Focus Marking, Focus Interpretation & Focus Sensitivity

Malte Zimmermann & Daniel Hole ESSLI 2009, Bordeaux

Session III: 22-07-09 The meaning of marked focus-constructions

Malte Zimmermann & Daniel Hole mazimmer@rz.uni-potsdam.de holedan@googlemail.com

Schedule:

- i. The formal representation of focus
- ii. The discourse-anaphoric nature of focus
- iii. The meaning of marked focus constructions
- iv. Association with Focus:FOC-particles and Q-Adverbs
- v. Extensions and case studies

Plan for today:

- i. Introduction: Focus and Exhaustiveness
- ii. Hungarian Focus and Exhaustiveness
- iii. The interpretation of it-Clefts

Observations:

- i. Focus marked by pitch accent does not introduce existence presuppositions, nor exhaustiveness effects.
 - \Rightarrow last session

Observations:

ii. Hungarian preverbal foci (FocHun) and English it-clefts encode additional meaning components:existence & exhaustiveness

• Krifka (2008): Exhaustiveness

"É. Kiss (1998) has pointed out that focus movement in Hungarian triggers this specific meaning, and it appears that cleft constructions in English trigger it as well:

This example [1] says that nobody else but John and Bill stole a cookie. Consequently, exhaustive focus is not compatible with additive particles, like *too*."

• Krifka (2008): Exhaustiveness

- (1) It's [John and Bill]_F that stole a cookie.
 - → Nobody else stole a cookie.
- (2) [**Péter és Paul**]_F aludt a padlón (Szabolcsi 1981) Peter and Paul slept.on the floor
 - → Nobody else slept on the floor.

• Questions:

Q1: Are the observed exhaustiveness effects with Hungarian preverbal foci and *it*-Clefts

truth-conditional OR presuppositions/conventional implicatures OR conversational implicatures ?

Questions:

- **Q2:** Is exhaustiveness a structurally coded meaning component of Hungarian foci and *it*-Clefts?
 - ⇒ Are exhaustivene interpretations obligatory or not?

Claims:

- Hungarian preverbal focus encodes exhaustiveness in form of a presupposition (Kenesei 1986, Szabolcsi 1994)
- ➤ *It*-it-Clefts do not structurally encode exhaustiveness. Exhaustiveness effects with *it*-clefts come about as the result of generalized conversational implicatures (Horn 1981)

• **Basic Observation** (É. Kiss 1998)

- Hungarian has two focus positions that come with different interpretations:
 - i. postverbal: plain information focus
 - ii. preverbal: exhaustive/identification focus

- **Basic Observation** (É. Kiss 1998)
- (3) Q: Where have you been over the summer?
 - a. Járta-m **Olaszirszág-ban**. *information focus* went-I Italy-to 'I went to Italy (possibly among other places).'
 - b. **Olaszirszág-ban** járta-m. *identification fokus* Italy-to went-I 'It was to Italy that I went.'

• **Basic Observation** (É. Kiss 1998)

The assumption of a strict 1:1-correlation between different grammatical realizations of focus (*focus marking*) and different semantic interpretations (*new/ presentational* focus vs. *exhaustive/contrastive/ identificational focus*) is generally accepted; see e.g.

Rochement (1986), Vallduví & Vilkuna (1998) on Finnish, Kratzer & Selkirk (2007), van der Wal (2009) on Makhuwa (Bantu)

Preverbal Foci in Hungarian

> Syntax:

Focus constituent A'-moves into preverbal functional projection: FocP (Brody 1990)

(4) $\begin{bmatrix} \text{TopP ZP } \begin{bmatrix} \text{FocP } \mathbf{XP}_{F} \end{bmatrix} \end{bmatrix} \begin{bmatrix} \text{V } \begin{bmatrix} \text{VP PV } t_{V} \end{bmatrix} \end{bmatrix} \end{bmatrix}$

Preverbal Foci in Hungarian

> **Semantics** (Szabolcsi 1981: 144, 148):

"The placement of certain arguments into F [Spec,FocP, MZ] always effects the asserted meaning (i.e. the truth-or denotation conditions) of the sentence." [144]

"Focusing expresses exhaustive listing" [148]

• Testing for exhaustiveness (Szabolcsi 1981)

Test 1: Failing Entailments

- (5) a. [Péter és Paul]_F aludt t_{FOC} a padlón Peter and Paul slept.on the floor
 - b. $[P\acute{e}ter]_F$ aludt t_{FOC} a padlón Peter slept.on the floor
- > (5a) does not entail (5b) with *Peter* in F!

