

# Licensing by modification in two classes of verbs

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## 1 Introduction

**Q:** What are evaluatives like *like*?

- Contrasts like (1) v. (2) make them look similar to habituais, e.g. *eat*
  - Both habituais and evaluatives give specific readings of their singular indefinite argument in (1) – these are often infelicitous
  - Both habituais and evaluatives can be modified to license a non-specific reading in (2)
  - We propose that for both habituais and evaluatives, a non-specific reading is licensed by the introduction of a modifier that allows for low binding of the singular indefinite (cf. Rimell, 2004; Ferreira, 2005a,b) [SECTION 2]

- |     |                                       |                |
|-----|---------------------------------------|----------------|
| (1) | a. #Greta eats a cookie.              | (habitual)     |
|     | b. #Greta likes a cookie.             | (evaluative)   |
|     | c. Greta wants a cookie.              | (desiderative) |
|     |                                       |                |
| (2) | a. Greta eats a cookie after dinner.  | (habitual)     |
|     | b. Greta likes a cookie after dinner. | (evaluative)   |
|     | c. Greta wants a cookie after dinner. | (desiderative) |

**A:** Evaluatives are more like desideratives, e.g. *want*

Two features of *want*

- +*HAVE*

- (3) Greta wants a cookie.  $\approx$  Greta wants to have a cookie.

- +intensional

- (4) Greta wants a unicorn. (cf. Zimmermann, 1993)

	+ <i>HAVE</i>	– <i>HAVE</i>
(5) +intensional	<i>want, need, ...</i> ( <i>need-type</i> ITVs)	<i>look for, seek, ...</i> ( <i>look-for-type</i> ITVs)
–intensional	<i>get, give, ...</i> (DO constructions)	<i>eat, drink, ...</i> (habituals)

We argue that evaluatives share these features

- take *HAVE*-clause complements [SECTION 3]
- are intensional [SECTION 4]

We propose treating evaluatives as a ‘defective’ *need*-type Intensional Transitive Verbs (ITVs)

- They take a *HAVE*-clause, but only sometimes
- They are intensional, but not quite as intensional as ITVs

	<i>+HAVE</i>	<i>±HAVE</i>	<i>–HAVE</i>
	<i>want, need...</i> ( <i>need</i> -type ITVs)		<i>look for, seek, ...</i> ( <i>look-for</i> -type ITVs)
(6) <i>±intensional</i>		<i>like</i> (evaluatives)	
<i>–intensional</i>	<i>get, give,...</i> (DO constructions)		<i>eat, drink, ...</i> (habituals)

## 2 Licensing a non-specific reading

### 2.1 Licensing with habituals

The contrast in (1a) v. (2a) has been explored in previous literature (e.g. Rimell, 2004; Ferreira, 2005a,b).

(1a) #Greta eats a cookie.

(2a) Greta eats a cookie after dinner.

Rimell’s analysis:

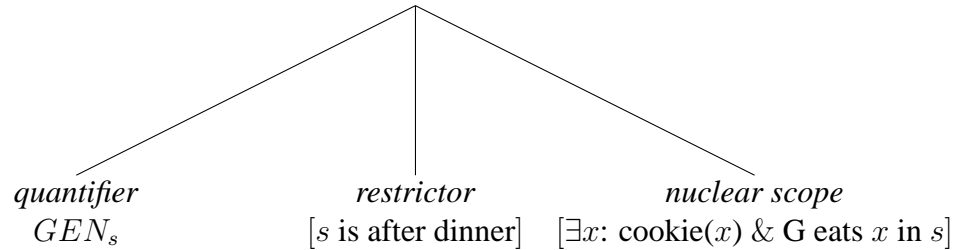
- Simple habituals (no overt quantifier or restrictor, e.g. (1a))  $\neq$  Overtly quantified habituals (overt quantifier and/or restrictor, e.g. (2a))
  - In simple habituals like (1a), the singular indefinite obligatorily QRs to a wide-scope position<sup>1</sup>  $\rightarrow$  specific reading

$$(7) \quad \exists x : \text{cookie}(x). \exists_{\text{sufficient}} s : G \text{ eats } x \text{ in } s$$

<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 (2a) have a tripartite logical form in which the singular indefinite DOES NOT take wide scope → no specific reading

(8)



### Summary

- No overt quantifier or restrictor → QR → specific singular indefinite
- Overt quantifier or a restrictor → tripartite  $\nrightarrow$  specific singular indefinite

## 2.2 Extending licensing to evaluatives

The same pattern from above with habituals

(1a) #Greta eats a cookie.

