The semantics of clefts: Exhaustiveness (Horn 1981)

MM3/MM5 Clefting and Focus
Vasishth/Zimmermann
WS 09/10
Exhaustiveness of *it*-Clefts

(1) It‘s Bill and Peter that stole the cookies.

(2)a. ??It was even the case that it was John_F that saw Mary.  
    b. ??It was also the case that it was John_F that saw Mary.  
    c. ??It was only the case that it was John_F that saw Mary.
Exhaustiveness of *it*-Clefts

(1) It’s Bill and Peter that stole the cookies.

(2)a’. ?It was even John_F that saw Mary.
   b’. ?It was also John_F that saw Mary.
   c’. It was only John_F that saw Mary.
Exhaustiveness of *it*-Clefts

Q: Does the exhaustiveness effect arise from

i. truth-conditional import ?

ii. a presupposition/ conventional implicature ?

iii. a generalized conversational implicature ?
    (Horn 1981, Zimmermann & Drenhaus 2009)
Exhaustiveness of *it*-Clefts

• Truth-functional import?
Exhaustiveness of *it*-Clefts

- Observation I

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

(3) 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.
Exhaustiveness of *it*-Clefts

- **Observation I**
  
  Exhaustiveness not part of the truth-conditions
  (Horn 1981: 130)

  (3) a. #I know Mary ate a pizza, but I have just discovered that *it was a pizza* that she ate.  
     = *truth conditions identical: uninformative*

  b. I know Mary ate a pizza, but I have just discovered that *it was only a pizza* that she ate.  
     = *truth conditions differ: informative*
Exhaustiveness of *it*-Clefts

• Observation I

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

(4) 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
Exhaustiveness of *it*-Clefts

- Conventional implicatures?
Exhaustiveness of *it*-Clefts

- **Observation II**
  The projection behaviour of exhaustiveness effect differs from that of presuppositions or conventional implicatures (Horn 1981)
Exhaustiveness of *it*-Clefts

- Observation II

Exhaustiveness effect ≠ conventional implicature (Horn 1981)

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

⇒ Mary ate something Existence

Mary ate nothing else EXH

(≈ ∀x [Mary ate x] → pizza(x))
Exhaustiveness of *it*-Clefts

- **Observation II**
  Exhaustiveness effect ≠ conventional implicature (Horn 1981)

(6) b. It wasn’t a pizza that Mary ate \(\text{NEG}\)
  \[\Rightarrow\] Mary ate something \(\text{Existence}\)
  \textbf{not:} Mary ate nothing else \(\text{EXH}\)
Exhaustiveness of *it*-Clefts

• **Observation II**

Exhaustiveness effect $\neq$ conventional implicature (Horn 1981)

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

$\Rightarrow$ Mary ate something  Existence

**not:** Mary ate nothing else  EXH
Exhaustiveness of *it*-Clefts

- Observation II
  Exhaustiveness effect ≠ conventional implicature (Horn 1981)
  - Exhaustiveness implicature not constant under negation or yes/no-question formation
Exhaustiveness of \textit{it}-Clefts

- **Observation II**
  Exhaustiveness effect \( \neq \) conventional implicature (Horn 1981)

\textbf{but:} This only holds for conventional implicatures of the form 'If Mary ate something it was a pizza', but not for uniqueness implicatures of the form 'Mary ate only one thing.'
Exhaustiveness of *it*-Clefts

- **Observation II**
  Exhaustiveness effect $\neq$ conventional implicature (Horn 1981)

(6) b. It wasn’t a pizza that Mary ate \textsc{NEG}
  $\Rightarrow$ Mary ate something \textsc{Existence}
  $?\Rightarrow?$ Mary ate only one thing \textsc{UNIQ}
Exhaustiveness of *it*-Clefts

- **Observation II**
  Exhaustiveness effect $\neq$ conventional implicature (Horn 1981)