• Testing for exhaustiveness (Szabolcsi 1981)

Test 1: Failing Entailments

- (5) a. [Péter és Paul]_F aludt t_{FOC} a padlón Peter and Paul slept.on the floor
 - c. Aludt **Péter** a padlón slept.on Peter the floor
- > (5a) DOES entail (5c) with *Peter* not in F!

• Testing for exhaustiveness (Szabolcsi 1981)

Compare: Failing Entailments with only

- (6) a. Only Peter and Paul slept on the floor.
- //⇒//b. Only Peter slept on the floor.
 - \Rightarrow c. Peter slept on the floor.
- **(6a)** entails (6c), but not (6b)!

• Testing for exhaustiveness (Szabolcsi 1981)

Test 2: Focus Negation

- (5) a. [Péter és Paul]_F aludt t_{FOC} a padlón Peter and Paul slept.on the floor
 - d. Nem $[P\acute{e}ter]_F$ aludt t_{FOC} a padlón NEG Peter slept.on the floor
- > (5a) and (5d) are compatible!

• Testing for exhaustiveness (Szabolcsi 1981)

Comparison: Focus Negation in English

- (7) a. Only Peter and Paul slept on the floor.
 - b. **Not only Peter** slept on the floor.
- > (5a) and (5d) are compatible!

• Testing for exhaustiveness (Szabolcsi 1981)

Test 3: Focused Numerals

- (8) a. [**Három fiú**]_F alszik three boys are sleeping
 - b. [**Két fiú**]_F alszik two boys are sleeping
- > (8b) does not follow from (8a)!

• Testing for exhaustiveness (Szabolcsi 1981)

Comparison: Exactly+Num in English

- (9) a. **Exactly three boys** are sleeping.
 - b. Exactly two boys are sleeping.
- (9b) does not follow from (9a)!

• Szabolcsi (1981): Conclusion

Syntactic fronting to the preverbal FOC-position leads to an exhaustive interpretation of the focus constituent *as part of the truth conditions*.

• Szabolcsi (1981): Conclusion

Syntactic fronting to the preverbal FOC-position leads to an exhaustive interpretation of the focus constituent *as part of the truth conditions*.

- \triangleright XP_F + syntactic marking = exhaustiveness
- > exhaustiveness structurally encoded

• Szabolcsi (1981): Conclusion

TCs of sentences with preverbal focus:

(5) b. $[P\acute{e}ter]_F$ aludt t_{FOC} a padlón is true iff for every x, x slept on the floor if and only if x is Peter

More recent implementations

- É. Kiss (1998,2006):
 Preverbal focus is predicative and identified with the VP-denotation: exhaustiveness
- Horvath (2007): ,Focus' movement triggered by a covert EXH-operator in preverbal position.

• Presuppositional analyses (Kenesei 1986, 2006; Szabolcsi 1994)

Exhaustiveness is the indirect result of a uniqueness presupposition.

- Presuppositional analyses (Kenesei 1986, 2006; Szabolcsi 1994)
- (10) [Mari]_F alszik Mari sleeps
- ➤ (10) *presupposes* that there is a unique individual that sleeps.
- (10) asserts that this individual is Mari.