(2a) Greta eats a cookie after dinner.

...is seen with evaluatives:

(1b) #Greta likes a cookie.

(2b) Greta likes a cookie after dinner.

We extend Rimell's analysis for habituals to evaluatives

- Both habituals and evaluative statives are generalizations over situations
  - *like* generalizes over situations where the judge experiences the object of evaluation positively
- Both habituals and evaluatives involve quantification has less than universal force ( $\exists_{\text{sufficient}}$ , not  $\forall$ )
  - e.g. It can be true that Greta likes cookies, even if she is not positively disposed toward them at every moment, but for the sentence to be true there must be some sufficient number of moments in which she IS so disposed

- (9) Greta likes cookies.  
≈ ‘There are sufficient Greta-moments that like cookie-moments for us to generalize to Greta herself’
- (10) Greta eats cookies.  
≈ ‘There are sufficient Greta-moments that eat cookie-moments for us to generalize to Greta herself’

Tripartite structures should be as in (11) and (12)

- (11)  $GEN_s$  [s is after dinner] [ $\exists x$  : cookie( $x$ ) and G eats  $x$  in  $s$ ] = (2a)
- (12)  $GEN_s$  [s is after dinner] [ $\exists x$  : cookie( $x$ ) and G likes  $x$  in  $s$ ]  $\stackrel{?}{=}$  (2b)

But while (11) is a good representation of (2a), (12) does not represent the most natural interpretation of (2b)

- ‘Fickleness’ – General ‘likes’ should stay relatively constant (or have a good reason for changing) – see also (13), where the referring expression forces the adverb to modify ‘liking’

- (13) # I like the president when it’s raining.

- In the most natural interpretation of (2b), the adverbial does not directly apply to ‘liking’

- Also note – Evaluatives can license without overt quantifier or restrictor in the right context, habituals cannot (See Zaroukian and Beller (2011) for analysis)

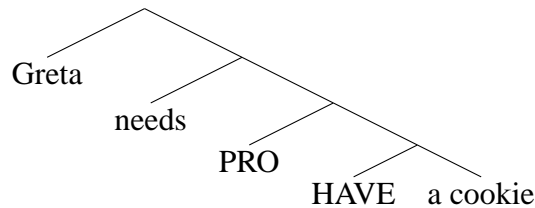
- (14) You know what I learned about myself today?
- a. I want a challenge.
  - b. I like a challenge.
  - c. I create a challenge #(every day).

### 3 HAVE-clause complements

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

*Need*-type ITVs (including desideratives) take a covert *HAVE*<sup>2</sup>-clause argument (McCawley, 1974; Ross, 1976; Larson et al., 1997; Schwarz, 2008, a.o.)

(15)



Evidence: attachment ambiguities

- The sentence in (16) is ambiguous between the readings shown in (16a) and (16b)
- Other verbs lack this ambiguity
  - Habituals like *eat* – (17)
  - *Look-for*-type ITVs like *look for* – (18)

(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.

(17) Greta ate a cookie after dinner.

- a. There was a time after dinner at which Greta ate a cookie.
- b. NA

(18) Greta looked for a cookie after dinner.

