $\forall w, x[[student(x, w) \land work-hard(x, w)] \rightarrow like(I, x, w)]$ 

We can provide a similar translation for (45b) with the singular indefinite in (50).

(50) 
$$\forall w, x[[student(x, w) \land work-hard(x, w)] \rightarrow like(I, HAVE(I, x, w), w)]$$

Here as before the content of the relative clause serves to restrict the conditional operator.

This points toward a unified analysis for licensing by modification, wherein all three cases above are instances where modification creates a concealed conditional. Relevant to licensing generic readings of plural definites and non-specific readings of singular indefinites, the quantification in the concealed conditional allows the referent of the noun to vary over individuals and worlds.

Relevant to licensing *any*, the modification in the concealed conditional restricts *any*'s domain to achieve felicity. But not all potential domain restrictors can license, i.e. induce a concealed conditional, shown by the contrast in (51).

- (51) a. \*Mary talked to any angry student. (Dayal 2004:223)
  - b. Mary talked to any student who was angry.

Following Dayal (2004), the restrictor must introduce a spatio-temporal operator to license *any* or to induce a concealed conditional. Thus the relative clause in (51b), which does introduce a spatio-temporal operator, is felicitous, but the adjective in (51a), which does not introduce a spatio-temporal operator, is not felicitous. Note also that it was the more 'eventy' noun *demonstrator* that was felicitous with *any* above. This also helps us see why evaluatives only license non-specific readings

of singular indefinites when they take a *HAVE*-clause reading: the *HAVE*-clause introduces the spatio-temporal operator which induces the concealed conditional. We believe this provides ample evidence to pursue a unified concealed-conditional analysis of licensing by modification.

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