# RHETORICITY & INQUISITIVITY

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LINGUISTIC ASSOCIATION OF GREAT BRITAIN annual meeting 2016 workshop on TRUTH-CONDITIONS & PERSPECTIVAL MEANING

University of York, 7 September, 2016

#### **1** INTRODUCTION

#### 1.1 Overview

• The nature of syntactic encoding of perspectival meaning: emotive-factive rhetorical questions (wTF-type).

• "Entia non sunt multiplicanda praeter necessitatem: let us not suppose the existence of homophonous particles unless we uncover compelling evidence for such multiplicity." (Slade, 2011: 8)

- 1.2 The inquisitive superparticle  $\kappa$
- Natural languages display a surprising diversity of expression of elementary logical operations.

- Languages generally resort to two (types of) superparticles
  - The first one,  $\mu$ , can express conjunction and universal quantification (among other meanings).
  - The second one,  $\mu$ , can express questions, disjunction and existential quantification (among other meanings).

## 1.2 The inquisitive superparticle $\kappa$ : a comparative view from Japanese

- (1) The  $\kappa$ -series (ka) in Japanese
  - a. K AS INTERROGATIVE
    - i. 分かる か? wakaru ka understand ĸ 'Do you understand?'
    - ii. 誰 分かるか? dare wakaru ka understand ĸ 'Who understands?'
  - b. KAS DISJUNCTIVE ビル(か)メアリーか Bill ka Mary ka B K M K
    (either) Bill or Mary.'
    c. KAS ∃-QUANTIFICATIONAL 誰 か dare ka who K
    - 'someone'

- (2) The  $\kappa$ -series (*li*) in Ser-Bo-Croatian
  - a. KAS INTERROGATIVE
    - i. razumiješ li understand κ
      'Do you understand?'
    - ii. ko razumije Ø understand κ 'Who understands?'
    - iii. ko li razumije who κ understand'Who ever/on earth understands?'
  - b. κ AS DISJUNCTIVE (ili) Mujo ili Haso (and.κ) M and.κ H '(either) Mujo or Haso.'
  - c.  $\kappa$  as  $\exists$ -quantificational

Ø

 $[\kappa \text{ is not historically attested as } \exists Q \text{ in } Indo-Eur.]$ 

## 1.2 The inquisitive superparticle $\kappa$ : a comparative view from Japanese

- Gil (2011) reports [WALS] that two-thirds of languages (66%) in a sample of N = 76 show formal similarity between quantificational, focal and coordinate constructions.
  - For accounts, see, for instance, Kratzer & Shimoyama (2002), Mitrović (2014), Mitrović
     & Sauerland (2014, 2016), Szabolcsi (2015), among others.

- Today I focus on the second type of quantifier particle, specifically: contexts where the κ-particle (=q-morpheme) encodes rhetorical (perspectival) meaning in concert with particular structural properties.
  - What is the syntax/semantics of rhetorical questions?

# 1.3 A primitive interrogative typology

- (3) POLAR QUESTION: Je li Mujo tu? is q M here "Is Mujo here?"
- (4) wh-question: Gdje je Mujo? where is M "Where is Mujo?"
- (5) RHETORICAL QUESTION featuring both the polar q-morpheme and a wh-term: Gdje li je Mujo? where q is M
  "[Where]<sub>F</sub> on earth is Mujo?"

The q-morpheme takes a proposition and returns a doubleton set of propositions:  $[-li](p) = \{p, \neg p\}$ 

## Rhetorical wTF-constructs in Ser-Bo-Croatian

- Structural recipe: both wh- and q-morphemes are auble
- Semantics: conveying factive and negatively emotive meaning with a strong flavour of suprise (cf. 'on earth', 'wh-...the hell', 'wh-...the fuck')
  - Intuition: What's surprising is the existence:
  - (6) S kim li ideš with whom κ go'Who the hell are going with?'
  - (7) Gdje li si? hhere κ are'Where the hell are you?'
  - (8) Koliko li ovo košta? how-much κ this costs
    'How much (!) in the hell does this cost?'
  - (9) Kada li si došao? when κ are come

'When the hell did you come (home last night)?'

## A compositional recipe

• Syntactically, this type of rhetorical construction unionises the polar and *wh*-interrogative strategies, seemingly violating the (traditionally dubbed) doubly-filled COMP filter (DFCF) of Riemsdijk & Williams (1986).