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

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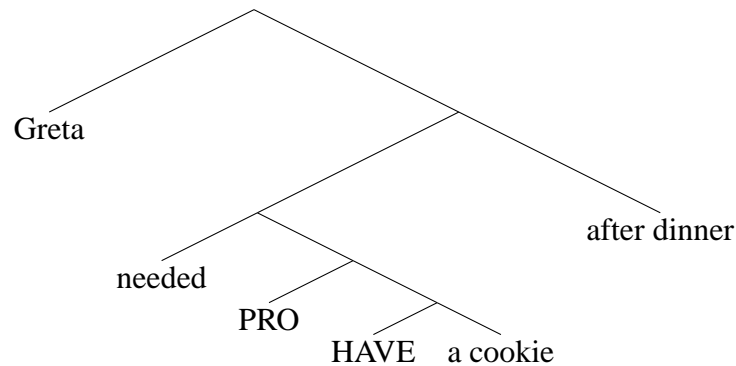
<sup>2</sup>Note that this covert verb need not be *have* exactly (Schwarz, 2008; Marušič and Žaucer, 2006, a.o.).

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

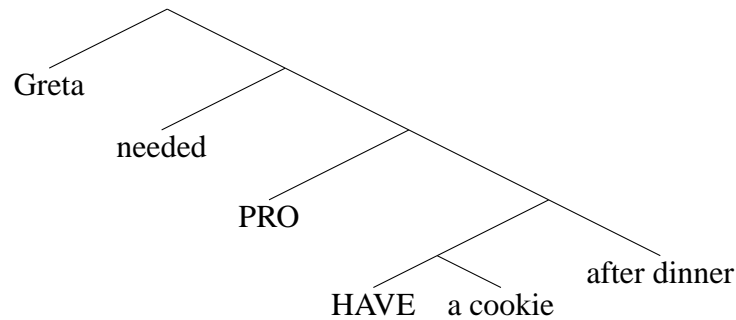
Schwarz (2008) suggests treating it as a contextually-supplied relation *R*. For simplicity, we will continue to refer to this as *HAVE*.

Adverbials, then, can attach high or low with *need*-type ITVs

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



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



*Want* is a *need*-type ITV, shows the same ambiguities

- (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)

Note – *like* is ambiguous 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)

### 3.2 The structure of evaluatives

**We propose:** *like* takes a null *HAVE*-clause, like *need*-type ITVs

- The low-attachment reading (20b) is given in (21)

(21)  $GEN_s$  [*s* is after dinner] [ $\exists x : \text{cookie}(x)$  and G likes(G HAVE *x* in *s*)] = (2b)

- Overt restrictor (*after dinner*) → tripartite structure → non-specific
- Low attachment restricts *HAVING*, not *liking* → avoids ‘fickle’ reading

**But**, unlike *need*-type ITVs, a *HAVE*-clause is not required

- ‘High’ attachment reading (20a) is like what was given in (12)
  - 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)
  - i.e. fickle/‘high’ attachment  $\xrightarrow{?}$  *–HAVE*  $\xrightarrow{?}$  specific

(22) Greta liked a cookie after dinner, though she may not have liked that cookie at other times. (‘high’)

- *HAVE*-clause is also not present when *like* takes a pure DP complement – (13), (23)

(23) Greta likes John.

### 3.3 Summary

- *HAVE* [SECTION 3]
  - *need*-type ITVs always take *HAVE*-clauses
  - habituais never take *HAVE*-clauses
  - **evaluatives sometimes takes a *HAVE*-clause**

	<i>+HAVE</i>	<i>±HAVE</i>	<i>–HAVE</i>
(24)	<i>want, need, ...</i> <i>get, give, ...</i>	<i>like</i>	<i>look for, seek, ...</i> <i>eat, drink, ...</i>

- Licensing non-specific singular indefinite [SECTION 2]
  - *need*-type ITVs always license – (1a)
  - habituais license only through overt quantifier and/or restrictor – (2a)
  - **evaluatives license through sufficient contextual support** – (2b), (14b)

Next section – look more closely at intensionality

	<i>+HAVE</i>	<i>±HAVE</i>	<i>–HAVE</i>
(5) <i>+intensional</i>	<i>want, need, ...</i>		<i>look for, seek, ...</i>
<i>–intensional</i>	<i>get, give, ...</i>		<i>eat, drink, ...</i>