  - Exhaustiveness/Uniqueness effect does not project out of conditional antecedents (à la Karttunen & Peters 1979) (Drenhaus & Zimmermann 2009)
Exhaustiveness of *it*-Clefts

• **Observation II**
  Exhaustiveness effect \(\neq\) conventional implicature (Horn 1981)

(7) If it was a pizza that Mary ate, she did not have anything else, but if it was a burrito (that she ate), she probably had chips as well.
Exhaustiveness of *it*-Clefts

- **Uniqueness Presupposition?**

(8) a. It was Peter that slept on the floor.
   b. [it [ was [Peter]] [DP $\emptyset_{+\text{def}}$ that slept on the floor]]
   $\approx$ 'The one that slept on the floor was Peter.'
Exhaustiveness of \textit{it}-Clefts

- **Observation III**
  Exhaustiveness effect $\neq$ uniqueness presupposition (Zimmermann & Drenhaus 2009)

  - Projection behaviour in conditionals $\checkmark$
  - 'Hey, wait a minute!'-Test ??
Exhaustiveness of *it*-Clefts

• **Observation III**
  Exhaustiveness effect $\neq$ uniqueness presupposition (Zimmermann & Drenhaus 2009)

(10) **The king** of France arrived.
      Hey, wait a minute! I didn’t know there was a king of France. (DP-existence) ✓
Exhaustiveness of *it*-Clefts

- Observation III
  Exhaustiveness effect ≠ uniqueness presupposition (Zimmermann & Drenhaus 2009)

(11) **The author** of *Relevance Theory* is clever.
Hey, wait a minute! I thought there were two authors. (DP-uniqueness) ✓
Exhaustiveness of *it*-Clefts

- **Observation III**
  Exhaustiveness effect $\neq$ uniqueness presupposition (Zimmermann & Drenhaus 2009)

(12) It is Peter that won the contest.
  Hey, wait a minute! I didn’t know there was a winner. (cleft existence) ✓
Exhaustiveness of *it*-Clefts

- **Observation III**
  Exhaustiveness effect $\neq$ uniqueness presupposition (Zimmermann & Drenhaus 2009)

(12) It is Peter that won the contest.
  Hey, wait a minute! I didn’t know there was a winner. (cleft existence) ✓
  ?Hey wait a minute! I thought there were two winners. (cleft uniqueness) ???
Exhaustiveness of *it*-Clefts

• **Observation III**

Exhaustiveness effect ≠ uniqueness presupposition (Zimmermann & Drenhaus 2009)

⇒ ‘Hey, wait a minute!’-test possibly unable to target the uniqueness/ exhaustiveness component!
Exhaustiveness of *it*-Clefts

- **Observation III**

  Exhaustiveness effect ≠ uniqueness presupposition (Zimmermann & Drenhaus 2009)

(12‘) A: It‘s Peter that won the contest.
    B: And also Bill!
Exhaustiveness of *it*-Clefts

- **Observation III**
  
  Exhaustiveness effect ≠ uniqueness presupposition (Zimmermann & Drenhaus 2009)

  (13) A: It‘s Dan Sperber that wrote Relevance Theory.
  
  B: Hey, wait a minute! Didn‘t he write it together with Deirdre Wilson?
Exhaustiveness of *it*-Clefts

• **Observation III**

  Exhaustiveness effect ≠ uniqueness presupposition *(Zimmermann & Drenhaus 2009)*

  (13)  A: It‘s Dan Sperber that wrote Relevance Theory.
       B: But/#And also Deirdre Wilson!
Exhaustiveness of *it*-Clefts

- **Observation III**
  Exhaustiveness effect ≠ uniqueness presupposition (Zimmermann & Drenhaus 2009)

**Problem:** Even if the ’Hey, wait a minute!’-responses are good in the above contexts, we only know for sure that the uniqueness component is not part of the asserted truth-functional content (**which we already knew !**)
Exhaustiveness of *it*-Clefts