- Presuppositional analyses (Kenesei 1986, 2006; Szabolcsi 1994)
- (10) [Mari]_F alszik Mari sleeps

(11)
$$\lambda z_e \cdot \lambda P_{\langle e,t \rangle}$$
. $[z = \mathbf{tx} [P(x) \& \forall y [P(y) \rightarrow y \subseteq x]]]$

- Presuppositional analyses (Kenesei 1986, 2006; Szabolcsi 1994)
- (10) [Mari]_F alszik Mari sleeps
- (11) $\lambda z_e . \lambda P_{\langle e,t \rangle}$. [$z = \mathbf{tx} [P(x) \& \forall y [P(y) \rightarrow y \subseteq x]]$] (mary) ([$\lambda x. x sleeps$])
- \Leftrightarrow mary = ιx [x sleeps & $\forall y$ [y sleeps $\rightarrow y \subseteq x$]]]

- Presuppositional analyses (Kenesei 1986, 2006; Szabolcsi 1994)
- (10) [Mari]_F alszik Mari sleeps
- (12) [The one that sleeps] is Mary.
- \Leftrightarrow mary = tx [x sleeps & $\forall y$ [y sleeps $\rightarrow y \subseteq x$]]]

- Presuppositional analyses (Kenesei 1986, 2006; Szabolcsi 1994)
- (10) [Mari]_F alszik Mari sleeps

(11)
$$\lambda z_e \cdot \lambda P_{\langle e,t \rangle}$$
. $[z = \mathbf{tx} [P(x) \& \forall y [P(y) \rightarrow y \subseteq x]]]$

• Evidence for Presuppositions

Differences [XP_F V] vs. [csak XP_F V]: I

- (13) a. $\mathbf{\acute{E}n}_F$ kaptam a könyvet (Szabolcsi 1984) 1sg got the book-acc ,It was me that got the book.'
 - b. *Csak én_F kaptam a könyvet only 1sg got the book-acc

Evidence for Presuppositions

Differences [XP_F V] vs. [csak XP_F V]: II

- (14) a. nem [Mari]_F ment el, hanem Kati (*is) not Mari went away but Kati too, It is not Mari that left, but Kati (*too).
 - b. nem-csak [Mari]_F ment el, hanem Kati *(is) not Mari went awaybut Kati too ,It is not only Mari that left, but Kati *(too).

• Evidence for Presuppositions

Differences [XP_F V] vs. [csak XP_F V]: II

- (14) a. nem $[Mari]_F$ ment el, hanem Kati (*is) $PR\ddot{A}S$: A unique individual left; ASS: It's Mari.
 - b. nem-csak [Mari]_F ment el, hanem Kati *(is) $PR\ddot{A}S$: Mari left; ASS: Nobody but Mari left.

• Evidence for Presuppositions

Differences [XP_F V] vs. [csak XP_F V]: II

- (14) a. nem $[Mari]_F$ ment el, hanem Kati (*is) $PR\ddot{A}S$: A unique individual left; ASS: It's Mari.
- Exhaustiveness inaccessible to negation!
 - b. nem-csak [Mari]_F ment el, hanem Kati *(is) $PR\ddot{A}S$: Mari left; ASS: Nobody but Mari left.

• Evidence for Presuppositions

Differences [XP_F V] vs. [csak XP_F V]: III

- (15) a. János azt bánta, hogy **Péter**_F jött el. Janos that regretted that Peter came pv 'Janos regretted that it was Peter who came.'
 - b. János azt bánta, hogy **csak Péter**_F jött el. Janos that regretted that only Peter came pv 'Janos regretted that only Peter came.' (A. Lipták, p.c.)

Evidence for Presuppositions

Differences [XP_F V] vs. [csak XP_F V]: III

- (15) a. János azt bánta, hogy **Péter**_F jött el.
- Janos regrets identity, not exclusiveness!
 - b. János azt bánta, hogy $\operatorname{csak} \operatorname{P\'{e}ter}_{\mathbf{F}} \operatorname{j\"{o}tt}$ el.
- Janos regrets *exclusiveness*, not *identity*!

Hungarian Focus: Conclusion

The observable exhaustivity effects with preverbal foci in Hungarian are due to a presupposition that there is a unique (maximal) individual satisfying the background predicate.

This presupposition seems to be ,hard-wired' into the preverbal focus configuration, i.e. structurally coded.

• but...

- i. Exhaustiveness effects are not as strong when the focus constituent does not denote in D_{ee} , but in other domains, such as, e.g, in D_{et} or $D_{es,t}$
- > contextualization: relevant properties (Szabolcsi 1983)
- ii. Sometimes, even individual-denoting phrases are not exhaustively interpreted.

