Information Structure and Discourse Structure (aka the poltergeist)

Stefan Bott
Information Structure

Why are certain linguistic realisations inadequate in certain contexts (although they are perfectly grammatical)?

How is information presented within a sentence?
Information Structure

An example:

(1) “Wir haben nicht auf das Schiff geschossen”
“We did not fire at the ship”

Tagesschau online 27.10.2006
Information Structure

What we would expect is the following intonation:

(1')"Wir haben nicht auf das Schiff GESCHOSSEN"
  "We did not FIRE at the ship"
Information Structure

But in context, this is not what we get:
Information Structure

"It was not longer denied by Regev that during the incident there was fire from the Israeli jets. Literally he emphasized: “We did not FIRE at the ship.”"

(Dass im Verlauf des Zwischenfalls aus israelischen Kampfflugzeugen geschossen worden ist, wurde von Regev nicht mehr dementiert. Wörtlich betonte er vielmehr: “Wir haben nicht auf das Schiff geschossen”)

Information Structure

*It was not longer denied by Regev that during the incident there was fire from the Israeli jets. Literally he emphasized: “We did not fire at the SHIP.”*

(Dass im Verlauf des Zwischenfalls aus israelischen Kampfflugzeugen geschossen worden ist, wurde von Regev nicht mehr dementiert. Wörtlich betonte er vielmehr: “Wir haben nicht auf das Schiff geschossen”)


Information Structure

It was not longer denied by Regev that during the incident there was fire from the Israeli jets. Literally he emphasized:

(1") "Wir haben nicht auf das SCHIFF geschossen"
   "We did not FIRE at the ship."
(1') "Wir haben nicht auf das Schiff GESCHOSSEN"
   "We did not fire at the SHIP."
It was not longer denied by Regev that during the incident there was fire from the Israeli jets. Literally he emphasized:

“Wir haben nicht auf das SCHIFF geschossen”

boring informative boring
It was not longer denied by Regev that during the incident there was fire from the Israeli jets. Literally he emphasized:

“We did not fire at the SHIP”

boring  boring  informative
Information Structure

There is a close relationship between context and possible intonation contours!
The poltergeist

A poltergeist is a phenomenon which:

* is not directly observable (only through indirect evidence) and
* has sparse evidence.
The poltergeist

What’s the true nature of a poltergeist?

What’s the true nature of Information Structure?
Information Structure

What is the basic linguistic module that handles Information Structure?
Information Structure

What is the basic linguistic module that handles Information Structure?

Context (discourse semantics)
Information Structure

What is the basic linguistic module that handles Information Structure?

Context (discourse semantics)
Phonology
Information Structure

What is the basic linguistic module that handles Information Structure?

Context (discourse semantics)
Phonology
Semantics
Information Structure

What is the basic linguistic module that handles Information Structure?

Context (discourse semantics)
Phonology
Semantics
Syntax
What is the basic linguistic module that handles Information Structure?

Context (discourse semantics)  
Phonology  
Semantics  
Syntax  
Morphology
Information Structure

What is the basic linguistic module that handles Information Structure?

Context (discourse semantics)

- **Phonology**
- Semantics
- Syntax
- Morphology
Information Structure

Phonology

(2) Q: Who ate the cake?
A1: ULAS ate the cake.
A2: # Ulas ate the CAKE.
Information Structure

What is the basic linguistic module that handles Information Structure?

Context (discourse semantics)
Phonology
Semantics
Syntax
Morphology
Information Structure

Semantics

(3) Q1: What did John drink?
Q2: What did John do?
Q3: #What did John do with the wine?
A: John only [drank [WINE]]

DIFFERENT TRUTH CONDITIONS!!!
Information Structure

What is the basic linguistic module that handles Information Structure?

Context (discourse semantics)
Phonology
Semantics
Syntax
Morphology
Information Structure

Syntax

German:

(4) Q1: Was ist mit Peter?
    Q2: #Wen hast Du gesehen?
    A: Peter hab ich gestern getroffen
        Peter have I yesterday met
Information Structure

Syntax

Catalan Clitic Dislocation:
(5) Q1: Saps alguna cosa de en Pere?
    Do you know anything about Peter?
Q2: # A qui vas veure?
    Whom did you see
A: En Pere, el vaig veure ahir
    art Peter, him-cl have seen yesterday
Information Structure

What is the basic linguistic module that handles Information Structure?

Context (discourse semantics)
Phonology
Semantics
Syntax
Morphology
The units of information structure

A terminological minefield:

theme-rheme
focus-background
focus-presupposition
topic-comment
link-tail-focus
phonological focus within theme and rhyme
Focus of attention
The units of information structure

**Focus:**

Expresses usually new and/or contrastive information

(6) **Q:** Who ate the cake?

   **A:** JOHN ate the cake

(7) **A:** You know what? Bill ate the cake.

   **B:** NO. JOHN ate the cake

(* ) **A:** What did John do with the cake?

   **B:** [John] ATE [the cake]
The units of information structure

**Focus:**

*In focus-background approaches all non-focus material is part of the background.*
The units of information structure

**Topic:**

*Usually associated with aboutness and/or contrastive interpretation*

*Given / anaphoric / context bound information*

*Marked with a raising accent in English*

(8) a. What about Fred? What did he eat? *Fred* ate the *BEANS.*

   L+H*  H*%

b. What about the *beans*? Who ate them? *FRED* ate the *beans.*

   H*  L+H*
The units of information structure

**Topic:**

* In (spoken register) Catalan topics are typically (clitic) left dislocated.

(9) b. Que és de les mongetes? Qui les va menjar?  
[Les mongetes], les (clitic) va mengar en Fred.
The units of information structure

**Topic:**

* In topic-comment approaches all non-topic material belongs to the comment
* The comment includes, but is not identical to the focus.

* Topics display an aboutness-effect (Reinhart, 1995).
* Topics are typically contrastive (Büring, e.g. 1999)
The units of information structure

Non-topic background material
(aka non-marked themes or tails)

* Usually deaccented
* Also given material / anaphoric
 No aboutness effects, no contrastivity.

(10) Who ate the beans?
FRED [ate the beans]_{tail}

Catalan: left dislocation

(11) Qui va menjar les mongetes?
En Fred les va menjar, [les mongetes].
Summary

Why is it interesting? / Why is it difficult?

* Information Structure may seem ornamental, but is more than that

* Linguistic clues are sparse and sometimes hard to interpret (the poltergeist)
to be continued...