Evaluating Singular Indefinites

Erin Zaroukian & Charley Beller
Johns Hopkins University

1 Introduction

There is a sharp contrast between the interpretation of bare plurals (e.g. *cookies*) and singular indefinites (e.g. *a cookie*) when they occur as object of an evaluative verb such as *like*, as demonstrated in (1).

(1) a. John likes cookies. (kind reading)
b. #John likes a cookie. (specific reading)

The sentence in (1a) with a bare plural indicates that John is favorably disposed toward cookies in general. The singular indefinite in (1b), however, only allows a (typically infelicitous) reading where John is favorably disposed toward one specific cookie. A similar pattern can be found with habituals, as shown in (2).

(2) a. John eats cookies.
b. #John eats a cookie.

There are, however, a number of constructions which use an evaluative verb and a singular indefinite object which do *not* lead to a specific reading of the object, shown in (3).[1]

(3) a. John likes a cookie after dinner.
b. ?John likes to have a cookie.
c. John likes a good cookie.
d. John likes a cookie as much as the next person.

With the exception of temporal modification as in (3a), these constructions do not have the same ameliorating effect on habituals, as shown in (4).

(4) a. John eats a cookie after dinner.
b. * John eats to have a cookie.
c. # John eats a good cookie.
d. # John eats a cookie as much as the next person.

This paper investigates why evaluative verbs and the modifications in (3) present this specificity contrast. Drawing on the analysis of habituals in Rimell (2004), we provide an analysis where the structures in (3) provide a restriction on situations. This restriction gives rise to a tripartite structure, and this tripartite structure allows the singular indefinite to avoid a wide-scope specific reading.

2 Specificity and domain restriction

2.1 Habituals (Rimell, 2004)

Rimell (2004) discusses habitual sentences like (5), which contain an episodic verb (e.g *drink*) and quantify over multiple episodes (e.g. of Mary drinking beer).

(5) Mary drinks beer.

She argues that simple habitual sentences like (6a) need to be distinguished from habituals with overt quantificational elements like (6b), due their contrast in felicity.

(6) a. #Mary drinks a beer.
b. Mary usually drinks a beer when she's at Dempsey's Pub.

On Rimell's analysis, overtly quantified habituals have a tripartite logical form like that in (7) (Rimell, 2004, p. 665).

(7)

USUALLY$_s$	[M at DP in s]	$\exists x$[beer(x) & M drinks x in s]
Q	*restrictor*	*nuclear scope*

When a quantifier has no restrictor overtly specified, as in (8a), one can be supplied contextually. Similarly, the presence of a restrictor, as in (8b), licenses a covert quantifier. GEN_s.

(8) a. Mary often eats roast beef sandwiches.
b. Mary eats green beans when she's hungry.

Speakers can infer either a covert restrictor or a covert quantifier, but they (typically) cannot infer both if they are given only a nuclear scope. Rimell argues that simple habituals (i.e. those with neither restrictor nor quantifier overtly supplied) do not, therefore, have a tripartite structure. Instead, generalization in simple habituals is due to a scopally inert affix of the matrix verb and a generalization operator ($\exists_{\text{sufficient}}$) over stages of individuals, shown in (9) (Rimell, 2004, p. 674).

(9) Mary drinks beer. (habitual)

$\exists_{\text{sufficient}} y^s.R(y^s, m) \wedge \exists z^s.R(z^s, b) \wedge drink'(z^s, y^s)$
'There are sufficient Mary-stages that drink beer-stages for us to generalize to Mary herself.'

Obligatory quantifier-raising of the singular indefinite object gives it widest scope, shown in (10), which results in a specific reading.

(10) #Mary drinks a beer.
$\exists x^o[beer'(x^o) \wedge \exists_{\text{sufficient}} y^s.R(y^s, m) \wedge \exists z^s.R(z^s, x^o) \wedge drink'(z^s, y^s)]$
'There is a beer such that there are sufficient Mary-stages that drink stages of that beer for us to generalize to Mary herself.'

This reading is infelicitous, since a single beer cannot typically be drunk on multiple occasions. This contrasts with the overtly-quantified habitual in (6b), where the quantifier *usually* takes scope over the indefinite, resulting in an interpretation where a different beer is drunk on each occasion.