(Wedgwood 2005, Wedgwood et al. 2006)

but...

(16) Context: In the delegation, Javier Solan will be included in addition to Chris Patten, [...] akiket útjukra többek között [Anna Lindh svéd whom way-on others among Anna Lindh Swedish külügyminiszter] kísér majd el. Foreign minister accompany FUT VM, And they will also be accompanied, among others, by the Swedish foreign minister Anna Lindh'

• Wedgwood (2005, 2006)

Exhaustiveness not structurally coded, but the result of general pragmatic inferencing procedures

- Dynamic semantic interpretationOR:
- ➤ Generalized conversational implicatures (Levinson 2000) ?

• Wedgwood (2005, 2006)

Exhaustiveness not structurally coded, but the result of general pragmatic inferencing procedures

More research required on focused QPs, PREDs, Adjuncts, complex NPs etc.

- The Meaning of it-Clefts
- Q: Does the exhaustiveness effect arise from
- i. truth conditions?
 (Atlas & Levinson 1981, É. Kiss 1998, 1999)
- ii. a presupposition/ conventional implicature? (Wedgwood et al. 2006, Delin & Oberlander 1995, Percus 1997)
- iii. a conversational implicature? (Horn 1981, Zimmermann & Drenhaus 2009)

Observation I

Exhaustiveness not part of truth-conditions (Horn 1981: 130)

- (17) a.#I know Mary ate a pizza, but I have just discovered that it was a pizza that she ate.
 - b. I know Mary ate a pizza, but I have just discovered that it was only a pizza that she ate.

Observation I

Exhaustiveness not part of truth-conditions (Horn 1981: 130)

- (17) a.#I know Mary ate a pizza, but I have just discovered that it was a pizza that she ate.
 - = truth conditions identical!
 - b. I know Mary ate a pizza, but I have just discovered that it was only a pizza that she ate.
 - = truth conditions differ!

Observation I

Exhaustiveness not part of truth-conditions (Horn 1981: 130)

- (18) a.#I know Mary ate a pizza, but it wasn't a pizza that she ate.
 - = truth conditions identical: contradiction
 - b. I know Mary ate a pizza, but it was not only a pizza that she ate.
 - = truth conditions differ: no contradiction

Presuppositions?

- A presuppositional account of exhaustiveness in *it*-clefts would not only
- account for the similarity of *it*-clefts and Hungarian preverbal foci; but also
- be in line with prominent syntactic analyses of *it*-clefts as involving covert definite determiners (Percus 1997)

Presuppositions?

- (18) a. It was Peter that slept on the floor.
 - b. [it [was [Peter]] $[_{DP}\emptyset_{+def}$ that slept on the floor]]
 - ≈ ,The one that slept on the floor was Peter.

Observation II

The projection behaviour of exhaustiveness effect differs from that of presuppositions/conventional implicatures (Horn 1981)

Observation II

Exhaustiveness effect ≠ presupposition (Horn 1981)

(19) a. It was a pizza that Mary ate

⇒ Mary ate something Existence

Mary ate nothing else EXH

Observation II

Exhaustiveness effect ≠ presupposition (Horn 1981)

(19) b. It wasn't a pizza that Mary ate NEG

⇒ Mary ate something Existence

not: Mary ate nothing else **EXH**

Observation II

Exhaustiveness effect ≠ presupposition (Horn 1981)

(19) c. Was it a pizza that Mary ate? Q

⇒ Mary ate something Existence

not: Mary ate nothing else **EXH**

Observation II

Exhaustiveness effect ≠ presupposition (Horn 1981)

Exhaustiveness not constant under negation or Yes/No-question formation

Observation III

Exhaustiveness effect possible without clefting (Kuno 1972: 269, Horn 1981)

- (20) a. John_F kissed Mary.
 - b. John (and only John) kissed Mary; among those under discussion, it was John who kissed Mary. EXH(austive listing)

Observation III

Exhaustiveness effect possible without clefting (Kuno 1972: 269, Horn 1981)

Exhaustiveness not tied to a specific structure even though frequently occurring with clefts.

