# Assertoric inertia, veridicality conflict, and perspective in NPI licensing

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## Assertoric inertia

Semantically entailed material that is outside the scope of the asserted, and hence potentially controversial, aspect of utterance meaning counts as **assertorically inert** and <u>hence as effectively transparent to NPI-licensing</u> and related diagnostics of scalar orientation.

(Horn, 2002, Assertoric inertia and NPI-licensing CLS 32: 62)

- (1) \*Ariadne almost talked to anybody.
  Entails: (1') Ariadne did not talk to somebody
  But (1') becomes assertorically inert and cannot license NPIs.
- (2) Only Ariadne talked to anybody.

  Entails or presupposes (2') Ariadne talked to somebody

  But (2') becomes assertorically inert and cannot block NPIs.

## Likewise, emotive verbs

(1) Ariadne regrets that she talked to anybody.

Entails or presupposes: (1') Ariadne talked to somebody

But (1') becomes assertorically inert and cannot block NPIs.

## Negative inference

NPIs are licensed by negative inferences (Baker 1970, Linebarger 1980, Giannakidou 1998) that become assertorically 'active'.

- (1) Nobody other than Ariadne talked to anybody.
- (2) Ariadne did not want to talk to anybody.

(see also Horn 2002, Beaver and Clark 2008).

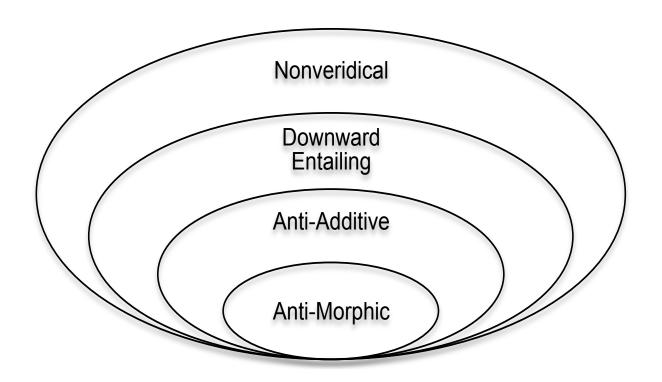
## Licensing vs. rescuing

Two modes of licensing (Giannakidou 2006, Language paper)

- In licensing there is a formal licenser at LF for the NPI.
- In rescuing, there is a <u>potential licenser</u>: <u>negation</u>. But there is also <u>veridicality conflict</u>.
- Rescuing produces weaker licensers.

Giannakidou 1998 called this direct vs. indirect licensing

#### NPIs are licensed in Nonveridical Contexts



Giannakidou 1997, 1998 et seq., Zwarts 1995, 1996, Hoeksema 1999, 2012, Bernardi 2002, etc.

## Implicit and explicit negation

- Explicit: negative (anti-additive, anti-morphic, DE) in the assertion, i.e. by entailment
- Implicit: negation in the non-assertion (emotives)
- Implicit negation indeed has ERB profile akin to the ungrammatical (during the 500-700ms time window, the emotive condition showed a P600 amplitude that is as large as the unlicensed condition)

Xiang, Grove, and Giannakidou 2015, Journal of Neurolinguistics

#### What do all these observations have in common?

- We have NPI-licensers with conflicting veridicality components (only, barely, regret): a veridical component, and a negative (antiveridical) one.
- The licensing with the conflicting licensers is more complex.
- They are weaker licensers, we have variation (intraand crosslinguistic)

English: any is good with only, emotives, but other NPIs aren't

- (1) a \* Only Bill came either.
  - b \* Only Bill is all that intelligent.
  - c \* Only Bill arrived until Friday.
- (2) a \*Bill regrets that Larry came either.
  - b \* Bill regrets that Larry is all that intelligent.
  - c \* Bill regrets that Larry left until Friday.

Greek NPIs generally do not appear with only or emotives.

- (9) ?? **Μετάνιωσα** που είπα τίποτα. I regret that I said anything.
- (10) ?? Μόνο η Μαρία είπε τίποτα.Only Maria said anything.

## Duffley and Larrivée 2015:

- Any is not very frequent with emotives.
- It appears to be more frequent with 'negative' emotives than it is with positive ones.

