

Polarity Sensitivity and the Heart of Logic

ICLC 12 June 24-28, 2013
Edmonton, Alberta

Michael Israel
University of Maryland, College Park



The Mystery of Affectivity

What kinds of clauses license negative polarity items (NPIs)?

- 1 a. It's not a decision I would **care to** have to make.
b. *It's a decision I would care to make.
- 2 a. **Would you** care to tell me what your quarrel was about?
b. Yet the evidence is there **if** we care to look for it .
c. Because I 've had it around for a lot **longer than** I care to tell you .
d. And make no mistake, you have my full authority for **any action** you care to take.

Klima (1964) suggested that licensing contexts share a "grammatico-semantic feature (GSF)": ***Affect(ive)***

Affectivity and Inferencing

Propositions differ in their logical strength or informativeness.

- 1)
 - a. Edna liked *some* of the poems.
 - b. <— Edna liked *most* of the poems.
 - c. <— — Edna liked *all* of the poems.
- 2)
 - a. George *could* have already seen this movie.
 - b. <— George *must* have already seen this movie.
- 3)
 - a. Glynda saw a zombie
 - b. <— Glynda saw a purple zombie.

The Unmarked Case: bigger quantities and more specific entities
make for more informative .

Direction of Entailment

Certain constructions reverse the direction of entailments that normally hold across propositions.

- 1) a. I would be happy **if** Edna liked *some* of the poems. —>
b. I would be happy **if** Edna liked *all* of the poems.
- 2) a. I **don't think** George *could* have already seen this movie. —>
b. I **don't think** George *must* have already seen this movie.
- 3) a. **Anyone who** sees a zombie gets scared. —>
b. **Anyone who** sees a purple zombie gets scared.

These appear to be precisely the "affective" constructions which license negative polarity items.

The Informativity Hypothesis (Israel 1996, 2011)

Polarity Items conventionally encode informativeness:

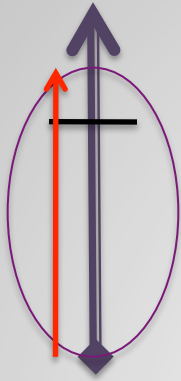
They are argumentative operators with two kinds of scalar semantic properties:

Quantitative (Q) Value: position relative to alternatives;
depicts an entity as **high** or **low** in a scalar ordering.

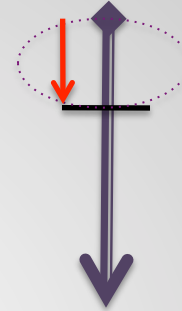
Informative (I) Value: expressive force of what is said;
presents an expressed proposition as **attenuating** or
emphatic relative to alternative propositions.

A polarity item is licensed only if both its Q-Value
and its I-Value can be felicitously expressed.

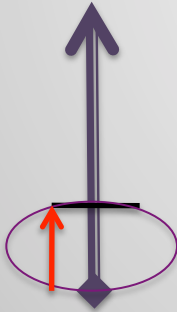
Four Sorts of Scalar Predication



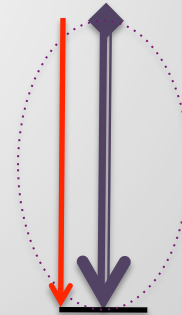
I love you more than life



you don't much like me



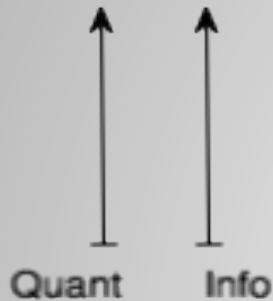
I quite like you



you don't like me at all

Affirmation: Strong and Weak

(a) He is _____ funny.

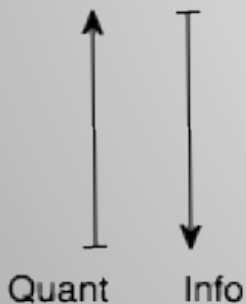


GALORE: *really, truly, totally, freaking, hella*

SOME: *kinda, sorta, somewhat, only so*

Scalar Denial: Weak and Strong

(b) She is not _____ worried.