## 4 Complements, intensionality, and verb classes

*Like* takes a *HAVE*-clause like *need*-type ITVs

**Q:** Is *like* a *need*-type ITV?

**Q:** What makes something intensional?

**A:** Three ways of being intensional (Forbes, 2010):

1. Lack of replaceability – “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 ”

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

- a. Louisa is seeking water.  $\neq$  Louisa is seeking H<sub>2</sub>O. (+intensional)
- b. Louisa is drinking water = Louisa is drinking H<sub>2</sub>O. (–intensional)

2. Lack of specific reading – “the VP admits of a special ‘unspecific’ reading if it contains a quantifier, or a certain type of quantifier”

- (26)
- a. John is seeking a doctor. (+intensional)
  - b. John is seeing a doctor. (–intensional)

3. Lack of existence requirement – “the normal existential commitments of names and existential quantifiers in the complement are suspended even when the embedding sentence is negation-free”

- (27)
- a. Greta is seeking a unicorn. (+intensional)
  - b. Greta is riding a unicorn. (–intensional)



- (28) Intensional<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]
- a. Louisa wants water, she does not want H<sub>2</sub>O. (des ✓)
  - b. Louisa likes water, she does not like H<sub>2</sub>O. (eval ✓)
  - c. #Louisa drinks water, she does not drink H<sub>2</sub>O. (hab X)
- (29) Intensional<sub>2</sub>?
- a. Louisa wants a cookie. (des ✓)
  - b. #Louisa likes a cookie. (eval X)
  - c. #Louisa eats a cookie. (hab X)
- (30) Intensional<sub>3</sub>?
- a. Louisa wants a real live unicorn. (des ✓)
  - b. #Louisa likes a real live unicorn. (eval X)
  - c. #Louisa rides a real live unicorn. (hab X)

• Pro *like* as a *need*-type ITV

- Both (can) take *HAVE*-clauses – [SECTION 3]
- Both lack replaceability in their object – (28a), (28b)
  - \* Lack of replaceability is parasitic on judge-dependence → both *want* and *like* (judge-dependent) lack replaceability while *eat* (not judge-dependent) does not
- Both can avoid a specific reading of their object – (29a), (29b)+modification<sup>3</sup>
  - \* For *like*, non-specific readings seem to require a *HAVE*-clause reading – since *HAVE*-clause can be absent, it is not surprising that the non-specific reading is sometimes absent

• Contra *like* as an ITV

- *want* always licenses non-specific indefinites, *like* needs support – (29a) v. (29b)
- *like*, but not *want*, requires that its object exists – (30a) v. (30b)
  - \* Not surprising that *like* is infelicitous in (30) – *like* requires previous experience with the object (Beller and Zaroukian, in press)

Generalization – Evaluatives are ‘defective’ ITVs

- Not fully +*HAVE* – only optionally takes a *HAVE* clause
- Not always intensional<sub>2</sub> – require support to license non-specific singular indefinite
- Not intensional<sub>3</sub> – requires prior experience

<sup>3</sup>Recall that specific readings with *like* are easier to avoid in contexts like (14).

**Q:** Are habituais defective (*look-for-type*) ITVs then??

**A:** No – the only way they act intensional is when they are part of a larger overtly quantificational construction, e.g. (2a)

- A contrast – The combination of a subjunctive modal element with a *like-type* evaluative results a *HAVE*-clause taking ITV (i.e. *would like*). This cannot be accomplished by adding subjunctive modal to a habitual, which results in a counterfactual (i.e. not an ITV).  $\rightarrow$  evaluatives are closer to ITVs than habituais are

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

A sketch of denotations to capture these contrasts<sup>4</sup>:

- Not fully +*HAVE* – only optionally takes a *HAVE* clause ( $\lambda x$  v.  $\lambda e$ )
- Not always intensional<sub>2</sub> – require support to license non-specific singular indefinite
- Not intensional<sub>3</sub> – requires prior experience (*y* has experienced *x/e* positively in *w*)

(32)     $\llbracket \textbf{like} \rrbracket = \lambda x \lambda y. \forall w \in \text{EPIST}_y : y \text{ has experienced } x \text{ positively in } w \quad (-\text{HAVE}, x \in D_e)$

(33)     $\llbracket \textbf{like} \rrbracket = \lambda e \lambda y. \forall w \in \text{EPIST}_y : y \text{ has experienced } e \text{ positively in } w \quad (+\text{HAVE})$

cf.