Observation IV

Exhaustiveness effects with *it*-clefts not mandatory (Prince 1978, Horn 1981, Hedberg & Fadden 2007)

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Exhaustiveness effects with *it*-clefts not mandatory (Prince 1978, Horn 1981, Hedberg & Fadden 2007)

(21) Perhaps it was Hitler's granite will and determination and certainly it was the fortitude of the German soldier that saved the armies of the Third Reich from a complete debacle. [Shirer, *Rise and Fall of the Third Reich*] (Horn 1981:131, quoting Ellen Prince)

Observation IV

Exhaustiveness effects with *it*-clefts not mandatory (Prince 1978, Horn 1981, Hedberg & Fadden 2007)

(22) Es ist auch ihr politischer Standort, der Sabine Leutheusser-Schnarrenberger in kritische Situationen bringt. (German, Frankfurter Rundschau)

,It is *also* her political position that gets SLS into critical situations.

Observation IV

- Exhaustiveness effects with *it*-clefts not mandatory (Prince 1978, Horn 1981, Hedberg & Fadden 2007)
- Exhaustiveness *not* structurally encoded in *it*-cleft-structure!

Summing up so far...

- Exhaustiveness not part of truth conditions
- Exhaustiveness not a presupposition/ conventional impl.
- Exhaustive interpretation possible without clefting
- Exhaustive interpretation with *it*-clefts not mandatory

• Generalized Conversational Implicature (Horn (1981:132)

"I suggest that it is instead a generalized conversational implicature, a pragmatic assumption naturally (as opposed to conventionally) arising from focussing or exhaustive listing constructions in the absence of a specific contextual trigger or block."

- Generalized Conversational Implicature (Horn (1981:132)
- See pragmatic/implicature-based accounts of exhaustivity in answers to wh-questions:

 Schulz & van Rooij (2006), Spector (2005)

• Generalized Conversational Implicature (Horn (1981:132)

(23) It was a pizza that Mary ate.

PRES: Mary ate something. EXIS

ASS: That something is a pizza. IDEN

CGI: She ate nothing else. EXH

Generalized Conversational Implicature

- Q1: Why does it look as if exhaustiveness were negated in some cases?
- (24) It wasn't a pizza that Mary ate, she ate a pizza, a calzone, and an order of ziti.
 - \Rightarrow Pizza is not the only thing she ate ...

• Generalized Conversational Implicature

Q1: Why does it look as if exhaustiveness were negated in some cases?

Negation can target both the truth or the appropriateness/linguistic form of an utterance (meta-linguistic negation)

Generalized Conversational Implicature

- Q2: Why is the exhaustiveness implicature so difficult to cancel?
- (25) a. Max has three children. Indeed, he has four. scalar implicature easily cancellable
 - b. 'It was a pizza that Maty ate. Indeed, it was a pizza and a calzone.

Generalized Conversational Implicature

- Horn (1981:133): *Structural Markedness*"But perhaps cancellability is also reduced because a speaker who uses a cleft has *gone out of her way* to employ a construction which introduces the existential and hence the exhaustiveness implicatures."
 - \Rightarrow *Maxim of Manner*

Final Question

- **Q:** How difficult is it really to cancel the EXH-implicature?
- (26) It's Mary that can play the piano, and/but Sue and Ellen can play it, too.

Final Question

- **Q:** How difficult is it really to cancel the EXH-implicature?
- (26) It's Mary that can play the piano, and/but Sue and Ellen can play it, too.
- More experimental work required, e.g., EKP-study in Zimmermann & Drenhaus (2009)

• Conclusion: Semantics of *it*-clefts

i. *Exhaustiveness* is not structurally encoded in *it*-clefts, but is pragmatically derived as a (possibly generalized) conversational implicature.

• Conclusion: Semantics of *it*-clefts

- ii. The only structural meaning component of *it*-clefts is an *existence presupposition* that postulates the existence of an individual satisfying the background predicate.
 - \Rightarrow see last session, Rooth (1996)

The rejection of a special exhaustive (focus) semantics for the clefted constituent in *it*-clefts is beneficial, for ...