MUCH: *all that, (any) too, too very, so very, overly*

ANY: *the least bit, in the slightest, in any way*

Some Reasons to be Skeptical

1. No immediate explanation for diverse sensitivities

German *irgend*, Romanian *vreun*, Spanish *ningun*, etc

2. Some Polarity Items sometimes lack rhetorical affect

*They don't have **any** chocolate.*

3. Some polarity items seem to lack scalar alternatives

*Would you **care to** address this issue?*

4. The Explanation seems suspiciously circular

How informative a scalar operator is depends on the inferential properties of its context. I-value seems inevitably redundant.

5. Is "Informative Value" a plausible semantic feature?

Informativity as Expressive Content

1. Speakers and writers can modulate the expression of informativity for rhetorical effects, e.g. to express involvement or mitigate face threats.

Thus the effects of informativity may be observed in discourse independent of the use of polarity items.

2. Such effects — the emphatic and attenuated ways of posing an expressed proposition — can be highly salient where they occur.

Emphasis and attenuation are thus liable to be semanticized with constructions that regularly trigger them.



Edna St. Vincent Millay (1892-1950)

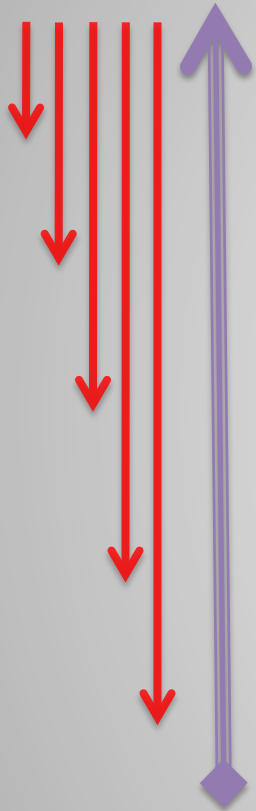
A jazz-age celebrity
and notorious hopeless
romantic.

Pulitzer prize for poetry in 1923
Still widely anthologized, though
her critical star has fallen some.

Makes good use of "Affective"
operators, and of negation
particularly.

Love is not all: it is not meat nor drink
Nor slumber nor a roof against the rain;
Nor yet a floating spar to men that sink
And rise and sink and rise and sink again;
Love cannot fill the thickened lung with breath,
Nor clean the blood, nor set the fractured bone;
Yet many a man is making friends with death
Even as I speak, for lack of love alone.
It well may be that in a difficult hour,
Pinned down by pain and moaning for release,
Or nagged by want past resolution's power,
I might be driven to sell your love for peace,
Or trade the memory of this day for food,
It well may be. I do not think I would.

Antithesis 1: NOT (all you need is love)



*Love is what we
need;
keeps men alive.*

⇐ ↓ ↓ Love is not all:

↓ ↓ it is not meat ↓ ↓ nor drink

↓ ↓ Nor slumber ↓ ↓ nor a roof against the rain;

↓ ↓ Nor yet a floating spar to men that sink

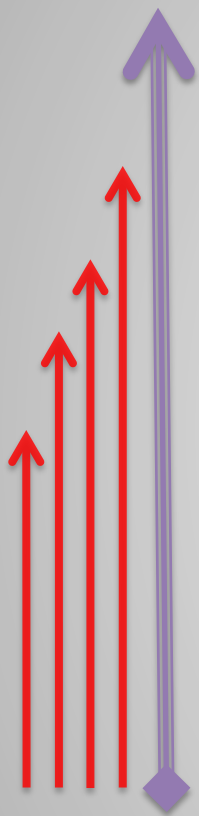
And rise and sink and rise and sink again;

↓ ↓ Love can not fill the thickened lung with breath,

↓ ↓ Nor clean the blood,

↓ ↓ nor set the fractured bone;

Anti-antithesis: lack of love can kill



⇒ yet

↑↑ many a man

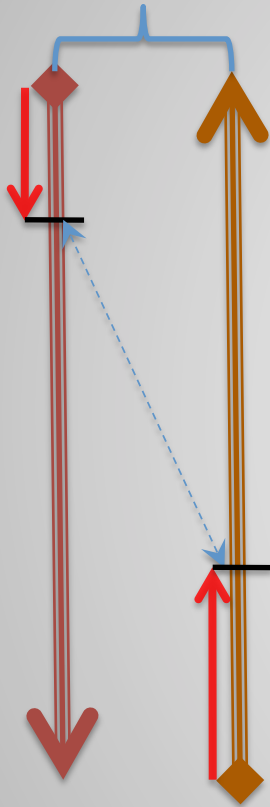
↑↑ is making friends with death

↑↑ Even as I speak,

↑↑ for lack of love alone.

