The strong and the weak
evaluation in modal desideratives

Erin Zaroukian
École Normale Supérieure/CNRS
egz@jhu.edu

Charley Beller
Johns Hopkins University
charleybeller@jhu.edu

1 Introduction

Two desiderative interpretations generated by modal auxiliaries.

1. Strong desideratives:
   - express strict preference (>) of one situation over another (see e.g. Heim, 1992; Villalta, 2008; Iatridou, 2000)

     (1) I {want / would like} a cookie.
     'A situation similar to this one but wherein I have a cookie is preferable to this situation'

   - are felicitous out of the blue

     (2) (A: Cookie anyone?) B: I {want / would like} a cookie.

2. Weak desideratives:
   - express *weak* preference of one situation over another

     (3) I {would / might} {have / take / eat} a cookie.
     'A situation similar to the one by wherein I have a cookie may be preferable to this situation'

   - are infelicitous out of the blue (accept offers, don't make requests)

     (4) #(A: Cookie anyone?) B: I {would / might} {have / take / eat} a cookie.

   - ◦ *Could* also gives a weak desiderative reading with canonical-use verbs but not with underspecified-use verbs (with these, we instead get an ability reading, marked as #).

(4') B: I could $\left\{\begin{array}{c}\text{\#have}\\ \text{\#take}\\ \text{eat}\end{array}\right\}$ a cookie.

We provide an analysis that accounts for the data above by introducing

1. a comparison operator
    - We propose that a comparison operator is part of the present subjunctive morpheme (cf. Villalta, 2008), which we assume to be part of modal auxiliaries *would*, *might*, and *could*
    - The force of this operator is modulated by what it combines with (which modal auxiliary it is part of)
2. a criterion determining how alternative situations are introduced for comparison
    - Strong desiderative readings require an evaluative verb / privileged information about preferences

N.B.

- We are talking about requests/desire reports, not counterfactuals, etc.

(5) Counterfactual, etc. ✗
   a. I would like this lasagna if it had less cheese.
   b. I would eat a cookie if one were available.
   c. I might take a towel {if I plan on getting in the water / tomorrow}.

(6) Request ✓
   a. I would like a cookie, if it's not too much trouble.
   b. A: Cookie anyone?
      B: I would eat a cookie, if you're trying to get rid of them.
   c. A: Do you need anything else?
      B: I might take a towel, if you feel like digging through the closet.

2 The framework

We formalize this using the discourse model developed in Farkas and Bruce (2010)

This model represents

a-b) non-mutual Discourse Commitments for individual participants in a discourse,

c) a stack of unresolved issues, *the Table*,

d) a common ground of mutual commitments (*cg*), and

***e*) a projected set of possible future discourse states (*ps*).**
→ how discourse is expected to proceed

(7) An empty discourse
   a. DC_A: –
   b. DC_B: –
   c. Table: –
   d. *cg*: s_1
   e. *ps*: s_1

2.1 Declaratives

The utterance of a standard declarative sentence, $S[D]$, is taken to

- update the speaker's commitment set with the proposition p expressed in S[D] (a)
- push both S[D] and its semantic representation onto the Table (c)
- no change is made to the common ground itself until all participants confirm p (d)
- **change is reflected in the projected set as the union of the current *cg* with p (e)**

(8) Discourse after A utters the declarative "John has a cookie" with semantic content p
   a. DC_A $\underline{p}$
   b. DC_B: –
   c. Table: $\underline{\langle \text{`John has a cookie'}[D]; \{p\}\rangle}$
   d. *cg*: s_1
   e. *ps*: $\underline{\{s_1 \cup \{p\}\}}$

(9) Discourse after A's utterance of the declarative "John has a cookie" with semantic content p is accepted
   a. DC_A: –
   b. DC_B: –
   c. Table: –
   d. *cg*: $s_1 \cup \{p\}$
   e. *ps*: $\{s_1 \cup \{p\}\}$

Canonical move – confirming (reflected in *ps*)

Reversing creates 'crisis'

(10) A: John has a cookie.
   B: Yes, he does. (removed from Table, p added to *cg*)
   B′: No, he doesn't. (crisis!)