- **Observation IV**
  
  Exhaustiveness effect possible without clefting
  
  (Kuno 1972: 269, Horn 1981)

  (14) a. John$_F$ kissed Mary.

  b. John (and only John) kissed Mary; among those under discussion, it was John who kissed Mary.   \text{EXH(austive listing)}
Exhaustiveness of *it*-Clefts

- **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.
Exhaustiveness of *it*-Clefts

- **Observation V**
  Exhaustiveness effects with *it*-clefts not mandatory (Prince 1978, Horn 1981, Dufter 2009)
Exhaustiveness of *it*-Clefts

**Observation V**

Exhaustiveness effects with *it*-clefts not mandatory (Prince 1978, Horn 1981, Dufter 2009)

(15) 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)
Exhaustiveness of \textit{it}-Clefts

\begin{itemize}
  \item \textbf{Observation V}
  \end{itemize}

Exhaustiveness effects with \textit{it}-clefts not mandatory (Prince 1978, Horn 1981, Dufter 2009)

(16) \textbf{Es ist auch ihr politischer Standort, der} Sabine Leutheusser-Schnarrenberger in kritische Situationen bringt. (German, \textit{Frankfurter Rundschau})

\textquote{It is also her political position that gets SLS into critical situations.}
Exhaustiveness of *it*-Clefts

- **Observation V**
  Exhaustiveness effects with *it*-clefts not mandatory (Prince 1978, Horn 1981, Dufet 2009)
  - Exhaustiveness *not* structurally encoded in *it*-cleft-structure!
Exhaustiveness of *it*-Clefts

- **Summing up so far...**
  - Exhaustiveness not part of truth conditions
  - Exhaustiveness not a conventional implicature
  - ?? Exhaustiveness not a presupposition ??
  - Exhaustive interpretation possible without clefting
  - Exhaustive interpretation with *it*-clefts not mandatory
Exhaustiveness of *it*-Clefts

- **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.”
Exhaustiveness of *it*-Clefts

- **Generalized Conversational Implicature**
  (Horn (1981:132))
  - See pragmatic/implicature-based accounts of exhaustivity in answers to *wh*-questions:
    Schulz & van Rooij (2006), Spector (2005)
Exhaustiveness of *it*-Clefts

• Generalized Conversational Implicature
  (Horn (1981:132))

(17) 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
Exhaustiveness of *it*-Clefts

- Generalized Conversational Implicature

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

(18) It wasn’t a pizza that Mary ate, she ate a pizza, a calzone, and an order of ziti.

⇒ Pizza is not the only thing she ate ...
Exhaustiveness of *it*-Clefts

- 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*)
Exhaustiveness of *it*-Clefts

- **Generalized Conversational Implicature**

Q2: Why is the exhaustiveness implicature so difficult to cancel?

(19) a. Max has three children. Indeed, he has four. *scalar implicature easily cancellable*

   b. ?It was a pizza that Maty ate. Actually, it was a pizza and a calzone.
Exhaustiveness of *it*-Clefts

- **Generalized Conversational Implicature**

  Haus (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.“

  ⇒ *Maxim of Manner*
Exhaustiveness of *it*-Clefts

• Final Question

Q: How difficult is it really to cancel the EXH-implicature?

(20) It’s Mary that plays the piano, and/but Sue and Ellen can play it, too.
Exhaustiveness of *it*-Clefts

- **Final Question**

Q: How difficult is it really to cancel the EXH-implicature?

(20) 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); Jule‘s eye-tracking experiment ...
Exhaustiveness of *it*-Clefts

**Conclusion: Semantics of *it*-clefts**

i. *Exhaustiveness* is not structurally encoded in *it*-clefts, but is pragmatically derived either as a (defeasible) presupposition or as a (generalized) conversational implicature.
Exhaustiveness of *it*-Clefts

- **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.

  ⇒ see Rooth (1996)