*Love is a necessity;
keeps men alive.*

Antithesis 2: a conditional concession



<i>Physical need</i>	<i>Chance of sell out</i>
--------------------------	-------------------------------

↑↑ It well may be that
 ↓↓ in a difficult hour,
 ↓↓ Pinned down by pain
 ↓↓ and moaning for release,
 ↓↓ Or
 ↓↓ nagged by want past resolution's power,
↑↑ I might
 ↑↑ be driven to sell your love for peace,
↑↑ Or
 ↑↑ trade the memory of this night for food.

Polarity Sensitive Catenative Verbs

LOW Q-Value

HIGH Q-Value

Inclination: NPI: *dare V, dream of Ving*
PPI: *(would) rather V*

care to V
be delighted to V

Aversion: NPI: *(can) resist Ving*
PPI: *(can) do without Ving*

mind Ving
(would) hate to V

Tolerance: NPI: *(can) stand to V*
PPI: *(can) live with*

(can) resign oneself to Ving
(be) dying to V

Effort: NPI: *bother {to V/Ving}*
PPI: *take a stab at Ving*

trouble oneself to V
make every effort to V

Canonical Uses under Negation

(examples from BNC)

(not) Mind Ving ?= 'dislike'

- (1) a. I **never minded** being shy.
b. But I **don't mind** living here, it's all right.
c. I know (she) **won't mind** you having a rest before that long walk back.
d. not caring much for drink, she **did not mind** losing the Madeira.

(not) Care to V ?= 'want'

- (2) a. It **isn't something I care** to discuss.
b. **No one** here, I trust, would **care** to disagree.
c. He knew there were dark corners of his life he did **not care** to explore .
d. The majority of people do **not care** to hear of the torture of elephants .

Uses in Questions as Illocutionary Force Indicators

***Mind Ving* occurs frequently in requests and demands:**

- (1) a. “Do you mind telling me your position here, Miss Carne ”
b. I'd say, would mind giving me your name sir?
c. He asked **whether** she **would mind** calling him a cab ...
d. Marcus said in a low voice, “Would **you mind** shaving me?”

***Care to V* occurs frequently in offers and invitations:**

- (2) a. **Would you care** to spend Christmas with me?
b. **Perhaps** this evening **you'd care** to join me?
c. **I don't suppose you'd care** to have a look at it ?
d. **Perhaps you'd care** to enlighten me as to what exactly you've been doing?

Care to V ≠ Want to V

- (1) They were not risks that he {wanted/??cared} to take, but he took them nonetheless.
- (2) If you {want/would care} to see her again, that can be arranged.
- (3) If you {want/??would care} to see her again, you're a damn fool.

Mind Ving ≠ Dislike Ving

- (4) I don't {dislike/??mind} doing the dishes, but I'm not going to do them anyway.
- (5) Would you {dislike/??mind} being a rock star?