2.2 Interrogatives

Denotation of a question is the set of its possible answers (Hamblin, 1973, and much subsequent work)

The utterance of a standard interrogative sentence, $S[I]$, is taken to

- push both S[I] and its semantic representation (possible answers) (c)
- no change is made to the common ground itself until all participants confirm a possible answer (d)
- **change is reflected in the projected set as the union of the current cg with each possible answer (e)**

(11) Discourse after A utters the interrogative "Does John have a cookie?" with semantic content $\{p, \neg p\}$

a. DC_A: –
b. DC_B: –
c. Table: $\underline{\langle \text{'John has a cookie'}[I]; \{p, \neg p\}\rangle}$
d. cg: s_1 unchanged
e. ps: $\underline{\{s_1 \cup \{p\}, s_1 \cup \{\neg p\}\}}$

Canonical move – confirming or reversing (reflected in ps)

Reversing does not create 'crisis'

(12) A: John has a cookie.
B: Yes, he does. (removed from Table, p added to cg)
B′: No, he doesn't. (removed from Table, $\neg p$ added to cg)

2.3 With desideratives

Confirming does not appear 'canonical'!

(13) A: I want a cookie.
B: #Yes, you do.
B′:#No, you don't.

Desideratives represent privileged information of the agent/experiencer. Other discourse participants are typically not licensed to confirm or deny desideratives, (14).[1]

[1]These responses are sometimes allowed through

- Report or inference

(i) John wants a cookie. I know because he {told me / has that certain look in his eye}.

Cf. other privileged information

(14) A: I had a dream about elephants last night.
B: #Yes, you did.
B′:#No, you didn't.

We propose: Canonical move – silent confirming

Cf. Gunlogson (2008)

- *yes*/*no* = indicates that $p/\neg p$ is part of Speaker's Source Set (ss)

(15) Discourse after A utters the declarative "I want a cookie" with semantic content p

a. DC_A: p
b. DC_B: –
c. Table: $\langle$'I want a cookie'$[D]; \{p\}\rangle$
d. cg: s_1 unchanged
e. ps: $\{s_1 \cup \{p\}\}$

(16) Discourse after A's utterance of the declarative "I want a cookie" with semantic content p is (tacitly) accepted

a. DC_A: –
b. DC_B: –
c. Table:
d. cg: $s_1 \cup \{p\}$
e. ps: $\{s_1 \cup \{p\}\}$

3 Comparison

Strong desideratives – express strict preference ($>$)

Weak desideratives – express weak preference

We assume

- Speaker 'authority'

(ii) a. I want to try Mary's roast.
b. No you don't, trust me.
'If you had the detail I have, you would not think that Mary's roast would improve your situation'

- As denial of request

(iii) A: I want a cookie.
B: No, not until finish your peas.

- This comparison is introduced via subjunctive morphology (cf. Villalta, 2008)
- This subjunctive morpheme is part of *would*, *might*, (*could*)
- Quantification force over alternatives affects the interpretation

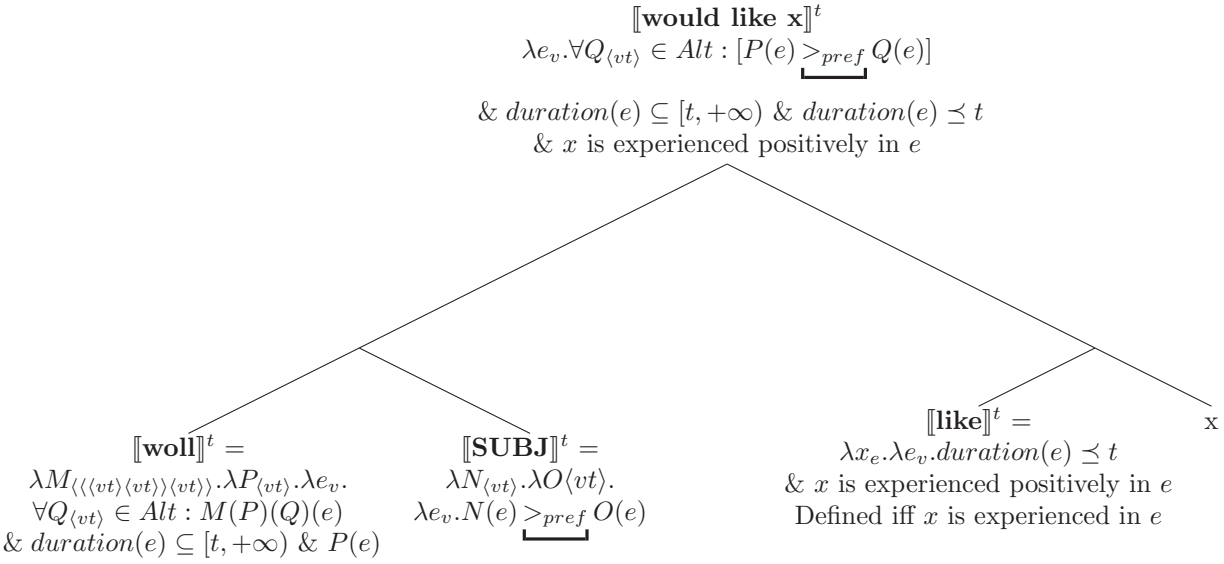
3.1 Strong desideratives

We adopt the view that desideratives express a comparison (Heim, 1992; Villalta, 2008, i.a.).