## Greek emotives

- We can't find NPIs with emotives in Greek corpora, and
- When speakers are asked for judgments, they are quite degraded, below acceptability threshold.
- Chatzikonstantinou, Giannakidou, and Manouilidou 2015: Gradient Strength of Greek NPIs

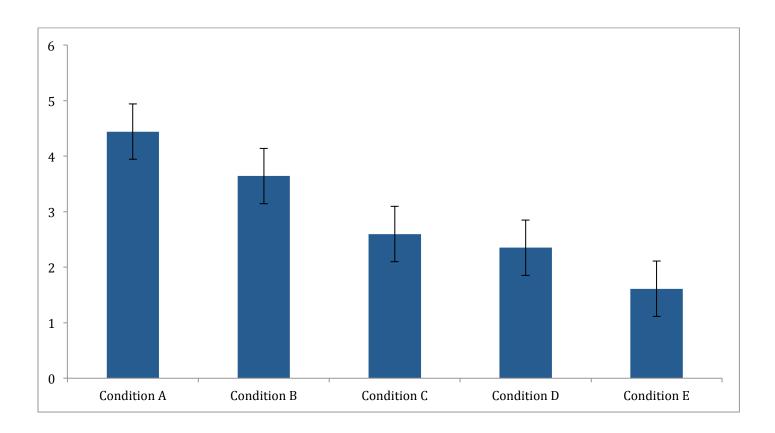
#### **Conditions**

- A. Κανένας νέος σκηνοθέτης **δεν** χρησιμοποίησε <u>ποτέ</u> ειδικά εφέ. NEG No young director ever used special effects.
- B. **Ελάχιστοι** νέοι σκηνοθέτες χρησιμοποίησαν <u>ποτέ</u> ειδικά εφέ. DE Very few young directors ever used special effects.
- C. **Μόνο** νέοι σκηνοθέτες χρησιμοποίησαν <u>ποτέ</u> ειδικά εφέ. Only young directors ever used special effects.
- D. **Έμεινα έκπληκτος** που νέοι σκηνοθέτες χρησιμοποίησαν ποτέ ειδικά εφέ.
  - I was surprised that young directors ever used special effects.
- Ε. \* Νέοι σκηνοθέτες χρησιμοποίησαν ποτέ ειδικά εφέ.
  - \* Young directors ever used special effects.

## Acceptability judgment task, 90 students, University of Patras

| Licenser     | Dependency         | <b>Acceptability Rate</b> |
|--------------|--------------------|---------------------------|
| Negation     | direct licensing   | 4.7                       |
| Very few     | indirect licensing | 3.5                       |
| Monon (only) | indirect licensing | 2.5                       |
| emotive      | indirect licensing | 2.3                       |
| no-licenser  | -                  | 0.3                       |

#### Chatzikonstantinou, Manouilidou and Giannakidou, 2015



Emotives and *only* pattern below acceptability (3.5); in between acceptable (grammatical NPIs) and ungrammatical NPIs.

## Interpreting these data

- There is a substantial empirical for two modes of licensing, as predicted by Giannakidou 1998, 2006 (pace Linebarger, Baker).
- Within the licensers, there is a difference between STRONG (negative), and MINIMAL negations (DE, ελαχιστοι).
- There is some rescuing with emotives and  $\mu \acute{o}vo$  in Greek; but less so than in English.

## What constrains rescuing and inertia?

- What determines whether a negative inference can rescue?
- Or, equivalently, what determines whether a component will become assertorically inert?

#### Baker's 1972 contrariness

Emotives express a relation of contrariness between a fact and some mental or emotional state.

(4) "We say that we are surprised when a certain fact does not conform to our expectations; relieved when it does not conform to our fears; disappointed when it is not in line with our hopes. Likewise, we say that a certain fact is odd or strange if it seems counter to our view of what is logical."

#### Which level of representation?

Giannakidou 2006, 2015, The Subjunctive as Evaluation, University of Chicago Press volume

Negative presupposition of factives i is surprised that (p) is defined if and only if: i believed or expected that  $\neg p$ , at a time  $t' \prec t_u$  (where  $t_u$  is the the utterance time).