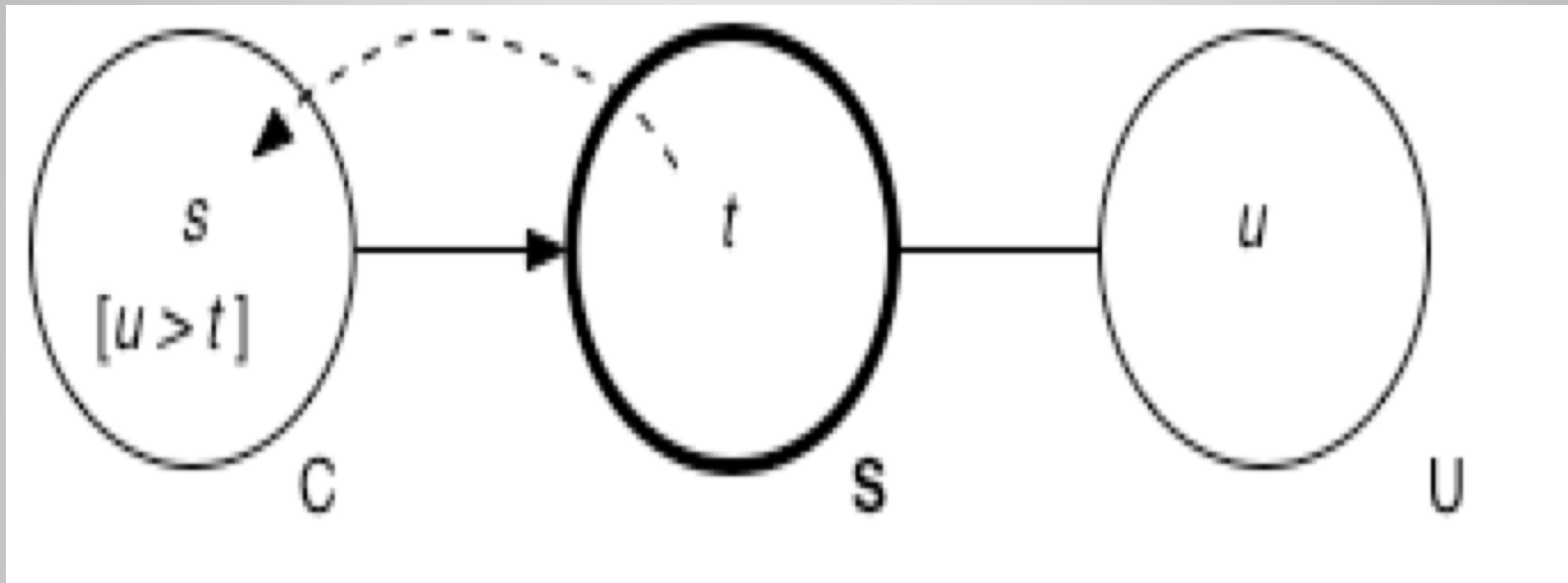
X care to VP depicts a strong inclination for X to V
construed as a relatively weak argument

X dream of Ving depicts *t* a minimal inclination for X to V
construed as a relatively strong argument.

X mind Ving depicts a strong aversion for X to V
acts as a weak argument for Ving

X resist Ving depicts a minimal aversion for X to V
acts as a strong argument for X Ving

An Attenuated Assertion



t (what is said): *It isn't something I care to discuss.*

u (what is unsaid): *It isn't something I'd dream of discussing*

Why these roots in these constructions?

CARE 'mourn, toil' —> 'be troubled about' —> 'feel concern for'

carefree = 'without problems'

take care of = 'trouble oneself on behalf of'

have a care in the world = 'have any problems'

So how does *not care to V* come to mean 'want to V'??

MIND 'think about, attend to'

mindful = 'conscious of'

have a mind to = 'intend to'

mind the store = 'take care of business'

So how does *not mind Ving* come to mean 'dislike Ving'??

***Mind:* 'attend to' —> '(dis)like'**

OED, *mind* s.v. II, 'to attend to, concern oneself with, care for, etc.'

1530 I mynde a thyng, I regarde it, or set my mynde upon it ... (Palsgrave)

Positive : When people like thing, they tend to set their mind on it:

- (1) a. **1611** Be of the same mind one toward another. **Mind not high things**, but condescend to men of low estate. (Romans 12.2.16)
- b. **1748** His heir...**minded nothing** but fox-hunting. (Smollett, *Roderick Random*)

Negative : When people don't dislike a thing, they tend not to keep it in mind.