2.2 Extension to evaluatives

The evaluative predicates we are concerned with (e.g. *like*) are stative, not episodic, but a similar generalization takes place. The statives generalize over situations[2] in which the judge experiences the object of evaluation positively, and just as with habituals, the quantification has less than universal force (i.e. $\exists_{\text{sufficient}}$, not $\forall$). In other words, it can be true that John likes cookies even if he is not positively disposed toward them in every situation. But there must be some sufficient number of situations in which he *is* so disposed.

If evaluative statives pattern with habituals generally, then we should see the same licensing of indefinites when there is an overt quantifier or restrictor (cf. (6b)). This is exactly what we find with temporal modification in sentences like (4a) and (3a), repeated below.

(4a) John eats a cookie after dinner.

(3a) John likes a cookie after dinner.

Their tripartite structures should be as in (12) and (11) respectively.

(11) GENs [after-dinner(s)] $\exists x$[cookie(x) and J likes x in s]

(12) GENs [after-dinner(s)] $\exists x$[cookie(x) and J eats x in s]

But while (12) is a good representation of (4a), (11) does not represent the most natural interpretation of (3a). The adverbial in (3a) cannot easily be applied to 'liking', as this results in what we term a 'fickle' reading: Restricting situations in which a person is positively disposed toward some object makes that person appear fickle in their preferences, since a person's

likes should stay relatively constant (or have a good reason for changing), cf. (13).

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

The most natural interpretation of (3a) is one where John does not simply feel positively about a cookie, but rather where he feels positively about *having* a cookie. The availability of this *have*-reading appears to be tied to a certain class of verbs, to which we now turn.

3 Complement structure

3.1 Intensional Transitive Verbs

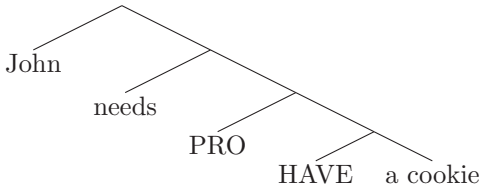
Schwarz (2008) argues for two distinct classes of intentional transitive verbs (ITVs), the *look-for*-class and the *need*-class, based on the presence or absence of certain interpretational ambiguities. On his analysis, the complements of ITVs in the *look-for*-class denote properties (cf. Zimmermann, 1993). In contrast, the complements of ITVs in the *need*-class denote propositions. We can see the relevant ambiguities in a sentence like (14), which is ambiguous between the readings in (14a) and (14b).[3]

(14) John needed a cookie after dinner.

a. There was a time after dinner at which John needed a cookie
b. John's need is to have a cookie after dinner

The explanation for this ambiguity Schwarz offers is that *need*-type ITVs can take a covert *HAVE*-clause complement, as sketched in (15).

(15) John needs a cookie.



Adverbials modifying *need*-type ITVs can then attach high (to *need*) or low (to *HAVE*), resulting in the ambiguities in (14).[4]

(14a) John [needed [PRO HAVE a cookie] after dinner] (high)

(14b) John needed [[PRO HAVE a cookie] after dinner] (low)

3.2 Extension to evaluatives

Evaluative *like* is ambiguous in the same way *need*-ITVs are, as shown in (16).[5,6]

(16) John liked a cookie after dinner.
  a. There was a time after dinner at which John liked (to have) a cookie (high)
  b. What John liked was having a cookie after dinner (low)

This shows us that *like* can (optionally) take a *HAVE*-clause argument. In fact, temporal adverbials like *after dinner* are typically only felicitous with *like* when modifying a *HAVE*-clause, since directly modifying *like* or similar statives results in the previously mentioned 'fickle' readings, cf. (13).[7]

We can identify two distinguishing characteristics of the constructions in (3): I) they allow a non-specific reading of the singular indefinite object and, as will be shown in greater detail in the next section, II) They allow a *HAVE*-clause reading.[8]

So why is (1b) not allowed a non-specific/*HAVE*-clause interpretation?

(1) a. John likes cookies.
  b. #John likes a cookie.

First we note that some singular-indefinite objects *are* allowed a non-specific reading in this context, as *a challenge* is in (17).

(17) Amy: Sorry to stick you with so much work.
  Ben: That's okay. I like a challenge.

We believe the important difference between the singular indefinites in (1) and (17) is that the evocativeness of *challenge* easily lends itself to a *HAVE*-clause reading, one where the agent is the consumer of a challenge. This evocativeness also seems to lead to a non-specific reading. Note the ambiguity with adverbial attachment, shown in (18), indicating the presence of a *HAVE*-clause in this example.