**But:** 

(1) Ariadne is happy that Nicholas participated in the marathon, and she always knew he would do it!

(ex. From Giannakidou & Mari, Mixed (non)veridicality and mood choice with emotive verbs, CLS 2015)

It can't be a presupposition.

## A conversational implicature?

- Linebarger seemed to believe that.
- A negative conversational implicature then can rescue any, but not Greek NPIs or stronger English NPIs.

## **Almost**

- (1) Ariadne almost solved the problem.
- (2) Ariadne didn't solve the problem.
- (3) \* Ariadne almost solved anything.
- Horn: (2) is assertorically inert although it is an entailment (in the same spirit, Amaral & del Praete 2010).
- How is this consistent with the fact that a negative implicature licenses NPIs with emotives?

In other words:

How come a negative implicature is enough to rescue *any* with *regret*, but a negative entailment is not enough to rescue *any* with *almost*?

## The two differ in **perspective**

- Almost has positive perspective
- Regret has negative perspective
- Barely has negative perspective too, and rescues any

(1) SYRIZA barely/hardly solved any problems.

Barely (S) = SYRIZA solved a small number of problems, there is a much greater number of problems that SYRIZA didn't solve.

Perspective: NOT solving a much greater number of problems is considered by the speaker to be bad thing.

(1) Ariadne almost won the race.

Almost (S)= Ariadne did not win, but she was close to winning. (Ariadne finished second place).

Perspective: Coming close to winning is considered by the speaker to be a good thing.

## Perspective: an expressive phenomenon

Expressive 'concord': positive attitude towards the positive conjunct (almost), negative towards the negative conjunct (barely)

Like honorification? (Potts and Kawahara 2004)

- (1) Expressive index (Potts 2007: (37): An expressive index is a triple  $\langle a \ l \ b \rangle$ , where  $a,b \in D_e$ ;  $l \in [-1,1]$ .
  - Giannakidou and Yoon, The subjective mode of comparison; NLLT (2011: 49)
- (2) Expressive attitude towards a proposition An expression can have an expressive index  $<\alpha$  I q>, where  $\alpha$  is the speaker, q the proposition it embeds; and I  $\in$  [-1, 1].

## almost, barely: expressive modifiers

Almost P: positive index; P a scalar eventuality description

- a. almost:  $\langle t, \varepsilon \rangle$
- b. At issue meaning: x not P & x close to doing P.
- c.  $\underline{\varepsilon \text{ level}}$ : almost has an expressive index  $<\alpha \text{ I p}>$ , where  $\alpha=$  speaker, p is 'close to doing P'; and I ranges between [0, 1].

## Barely P: negative index; P a scalar eventuality description

- a. Barely:  $\langle t, \varepsilon \rangle$
- b. At issue meaning: Some x P & Many x not P.
- c.  $\underline{\varepsilon \text{ level}}$ : barely contains an expressive index  $<\alpha \mid p>$ , where  $\alpha=$  speaker, p is 'Many x not P'; I ranges between [-1, 0].

#### So:

• If perspective is in the expressive dimension, then this dimension plays a role in determining whether a negative proposition will be able to rescue NPIs or not.

• Expressive is the highest level of semantic representation (speaker oriented).

 Hence, the most global level of meaning determines whether an expression can act as a licenser. But: negative perspective alone cannot license NPIs!

(1) \*That bastard Kresge said anything! (Giannakidou and Yoon 2011: (73))

"This sentence is pretty bad because the negativity that comes from the expressive interval of bastard is not part of the descriptive content, where truth conditions are calculated. The sentence remains veridical (i.e. positive), hence the NPI anything cannot be licensed."

#### Giannakidou and Yoon 2011:

Negative expressive can license only if it becomes conventional, part of the at issue meaning:

- (1) He knows squat about any scientific theory.
- (2) He probably knows squat about any pop culture that doesn't revolve around ...
- (3) I've got him hooked on college and pro basketball and he knows jack about any of it.

(examples from GY, gratia Larry Horn, also discussed by Postal)

# Thank you, Larry, for being such an inspiring mentor!