E.g. The strong desiderative *I want a cookie* raises the issue that, in the speaker's view, the addition of a cookie to the current situation would improve it (*now + cookie* $>_s$ *now*).

Strong desiderative

- Comparison – $[\![\textbf{SUBJ}]\!]$
- Quantification over *all* alternatives – $[\![\textbf{woll}]\!]$



(17) $[\![\textbf{woll}]\!]^t = \lambda M_{\langle\langle\langle vt\rangle\langle vt\rangle\rangle\langle vt\rangle\rangle}.\lambda P_{\langle vt\rangle}.\lambda e_v.\forall Q_{\langle vt\rangle} \in Alt : M(P)(Q)(e)$ & $duration(e) \subseteq [t, +\infty)$ & $P(e)$ (cf. Condoravdi, 2003)
takes a mood (type $\langle\langle\langle vt\rangle\langle vt\rangle\rangle\langle vt\rangle\rangle$) and a predicate P and event e and returns true just in case the mood returns true for P and all eventualities in Alt and the duration of that eventuality starts at the speech time and extends into the future.[2]

[2]Membership in *Alt* is pragmatically determined. Crucially, we assume that *Alt* minimally includes an event representation of the currently observable speech context. This particular predicate in *Alt* will include information about who is participating in the discourse, what (if any) activities participants engaging in, and salient objects in the environment.

(18) $[\![\textbf{SUBJ}]\!]^t = \lambda N_{\langle vt\rangle}.\lambda O_{\langle vt\rangle}.\lambda e_v.N(e) \underbrace{>_{pref}} O(e)$

takes as arguments two predicates of eventualities N and P and an eventuality and returns true just in case N is preferred to P when evaluated for that eventuality, **provides comparison**

(19) $[\![\textbf{like}]\!]^t = \lambda x_e.\lambda e_v.duration(e) \preceq t$ & x is experienced positively in e
Defined iff x is experienced in e
takes an object of evaluation and an eventuality and assert that the eventuality occurs at or before the time parameter and that the object of evaluation is positively evaluated in that event

In declarative – *ps*: $\{s_1 \cup \{>\}\}$

In polar interrogative – *ps*: $\{s_1 \cup \{>\}, s_1 \cup \{\leq\}\}$

3.2 Weak desideratives

3.2.1 *Might*

(20) I might $\left\{\begin{matrix}\text{have}\\ \text{take}\\ \text{eat}\end{matrix}\right\}$ a cookie.

Might has a weaker (existential) quantificational force

(21) $[\![\textbf{may}]\!]^t = \lambda M_{\langle\langle vt\rangle\langle vt\rangle\rangle t\rangle}.\lambda P_{\langle vt\rangle}.\lambda e_v.\exists Q_{\langle vt\rangle} \in Alt : M(P)(Q)$ & $duration(e) \subseteq [t, +\infty)$ & $P(e)$ (cf. Condoravdi, 2003)

Leads to what we call a weak preference, where for at least one alternative $>$, but some $=$ or even $<$

We propose – This cannot lead to strong desiderativity – knowing that something is preferred to at least one alternative is not forceful enough to yield a request reading.

Cf.

(22) a. I would feel better if you let me drive. (can be request)
b. It's possible that I would feel better if you let me drive.

In declarative – *ps*: $\{s_1 \cup \{\exists >\}\}$

In interrogative – *ps*: $\{s_1 \cup \{\exists >\}, s_1 \cup \{\leq\}\}$

So weak desideratives should not work as offers

(23) Might you $\left\{\begin{matrix}\text{have}\\ \text{take}\\ \text{eat}\end{matrix}\right\}$ a cookie? (marked request)

- Excessively polite, pragmatically enriched version goes on the Table[3] ($>$)

Weak-desiderative declaratives responding to strong-desiderative interrogatives

(24) A: Do you want a cookie? (ps: $>, \leq$)
B: I might take one. $\exists >$

- Pragmatic matching to $>$
- Infelicity (when not interpreted as 'yes')

3.2.2 *Would*

What about

(25) I would $\left\{\begin{matrix}\text{have}\\ \text{take}\\ \text{eat}\end{matrix}\right\}$ a cookie.