- (2) a. **1710** **I did not mind his being** a little out of humour. (Steele, *Tatler* No. 206.2)
- b. **c.1800** He will have a good soil, & a good Mistress, & I suppose **will not mind** taking physic now & then. (Jane Austen - *Letters To Her Sister*)
- c. **1815** And now, Miss Woodhouse, I do not think I shall **mind** seeing them again. He is just as superior as ever;--but being married, you know, it is quite a different thing. (Jane Austen, *Emma*)

Attenuative and Understating Uses of *Mind*

- (3) a. **1839** 'Come, dub up!' roars a third; and I **don't mind telling you**..that I..took out the sovereign and gave it. (Comic Almanack 1840 36)
- b. **1848** "There are some men who wouldn't **mind** changing with you," he added, with a bitter smile.... (Thackeray - *Vanity Fair*)
- (4) a. **1837** I shouldn't think he was fit to be the lover of such a lady as mistress Jane, **if he minded running a little risk** for her sake. (T. J. Serle, *Parole of Honour*)
- b. **1860** **Would you mind taking** great pains not to let the doors bang, and not to drop the port-folio? Thank you. (Collins – *The Woman In White*)
- c. **1863** **Would you mind** my asking you what part of the country you come from? (Dickens, *Uncommerc. Traveller*)

Care: 'worry, toil, have concern'

- (1) a. Tremble, ye women that are at ease; **be troubled, ye careless ones**: strip you, and make you bare, and gird sackcloth upon your loins. (Isaiah 32. 3.11)
- b. He found no place of repentance, though **he sought it carefully with tears**. (Hebrews.12.1.17)
- (2) a. taken with a grievous disease, I thought it necessary **to care for the common safety of all** (2Mac.9.1.21)
- b. The unmarried woman **careth for the things of the Lord**, that she may be holy both in body and in spirit: but she that is married **careth for the things of the world**, how she may please her husband.(1Cor.7.4.34)

Care: 'worry' —> 'want'

- (3) **1603** If you have any music that may not be heard, to't again: but, as they say **to hear music** the general does **not** greatly **care**. (Othello, III.1)
- (4) a. **1670** neither do I **care to** wrinkle the smoothness of History with rugged names of places unknown (Milton, *History of Britain*)
- b. **1678** there are but **few** that **care thus to** spend their time... (Bunyan, *Pilgrim's Progress*)
- c. **1748** My dearest Harry, you must see why I **don't care to** say more on this head. (Walpole, *letters*)

Other Affective Contexts

- (5) a. **1748** We are in more confusion than we **care** to own. (Walpole – letters)
- b. **1749** and yet I begin to fear Mrs. Ellison knows something of her more than she **cares** to discover (Fielding – *Amelia*)
- (6) a. **1801** “you've taken such a fancy to the piece, if you've a mind to make up the remainder of the money, I will take this here little box, if you **care** to part with it.” (Edgeworth - *The Parent's Assistant*)
- b. **1869** It is not for me to tell all she said, even supposing (what is not likely) that any one **cared** to know it... (Blackmore - *Lorna Doone*)

The Grammaticalization of Sensitivity

The verbs *mind* and *care* are reanalyzed in catenative constructions under negation.

New constructions become entrenched as oblique expressions of dispreference (*care*) and non-aversion (*mind*).

New uses spread gradually from negative to other [+Affective] contexts — questions, conditionals, comparatives, etc — which do not support the original reanalysis, but do fit the new pragmatics.

But the new constructions do not spread to positive contexts, where their oblique pragmatics would not fit.

Conclusions: logic and affectivity in grammar

The grammar of *Affectivity* reflects two principles of usage-based grammar:

- i) The tendency toward subjectivity: (Traugott 1989, Traugott and Dasher 2002)

"Meanings tend to become increasingly situated in the speaker's subjective apprehension of the speech act situation."

- ii) The tendency toward item specificity: (Langacker 1987, Tomasello 2002)

Lexical and grammatical constructions tend to be learned and stored in narrowly defined constructions with pragmatically rich meanings.

An Equivocal Moral

Meaning is more than just a matter of logical truth conditions—it is crucially subjective and intersubjective as well.

But the subjectivity in language is itself sometimes an effect of the ways our minds follow paths which logic lays down.

The grammar of polarity sensitivity reflects two basic principles of usage-based grammar:

i) The tendency toward subjectivity: (Traugott 1989, Traugott and Dasher 2002)

Meanings tend to become increasingly situated in the speaker's subjective apprehension of the speech act situation.

ii) The tendency toward item specificity: (Langacker 1987, Tomasello 2002)
Lexical and grammatical constructions tend to be learned and stored in narrowly defined constructions with pragmatically rich meanings.