(18) I like a challenge in the afternoon.
  a. There are times in the afternoon when I like a challenge
  b. What I like is to 'have' a challenge in the afternoon

Nouns that pattern this way are arguably event denoting and include *puzzle* and *mystery*, as well as *nap*, *massage*, and *spanking* (these last three courtesy of Gregory Ward, p.c.). In these cases as well, the non-specific reading and *HAVE*-clause-reading are tied together. In contrast, the most salient (specific) readings of (3b) and (13) lack a *HAVE*-clause. In the next

section we examine each example from (3) and show how the modification leads to both a *HAVE*-clause reading and a non-specific reading.

4 Solutions

Below we explore how these modifications lead to two characteristics in the sentences in (3): I) they allow a non-specific reading of the singular indefinite object and II) they allow a *HAVE*-clause reading.

4.1 (3a) John likes a cookie after dinner.

I. Modification induces *HAVE*-clause reading As discussed in Section 3.2, the adverbial must modify a *HAVE*-clause in order to avoid a 'fickle' reading. These 'fickle' readings are shown in (19), where the adverbial modifies the *like*-clause. The felicitous reading is shown in (20).

(19) a. John [likes [a cookie] after dinner] ('fickle')
b. John [likes [PRO HAVE a cookie] after dinner] (high, 'fickle')

(20) John likes [[PRO HAVE a cookie] after dinner] (low)

II. Modification allows non-specific reading In this case we can apply our extension of Rimell (2004) directly. The modifier supplies a restrictor and the restrictor licenses a covert adverbial quantifier over situations, GEN_s. GEN_s takes scope above the indefinite, which allows a non-specific reading, as shown in (21).

(21) GEN_s [J in s and s after dinner] $\exists x$[cookie(x) and J likes(have(x, J) in s)]

4.2 (3b) ?John likes to have a cookie.

I. Modification induces *HAVE*-clause reading Here the modification is the introduction of an overt infinitival *have*-clause. Unsurprisingly, this sentence shows the appropriate attachment ambiguities; there is an overt attachment site in an overt subordinate clause, whose predicate, *have*, shares the interpretation of our covert *HAVE*. Just as with the covert *HAVE*, adverbial modification of *have* is preferred to the 'fickle' modification of *like*.

(22) John [likes [to have a cookie] after dinner] (high, 'fickle')

(23) John likes [[to have a cookie] after dinner] (low)

II. Modification allows non-specific reading Intuitively, interpretation (3b) requires further implicit restriction (e.g. *John likes to have a cookie when he's hungry*), and the overt verb *have* provides a salient (non-'fickle') target for an adverbial. As Rimell shows, an adverbial licenses a tripartite structure and therefore a non-specific reading of a singular indefinite. We propose that the overt verb leads hearers to anticipate or create a restrictor, which in turn allows them to provide a quantifier. This gives rise to a tripartite structure and allows for a non-specific reading.

(24) GEN_s [J in s and ??? in s] $\exists x$[cookie(x) and J likes(have(x, J) in s)]

The difficulty of supplying both a covert restrictor and a covert quantifier is reflected in the marginality some people report for this sentence.[9]

4.3 (3c) John likes a good cookie.

I. Modification induces *HAVE*-clause reading The most salient reading of (3c) involves a special reading of *good*, which we will refer to as *good**. We propose that instead of modifying the nominal and asserting that the cookie in question is 'good', *good** restricts us to consider only cookie-*HAVING*-situations that meet some standard of 'good'-ness.

This use of *good* seems to be related to cases where *good* modifies quantities, as in (25).

(25) a. John read a good ten books.
b. John saw a good number of geese.

Here the claim is not that the *ten books* or the *number of geese* is 'good'. Rather, *good* indicates that the quantity in question meets some cardinality standard.

In support of our claim that *good** is not modifying the nominal, consider the interpretation of standard intersective adjectives like *white*. These can appear in the same construction but are felicitous only under an intersective reading with contrastive stress. Non-prominence for a contrastive intersective adjective results in infelicity, shown in (26b).

(26) a. I like white shirts. (intersective *white*)
b. #I like a white SHIRT. (*white**, unavailable)
c. I like a WHITE shirt. (intersective *white*)

*Good** patterns differently. It needs to be less prominent than the noun. Otherwise, an intersective reading results.

(27) a. I like good cookies. (intersective *good*)

b. I like a good COOKIE. (*good**)
c. I like a GOOD cookie. (intersective *good*)

The infelicity of (26b) and the felicity of (27b) follow from the analysis above of *good** and *white** as situation modifiers: situations can be evaluated against standards of acceptability or 'good'-ness, but situations cannot typically be evaluated against standards of pertaining to colors.