- Semantically, we aim to capture the facts along the following lines: RQs invoke surprise over the existential presuppositional of the *wh*-term.
- **NB** I take the *on earth* adverb in English, being on a par with the overt SerBo-Croatian COMP, to yield a rhetorical effect, as understood here: the surprise contribution on part of the Speaker and reduced answerability (i.e., RQs denote biased sets of answers).

## A compositional recipe

• Semantically, we NEED BOTH the WH-term and the Q-morpheme to derive/compose a *wh*-interrogative.

• So Ser-Bo-Croatian evidence is overt support for that.

• But why this special meaning associated with the audible pronouncement of the wH- and q-morphemes?

• Something triggers the DFCF-violating realisation of the two morphemes – silent structure above, associated with a factive-emotive predicate (like, *surprise*).

### 2 RHETORICAL QUESTIONS: THREE (FOUR) APPROACHES

- (1) RQs are turn into negative statements
- e.g. [[What does he know?]] = [[He knows nothing.]]
- (2) RQs are interrogatives without an answer
- 3 RQs are ordinary Qs, but impose restrictions on what kind of answers they allow. INQ

(4) RQs are not asked to trigger an increase in the amount of mutual knowledge – i.e., the knowledge is known by both the Speaker and the Addressee. (Caponigro & Sprouse, 2007)

#### 3 PROPOSAL

• Embed an EVEN-Q under a covert factive negative-emotive like *wh-...the hell* (=surprise<sub>NEG</sub>)

# 3.2 Surprise

- We follow Romero (2015: 227, ex. 12) in her adapting the semantics of desire-predicates (of Heim 1992 and Stalnaker 1984) to factive emotives, such as the *surprise* predicate:
  - \* A relatition of comparative similarity (mapping *p* to *p*-words maximally similar to *w*)
  - \* A expectability ordering

 $[10) \quad [[x \text{ is surprised that } p]] = \lambda w_o \Big[ \forall w \in \bigcap \operatorname{Dox}(w_0) \Big[ \operatorname{SIM}_w(\neg p) >_{\langle x, w_0 \rangle}^{\operatorname{EXP}} \operatorname{SIM}_w(p) \Big] \Big]$ 

- The alternative to p need not (and is not)  $\neg p$
- Given the focus-sensitivity of emotive factive, the alternatives may be obtained from within the complement clause (our *wh*-term). (The following is from Romero 2015: 228)
  - (11) [SCENARIO] Lisa knew that syntax was going to be taught. She expected syntax to be taught by John, since he is the best syntactician around. Also, she expected syntax to be taught on Mondays, since that is the rule.
    - a. It surprised Lisa that John taught syntax on TUESdays ......TRUE
    - b. It surprised Lisa that JOHN taught syntax on Tuesdays ...... NOT TRUE

## 3.2 latridou & Tatevosov's even

• Iatridou & Tatevosov (2016) discuss the appearance of 'even' in questions:

- (12) Iatridou & Tatevosov (2016: 298, ex. 7)
  - A: Let's meet at Oleana for Dinner. Is that OK?
  - B: Where is that even?

• Their *even* picks out the question that is least likely to be asked (in context).

(13) 
$$\llbracket \text{EVEN}_{I-T} \rrbracket^{w,g} = \lambda C \lambda q : \forall q' \in C[q' \neq q \rightarrow q <_w q'] \text{ (simplified)}$$

### 3.2 latridou & Tatevosov's even: example



## 3.3 Synthesis: surprise + even

• We take the least likelihood meaning from the interrogative CP to translate into

- 4 MICRO-COMPARATIVE FACTS: EXHAUSTIFIERS
- This is further evidence for an *even*-style analysis of Iatridou & Tatevosov (2016).
- We take EVEN to be a scalar additive particle
- Following Fox (2007), we derive additivity as a Scalar Implicature resulting from recursive exhaustification (X) (inf. ONLY+ONLY=EVEN).

(15) a.  $\mathfrak{X}_{C_1} [\mathfrak{X}_{C_2} \operatorname{Mary}_F \text{ is well }] \vdash \neg \mathfrak{X} \operatorname{Mary}_F \text{ is well }$ 

• Then we expect to find audible exhaustifiers where *li* is . . .