 In many languages, overt focus movement does not give rise to obligatory exhaustiveness effects (e.g. Hartmann & Zimmermann 2007b on Hausa)

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(27) Hàwwa<sub>1</sub> mu-kà ganii t<sub>1</sub>.

Hawwa 1pl-rel.perf see

Kuma mu-n ga Hàliimà dà Dèelu.

also 1pl-perf see H. and D.

'We saw Hawwa, and we also saw Halima and Delu.'

(Hartmann & Zimmermann 2007b)
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The rejection of a special exhaustive (focus) semantics for the clefted constituent *it*-clefts is beneficial, for ...

ii. Clefts can be used to induce other partitions than *focus-background* (Prince 1978, Delin 1992, Lambrecht 2001, Huber 2006, a.o.)

Informative-presupposition clefts (Prince 1978)

- (28) It was *in 1886* that . . . Lewin published the first systematic study of the CACtus.
 - ⇒ non-clefted information new to the hearer, main stress in non-clefted part

• Clefts & Information Structure

All-new clefts (Lambrecht 1994, 2001)

(29) Q: What happened?

A: C'est *ma mére* qui est venue. [French]

- = All-new focus movement (Hausa)
- (30) Q: What happened?
 - A: **B'àràayii** nèe su-kà yi mîn saatàa! robbers prt 3pl-rel.perf do to.me theft 'It's robbers that have stolen from me.'

[Hausa] (Hartmann & Zimmermann 2007a)

Clefts & Information Structure

What all these clefts have in common is that the non-clefted material is presented as if it were known/old information to speaker and hearer.

"presupposed information is in general NON-NEGOTIABLE. I suggest that non-negotiability arises from anaphoricity because anaphora implies the existence of prior references to the same information. Using such a device, a speaker can persuade a hearer that the time for negotiation of the information is past, since it has been conversationally 'on the table' at some prior time" (Delin 1992: 295)

- Presenting the non-clefted information as given or known to the hearer
- (i.) encourages the hearer to accommodate the relevant information in case the information is in fact new to her.

- Presenting the non-clefted information as given or known to the hearer
- (ii.) Precludes the possibility for the hearer to reject that part of the information.

(31) A: It's **Dr Jonson** that went to Mary's party.

B: #No, Mary's party is only next week, so he couldn't have gone there.

(32) A: **Dr Jonson** went to Mary's party.

B: No, Mary's party is only next week, so he couldn't have gone there.

Clefting of a topic or focus constituent increases the *saliency* of the discourse referent denoted by the clefted constituent, which can be exploited for various discourse-semantic means:

Clefts & Information Structure

(i.) Easier retrieval and anaphoric back-reference in subsequent discourse (Vasishth et al. ???)

- (ii.) The establishment of a *contrastive relation* between the topic/focus referent and contextually relevant alternatives.
- topicalization: movement of topics or foci to sentence-initial position in Finnish & German. (Vilkuna & Vallduví 1998)

(iii.) The marking of unexpectedness or relative unlikelihood of the cleft denotation in the discourse context.

(Zimmermann 2008, Skopeteas & Fanselow 2009; but see also Gundel 1988, Givon 1988, Ward & Birner, in press)

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(33) Q: What did the fisherman catch?
A1: #Einen Fisch hat er geangelt. [German]

a fish has he caught
,A fish, he caught. 'expected ⇒ #

A2: Einen Schuh hat er geangelt! [German]

a Schuh has he caught
,A shoe, he caught! 'unexpected ⇒ ✓
```

- Clefts are frequently attested in languages with rigid word order (English, French, Norwegian):
- ⇒ Compensatory grammatical mechanism for making left-peripheral positions available for discourse semantic reasons.

(Jespersen 1937, Lambrecht 2001)

Conclusion:

Marked grammatical strategies of focus realization (clefting, focus movement, heavy focus accent) can be exploited for various discourse-semantic effects (saliency, contrast, surprise) beyond truth conditions and classic presuppositions, ...

Conclusion:

... without these effects being intrinsically tied to focushood per se.

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