Universal, so why is it get a weak desiderative reading?

4 Introducing alternatives

Only strong desideratives are felicitous out of the blue/requests

Why?

- Above – those with existential force are too weak
- Relevant alternatives for comparison ($>$) must be available

Evaluative verbs (e.g. *like*), as well as the desiderative *want*, convey privileged information about an agent's preferences

We propose – an (appropriate) evaluative verb is needed to introduce alternatives out of the blue

Strong desiderativity results when a modal (which, as shown above, must be *would*) combines with an evaluative, which can introduce potential alternatives

(26) I $\left\{\begin{matrix}\text{want}\\ \text{would like}\end{matrix}\right\}$ a cookie.

[3]There is independent reason to expect that pragmatically-enriched versions are used in general:

(i) A: Do you know what time it is?
B: Yes, I do. (uncooperative literal response)
B′: Yes, it's 2:30.

(27) I $\left\{\begin{matrix}\text{would}\\\text{might}\end{matrix}\right\}$ $\left\{\begin{matrix}\text{have}\\\text{take}\\\text{eat}\end{matrix}\right\}$ a cookie.

If no evaluative verb is involved, something else in the discourse (e.g. a question) must introduce alternative desirable situations.

(28) A: Cookie anyone?
B: I would take a cookie.

- If question doesn't address desirability, it's marked, e.g.

  (29) A: Cookies contain flour.
  B: ?I would have cookie.

Why can't evaluative-containing *might like* be uttered out of the blue?

- Weak requests (existential modal) are too weak to act as a request – Knowing that a cookie may or may not improve your situation is little incentive for me to get you one

5 Conclusion

Summary

- We utilize a comparison operator and a criterion determining how alternative situations are introduced.
  - We assume *would* and *might* (and *could*) here have present subjunctive morphology.
  - We attribute the comparison operator to the subjunctive morpheme (cf. Villalta, 2008).
  - We propose that this operator is $>$, which is weakened in force with existential modals (*might*, *could*) such that it cannot act as a request
  - Weak desideratives require that the desirable alternative has previously been introduced (no evaluative).

Strong/weak may not be a clean or straightforward divide, especially if using *please* as indicating a request

(30) a. I want a cookie, please.
b. I would like a cookie, please.
c. ?I would love a cookie, please.

d. ?A cookie would be great, please.
e. ??I would eat a cookie, please.
f.???I might have a cookie, please.

Cf. specificity of request

(31) A: Can I get you anything?
B: A cookie would be great.
B′: I would take a cookie.
B″: ?I could/would eat cookie.

(32) A: Can I offer you a cookie?
B: A cookie would be great.
B′: I would take a cookie.
B″: I could/would eat a cookie.

This analysis shows an important and novel role of evaluative predicates in constraining discourse function, and it may have ramifications in the wider domain of preference structures (imperatives, desire reports, etc.), particularly concerning strong/weak necessity (Portner, 2007; Rubenstein, 2013, a.o.).

References

Condoravdi, Cleo. 2003. Moods and modalities for *will* and *would*. Handout of talk presented at the Amsterdam Colloquium.

Farkas, Donka F., and Kim B. Bruce. 2010. On reacting to assertions and polar questions. *Journal of Semantics* 27:81–118.

Gunlogson, Christine. 2008. A question of commitment. *Belgian Journal of Linguistics* 101–136.

Hamblin, Charles L. 1973. Questions in Montague English. *Foundations of language* 10:41–53.

Heim, Irene. 1992. Presupposition projection and the semantics of attitude verbs. *Journal of Semantics* 9:183–221.

Iatridou, Sabine. 2000. The grammatical ingredients of counterfactuality. *Linguistic Inquiry* 31:231–270.

Portner, Paul. 2007. Imperatives and modals. *Natural Language Semantics* 15:351–383.

Rubenstein, Aynat. 2013. Figuring out what we ought to do: the challenge of delineating priorities. In *University of Pennsylvania working papers in lingusitics*, volume 19: Iss. 1, Article 20. Available at: http://repository.upenn.edu/pwpl/vol19/iss1/20.

Villalta, Elisabeth. 2008. Mood and gradability: an investigation of the subjunctive mood in spanish. *Linguistics and Philosophy* 31:467–522.