#### 4 MICRO-COMPARATIVE FACTS: EXHAUSTIFIERS

- In Slovenian, this wTF/ON-EARTH construction is also found, but featuring the EXH.
- (16) a. [Le Janezka] ima Marija tako zelo rada.
   LE/ONLY J has M so very much cares
   'It is [only Johnnie] that Mary cares for so very much.'
  - b. [Le koga] ima Marija tako zelo rada.
     LE/ONLY whom has M so very much cares
     '[who on earth] does Mary care for so very much.'
- Slovenian *le* and Ser-Bo-Croatian *li* have the same historical origins. (Vasmer, 1953)
  - i. one  $(\exists) \sim only (\mathfrak{X})$
  - ii.  $li(\exists) \sim le(\mathfrak{X})$

### 5 CONCLUSION

- We analysed the wTF construction as a factive negatively emotive construction
  - factivity comes from the ∃-presupposition of the wh-term (downstairs)
  - negative-emotivity comes from the presence of a cover wTF-operator akin to EVEN<sub>I-T</sub> (upstairs)
- Predicates of *anger* are (Strawson) DE, which makes the presence of the exhaustifier natural
- The *li* particle in (finite) swearing expressions.
  - The ordering there is not of expectability, but of Desirability (cf. Heim 1984)
  - However: imperatives don't work, only finite Vs. [MYSTERY, & orthogonal]
- Finally, the overt realisation of *li* can be taken as a reflex of syntactic chain between *li* and the covert wTF predicate, licensable with *wh*-interrogatives.
  - (17) Chain:  $\langle WTF[ineg-emt, uq], li[iq] \rangle$

#### SELECTED REFERENCES

Caponigro, Ivano & Jon Sprouse. 2007. Rhetorical questions as questions. In E. Puig-Walkmüller (ed.), *Proceedings of Sinn und Bedeutung* 11, 121–133. Barcelona: Universitat Pompeu Fabra.

Fox, D. 2007. Free choice and scalar implicatures. In U. Sauerland & P. Stateva (eds.), *Presupposition and Implicature in Compositional Semantics*, 71–120. London: Palgrave Macmilan.

Gil, David. 2011. Conjunctions and Universal Quantifiers. In Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures*, chap. 56. Munich: Max Planck Digital Library.

Heim, Irene. 1984. A note on negative polarity and downward entailingness. In C. Jones & P. Sells (eds.), *Proceedings of NELS 14*, 98–107. Amherst, MA: GLSA.

Heim, Irene. 1992. Presupposition projection and the semantics of attitude verbs. *Journal of Semantics* 9(3). 183–221.

Iatridou, Sabine & Sergei Tatevosov. 2016. Our even. Linguistics and Philosophy 39(4). 295–331.

Kratzer, Angelika & Junko Shimoyama. 2002. Indeterminate Phrases: the View from Japanese. In Yokio Otsu (ed.), *The Proceedings of the Third Tokyo Conference on Psycholinguistics*, 1–25. Tokyo: Hituzi Syobo.

Mitrović, Moreno. 2014. Morphosyntactic atoms of propositional logic: a philo-logical programme: University of Cambridge dissertation.

Mitrović, Moreno & U. Sauerland. 2014. Decomposing coordination. In Jyoti Iyer & Leland Kusmer (eds.), *Proceedings of NELS* 44, vol. 2, 39–52.

Mitrović, Moreno & Uli Sauerland. 2016. Two conjunctions are better than one. *Acta Linguistica Hungarica* 63(3). Submitted ms. under review. University of Graz and ZAS, Berlin.

Riemsdijk, H. van & E. Williams. 1986. Introduction to the theory of grammar. Cambridge, MA: MIT Press.

Romero, Maribel. 2015. Surprise-predicates, strong Stalnaker, Robert. 1984. Inquiry. Cambridge, MA: MIT exhaustivity and alternative questions. In Sarah D'Antonio, Mary Moroney & Carol Rose Little (eds.), Proceedings of SALT 25, 225–245.

Slade, Benjamin Martin. 2011. Formal and philological inquiries into the nature of interrogatives, indefinites, disjunction, and focus in Sinhala and other languages: University of Illinois at Urbana-Champaign dissertation.

Press.

Szabolcsi, Anna. 2015. What do quantifier particles do? Linguistics and Philosophy 38. 159–204.

Vasmer, MAx. 1953. Russisches Etymologisches Wörterbuch, vol. 1: A–K. Heidelberg: Carl Winter Universitätsverlag.