(26b) #I like a shirt-*HAVING* situation that is white. (*white**)

(27b) I like a cookie-*HAVING* situation that is good. (*good**)

The felicity of both (26c) and (27c) is expected under this analysis as well, since contrastive intersective adjectives modify the singular indefinite, not the situation, and a cookie can be good, just as a shirt can be white.

(26c) I like *HAVING* a white-shirt. (intersective *white*)

(27c) I like *HAVING* a good-cookie (intersective *good*)

II. Modification allows non-specific reading Ferreira (2005) proposes that the habitual operator is a covert definite determiner over pluralities of events. On this view, *good** can be understood as a modifier of pluralities of events in much the same way that the *good* of quantity in (25) modifies pluralities of objects.

In a system like Ferreira's, the adjective *good** would selectively modify only pluralities of events. In our current system that corresponds to licensing a covert quantifier by providing an overt restrictor. *Good**, then, is a situation restrictor and as such introduces a tripartite structure. As before this allows for a non-specific reading, shown in (28).

(28) GEN_s [J in s and s is a cookie-*HAVING* situation and s exceeds a threshold for goodness] [J likes s]

In this case the entire object is translated to the restrictor in the tripartite structure, providing an interesting parallel to the case of *I like a challenge* in (17), shown in (29).

(29) GEN_s [J in s and s is a challenge-*HAVING* situation] [J likes s]

Intersective adjectives like *white* also allow a non-specific reading when a *HAVE*-clause is present. The reason for this becomes more clear in the paraphrase in (30), where *white* acts as a restrictor. The tripartite structure is shown in (31).

(30) John likes a shirt if it is white.

(31) GEN_s [J in s & $\exists$ some shirt x in s and x is white] [J likes x in s]

4.4 (3d) John likes a cookie as much as the next person.

I. Modification induces *HAVE*-clause reading Similar to (3c), (3d) restricts us to cookie-*HAVING* situations that meet some standard of acceptability. Here, the standard appears to be somewhat lower than in that required in (3c) and is something like 'an average level of acceptability'. This is sketched in the paraphrase below.

(32) I like a cookie-*HAVING* situation that meets the average acceptability threshold of cookie-*HAVING*.

The presence of a *HAVE*-clause in the felicitous reading of (3d) is made apparent when it is contrasted to sentences like (33).

(33) ?I like a dictionary as much as the next person.

The noun in (33) requires considerable contextual support to be associated with a *HAVING* situation (e.g. *Don't get me wrong, I like a dictionary as much as the next person, but I don't think they make appropriate anniversary gifts*). Lacking that support in null contexts it contrasts in felicity with (3d).

II. Modification allows non-specific reading Here we have a tripartite structure much like that in (29), but with reference to a somewhat lower standard. As before, the tripartite structure licenses a non-specific reading of the indefinite.

(34) GEN_s [J in s and s is a cookie-*HAVING* situation and s meets a standard of acceptability] [J likes s]

We will not discuss how these tripartite structures arise compositionally. Reconciling the syntax of these evaluative constructions with something like Diesing's tree-splitting algorithm (Diesing, 1992) is not trivial and is beyond the scope of this work. The structure in (34) deserves some comment, as it is particularly suspect from a compositional perspective. Note, however, that (3d) is likely idiomatic. This is view is supported by the infelicity of paraphrases and similar expressions seen in (35).[10]

(35) a. # John likes a cookie the same amount as the next person.
b. # John likes a cookie more than the next person.

5 Conclusion

In this paper we investigated sentences with evaluative predicates, shown in (3), in which modification allows the singular indefinite object to avoid a specific reading. We proposed that evaluative sentences do not typically give rise to tripartite structures unless there is overt quantification or restriction, an extension of Rimell's analysis of habitual sentences. We further showed that *like* gives rise to the same kind of attachment ambiguities as those presented in Schwarz (2008) for *need*-type intensional transitive verbs, and we argued that *like* as well takes a covert *HAVE*-clause argument. Further, we showed a systematic connection between the availability of a *HAVE*-clause and the availability of a non-specific reading of the indefinite. In the process we argued for the presence of a non-intersective *good** which, along with the idiomatic modifier *as much as the next person*, directly modifies situations rather than individuals. Such situation modifiers directly map to the restrictor in our tripartite structures.