(34)     $\llbracket \textbf{eat} \rrbracket = \lambda x \lambda y. y \text{ eats } x$

(35)     $\llbracket \textbf{want} \rrbracket = \lambda e \lambda y. \forall w \in \text{EPIST}_y : y \text{ ‘prefers’ } e \text{ in } w$

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<sup>4</sup>For habitual/general reading, these will also include Rimell’s scopally-inert affix

## 5 Conclusion

- (1)
  - a. #Greta eats a cookie.
  - b. #Greta likes a cookie.
  - c. Greta wants a cookie.
- (2)
  - a. Greta eats a cookie after dinner.
  - b. Greta likes a cookie after dinner.
  - c. Greta wants a cookie after dinner.

Evaluatives are similar to habituals

- Give specific reading of singular indefinite object in (1)
- License a non-specific reading through modification in (2)

We claim they are more like desideratives (*need*-type ITVs)

- Take a *HAVE*-clause
- Are intensional

But they're 'defective'

- Don't always take a *HAVE*-clause
- Aren't as intensional
  - Require support to be intensional<sub>2</sub>
  - Are not intensional<sub>3</sub>

Also, evaluatives are unlike habituals in that

- Can license with contextual support (no quantifier/restrictor)

	+ <i>HAVE</i>	± <i>HAVE</i>	– <i>HAVE</i>
(6) +intensional	<i>want, need...</i> ( <i>need</i> -type ITVs)		<i>look for, seek, ...</i> ( <i>look-for</i> -type ITVs)
±intensional		<i>like</i> (evaluatives)	
–intensional	<i>get, give,...</i> (DO constructions)		<i>eat, drink, ...</i> (habituals)

Some remaining questions

- What is the relation between *HAVE* and intensionality?
  - *HAVE*-clause not a **sufficient** condition for being an ITV, cf. *get*
  - *HAVE*-clause not a **necessary** condition for being an ITV, cf. *look for*
  - Yet somehow *HAVE* is tied to intensionality<sub>2</sub>, at least for evaluatives
    - \* This conflicts with Rimell – adverbials should license non-specific readings regardless of presence/absence of *HAVE*-clauses
    - \* Could this contrast be built into **[[like]]**?
- Why is there the licensing contrast between evaluatives and habituals shown in (14)?

(14) 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).
- How does this relate to other cases of licensing by modification (e.g. Giannakidou, 2001; Dayal, 2004; Menéndez-Benito, 2005)?
  - See Appendix

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## 6 Appendix – Licensing by modification

There are other modifiers that separate evaluatives from habituals which are likewise cases where the modifier allows variable to be bound low for evaluatives, which provides a *HAVE*-clause.

- (36) a. Greta likes to have a cookie.  
b. Greta likes a good cookie.  
c. Greta likes a cookie as much as the next person.
- (37) a. #Greta eats to have a cookie.  
b. #Greta eats a good cookie.  
c. #Greta eats a cookie as much as the next person.

A similar licensing phenomenon occurs with the definite article (Dayal, 2004, p. 221).

- With the relative clause modification, the definite receives a generic rather than a specific interpretation.

(39) a. \*Leo odia gatti.  
Leo hates cats.  
b. Leo odia gatti di grandi dimensioni.  
Leo hates cats of large size.

(40) 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.

- (42) The police arrested any demonstrators. (Menéndez-Benito, 2005, p. 207)

- What these licensing phenomena have in common is that they allow one to generalize to hypothetical cases (cf. The underlying-conditional analysis advocated by Giannakidou)

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- d. I like a girl who reads.  
     $\approx$  If you are a girl who reads, I like you.
- e. John likes a challenge.  
     $\approx$  If you are are a challenge, John will like you.