An Equivocal Moral

Meaning is more than just a matter of objective truth conditions—still, it cannot entirely escape the logic such truth conditions can impose.

Thank You
for
Your Attention

Inherently Understating NPIs

VP Construction

be (any) great shakes

bear comment

take kindly to

think small beer of

be skin off one's nose

be the end of the world

be born yesterday

be something to sniff at

Use Denies

'be very good'

'be significant'

'esteem'

'disdain'

'be a problem'

'be a problem'

'be very naïve'

'be trivial'

Use Implicates

'be quite bad'

'be trivial'

'disdain'

'esteem'

'be no problem'

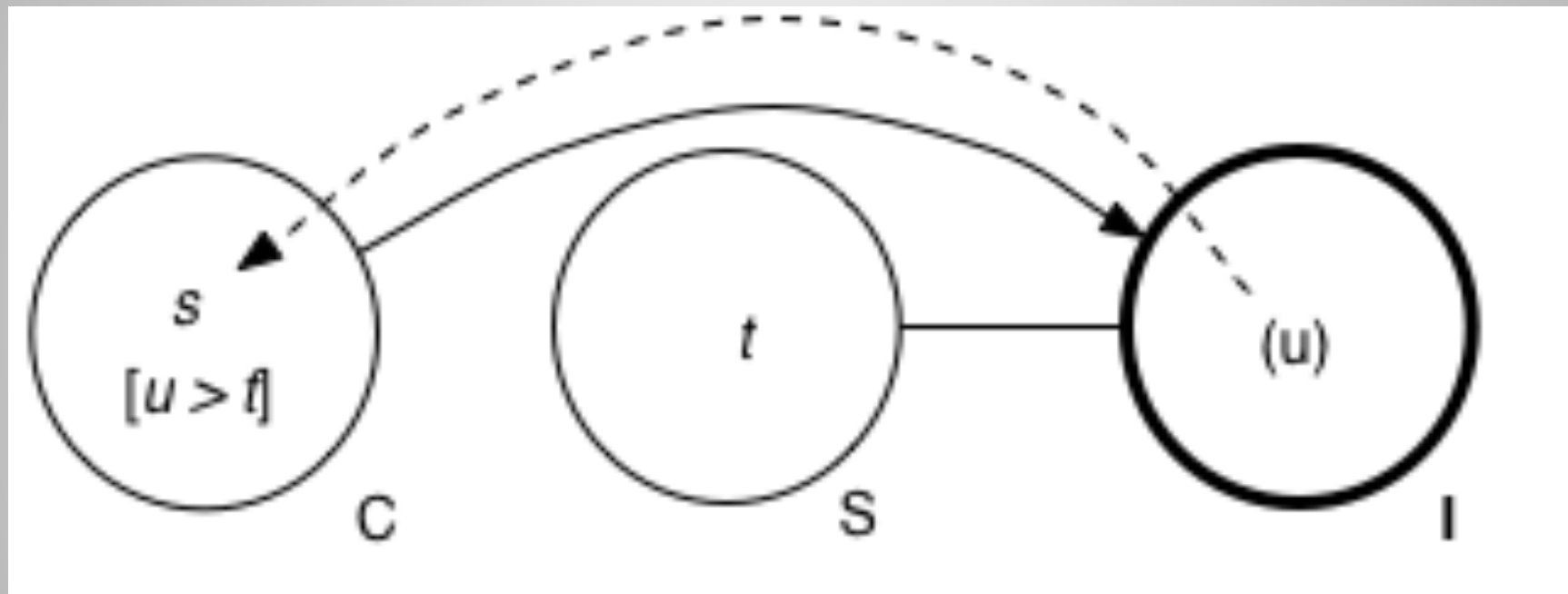
'be no problem'

'be quite savvy'

'be significant'

Short-Circuited Understatement

(cf. Morgan 1978; Horn & Bayer 1984)



C = Common Ground

S = What is Said

I = What is Implicated