We noted certain parallels and asymmetries between evaluative and habitual sentences, shown in (3) and (4). Specifically, unmodified habituals and evaluatives both give rise to a specific reading of a singular indefinite object, as was shown in (1b) and (2b). Adverbial modification licenses a non-specific reading of the singular indefinite, as shown in (3a) and (4a), but the other forms of modification discussed here license a non-specific reading of the singular indefinite for evaluates only, not habituals, as shown in (3b)-(3d) and (4b)-(4d). This asymmetry follows from our analysis, which links the non-specific reading to the *HAVE* clause. Recall that habituals do not take infinitival or *HAVE*-clause complements, so where a *have*/*HAVE* clause is required as the target of modification, as is in (3b)-(3d), the parallel is not available with habituals, as demonstrated in (36).

(4) a. John eats a cookie after dinner.
b. *John eats to have a cookie.
c. #John eats a good cookie.
d. #John eats a cookie as much as the next person.

While we have presented an analysis to account for specificity contrasts in (1) and (3), there are a number of additional questions that arise. Though the data is somewhat different, this work is very much in the spirit of other work on licensing by modification (Dayal, 2004; Ferreira, 2005, a.o.). Whether the current analysis can be brought to bear on these other licensing phenomena is left for future work. There is also a question of what material constitutes a restrictor. In our analyses we mapped both adverbials (e.g. *after dinner*) and situation evaluators (e.g. *good*) to the restrictor. It is left to future work to explore whether this difference is meaningful and

whether there are formal properties of situation evaluators that preclude them from being analyzed as adverbials. Lastly, while we identified a systematic connection between non-specific indefinites and the presence of a *HAVE*-clause, under this analysis these are both more or less independent results of modification. We leave open the possibility that there may be a more direct connection between the two.

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Notes

[1]See Beller and Zaroukian (in press) for an analysis of evaluatives in the presence of subjunctive modals as in (36). In such contexts a singular indefinite also avoids a specific reading.

(36) John would like a cookie.

[2]Carlson's stages of individuals (Carlson, 1980) do the same work in Rimell's analysis.
[3]Other verbs, even *look-for*-type ITVs have only a single reading.

(37) John needed a cookie after dinner.
  a. only: There was a time after dinner at which John needed a cookie

(38) John looked for a cookie after dinner.
  a. only: There was a time after dinner at which John looked for a cookie

[4]Schwarz points out that ITVs do not always fill their propositional complement with a null *HAVE*, as highlighted in examples like (39).

(39) a. I need a shower. ($\neq$ have a shower) (Schwarz, 2008, pp. 271-2)
  b. John needs a marathon. (??have a marathon)

Instead he suggests that there is also a relational variable R that can be filled in by the context.

(40) a. I need [PRO R a shower].
  b. John needs [PRO R a marathon].

For simplicity, we abstract over these two options, calling them simply *HAVE*-clauses.
[5]Habituals like *eat* are not ambiguous.

(41) John ate a cookie after dinner.
  a. only: There was a time after dinner at which John ate a cookie

[6] *Like* is ambiguous in (at least) one more way: with high attachment of the modifier, the *HAVE*-clause may be absent (this is not a possibility for *need*-type ITVs). All attachment readings given below:

(42) John liked a cookie after dinner.

a. There was a time(s) after dinner at which John liked to have a cookie. (high, +*HAVE*, 'fickle')

b. There was a time(s) after dinner at which John liked a cookie. (-*HAVE*, 'fickle')

c. What John liked was having a cookie after dinner. (low, +*HAVE*)

The *like*-modifying/high-attaching 'fickle' reading is compatible with a continuation like *. . . though she may not have liked that cookie at other times.* The *HAVE*-modifying/low-attaching reading is compatible with a continuation like *. . . when she was in college.*

[7]Note that fickleness is not a problem for habituals like *eat*, since restricting eating in a sentence like (4a) is perfectly natural.

[8]Note that these are characteristic of *need*-type ITVs as well, cf. (14).

[9]There seems to be another available reading of (3b), which corresponds (29) and is similar to the analyses provided here for (3c) and (3d).

(43) GEN_s [J in s and s is a cookie-*HAVING* situation] [J likes s]

[10]The extent to which (35b) is felicitous it is interpreted as a witticism, (35a) is not at all felicitous.

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Erin Zaroukian
Charley Beller
Cognitive Science Department
Johns Hopkins University
3400 N. Charles Street
Baltimore, MD 21218
zaroukian@cogsci.jhu.edu
beller@cogsci.jhu.edu