

Lost in Linguistics. A Guide to the Current Landscape in Linguistic Theory

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Grammar/Discourse Interface: Cartographic and Non-cartographic Approaches

Introduction

The main issue: How are Topic and Focus grammatically represented?

A. *Cartographic approach:*

- Topic and Focus are grammatical notions encoded in the Left-Periphery by dedicated positions
- Constituents are marked by dedicated corresponding features

B. *Non-cartographic approach:*

- Topic and Focus are IS notions
- Topic and Focus are identified by the interpretive systems by means of specific Mapping Rules

Section 1: Focus as a PF-phenomenon (Reinhart 2006)

“A more minimal and realistic assumption is that the focus constituent is coded at PF, as essentially assumed in Chomsky (1971). Since main stress is a requirement of the computational system (a derivation cannot be pronounced without main stress) an optimal language system would make use of this visible property of derivations to code information needed at the interface.”

“What is needed on the view that focus is coded at PF, is a rule or definition that tells Inference and Context how to identify the focus unit, based on intonation.”

Cinque's generalization:

- (1) The focus of IP is a(ny) constituent containing the main stress of IP, as determined by the stress-rule
- (2) *Focus set:* The focus set of a derivation D comprises all and only subtrees (constituents) which contain the main stress of D.
- (3)
 - a) [IP Subject [VP V **Object**]]
 - b) [IP Subject [VP **Object** V]]
 - c) *Focus set:* {IP, VP, Object}

→ in actual use, any of the members of the set in (iiic) can serve as focus.

- At the interface, one member of the focus set is selected, as the actual focus of the sentence.

Example: (4a) - generated with stress on the object - can be used as an answer in any of the contexts in (4b-d), with the F-bracketed constituent as focus.

- (4) a) My neighbor is building a **desk**
 b) Speaker A: What's this noise?
 Speaker B: [F My neighbor is building a **desk**]
 c) Speaker A: What's your neighbor doing these days?
 Speaker B: My neighbor [F is building a **desk**]
 d) Speaker A: What's your neighbor building?
 Speaker B: My neighbor is building [F a **desk**]

Discourse conditions, rather than syntax, determine whether a derivation with a particular stress is appropriate in a given context.

A derivation is inappropriate in context, if no member of its focus set can be used as an actual focus in that context. (4a), for example, cannot be used as answer in either of the contexts of (5). (# indicates inappropriateness to context)

- (5) a) Speaker A: Has your neighbor bought a desk already?
 Speaker B: #No, my neighbor is [F building] a **desk**.
 b) Speaker A: Who is building a desk?
 Speaker B: #[F My neighbor] is building a **desk**.

In the contexts of (5), the F-bracketed constituents should be the foci, but are not in the focus set generated by (2) for a sentence in which the object bears stress.

- Repair strategy: Stress shift → correct focus
- Complicating factor: interference of anaphoric distressing
- Reinhart: effects can be factored out.

Section 2. The cartographic analysis of Topic and Focus (Rizzi 1997)

(6) [CP Force ... (Topic*) ... Focus ... (Topic*) Fin [IP ...

(7) Credo che, il tuo libro, lo apprezzerrebbero molto
 I believe that your book, they would appreciate it a lot

(7') *Credo, il tuo libro, che lo apprezzerrebbero molto
 I believe, your book, that they would appreciate it a lot

(8) *Credo di, il tuo libro, apprezzarlo molto

(8') Credo, il tuo libro, di apprezzarlo molto

(9) *A chi, il premio Nobel, lo daranno?
 To whom, the Nobel Prize, will they give it?

(9') Il premio Nobel, a chi lo daranno?
 The Nobel Prize, to whom will they give it?

(10) Mi chiedo, il premio Nobel, a chi potrebbero darlo
 I wonder, the Nobel Prize, to whom they could give it

(10') ?Mi chiedo a chi, il premio Nobel, potrebbero darlo
 I wonder to whom, the Nobel Prize, they could give it

- (11) Qui c'è un uomo al quale IL PREMIO NOBEL dovrebbero dare
Here is a man to whom THE NOBEL PRIZE they should give
- (11') *A chi IL PREMIO NOBEL dovrebbero dare?
To whom THE NOBEL PRIZE they should give?
- (12) Credo che QUESTO, a Giovanni, dovrebbero dire
I believe that THIS, to John, they should say
- (12') Credo che a Giovanni QUESTO dovrebbero dire
I believe that to John, THIS they should say
- (13) Topic vs. Focus:
- A. Gianni/*GIANNI sua madre l'ha sempre apprezzato (*weak crossover*)
Gianni his mother always praised him
 - B. *Nessuno l'ho visto / NESSUNO ho visto (*bare quantifiers*)
Nobody I saw him
 - C. *A GIANNI che cosa hai detto? A Gianni che cosa gli hai detto? (*compatibility with wh*)
TO GIANNI what did you say? To Gianni what did you say?
- (14) **Some issues left unresolved by the cartographic hypothesis in (1)**
- A. Topic-positions have different properties crosslinguistically:
English topicalization vs. Romance CLLD
 - B. Why is the Topic-position recursive (above and below the Focus-position)?
 - C. Why can Focus be fronted across an Aboutness or Familiar Topic but not across a Contrastive Topic?

Section 3. Topic-structures as non-canonical predication structures

- (15) *Topicalization as operator-movement in syntax*
- a. *I said that that book to me Maxim gave (*multiple topicalization*)
 - b. ??*This book, to whom should I give? (*intervention effects of wh on topic displacement*)
 - c. ??The man to whom that book I gave... (*intervention effects of topics on wh-movement*)
 - d. *You know what in Scotland they eat
 - e. *To whom did Lee think that, this present, Robert gave?
- (16) *CLLD as operator-movement in semantics*
- a. Marcello lo legge.
'Marcello reads it.'
 - b. [_{Top} e] [λx (Marcello legge x)]
 - c. Questo libro, Marcello lo legge.
'This book, Marcello reads it.'
 - d. [_{Top} Questo libro] [λx (Marcello legge x)]
- (17) CLLD does not give rise to any intervention effect and is only constrained by strong islands.
Strong islands as a constraint on *scope-extension* in the semantics:
- a. *Questo libro, non ho mai visto l'uomo che Maria ha sposato prima di scriverlo

This book, I have never seen the man who Mary married before she wrote it

Section 4. Topic recursion as multiple λ -abstraction on argument-positions

- (18) $\lambda x \lambda y \dots P(x, y, \dots)$
- (19) A: Lasceraì la casa in campagna a tua sorella? (*familiar topic*)
will you bequeath the country house to your sister?
B: No, a mia sorella la casa in campagna non gliela lascerò mai
No, to my sister the country house I will never bequeath it to her
- (20) A: Cosa intendi fare con l'eredità? (*contrastive topic: see also (39)-(40) below*)
what will you do about the inheritance?
B: Non lo so, ma a mia sorella la casa in campagna non gliela lascerò mai
I don't know, but to my sister the country house I'll never bequeath it to her

Section 4. Focus-movement as feature-driven movement (Horvath's Exhaustivity Operator)

- (21) Horvath 2010: In Hungarian, preposing a constituent to the alleged focus position involves a truth-conditional notion of exhaustivity, rather than a discourse notion of focus with a conversational implicature of exhaustivity. Focus-movement is triggered by a specific quantificational feature (*exhaustivity*)
- (22) Q: Who did they call up?
a. They called up JOHN AND MARY.
b. They called up JOHN.
- (23) In Hungarian (22b) is not a logical consequence of (22a)
- (24) Q: Who did they call up?
SpeakerA: They called up JOHN.
SpeakerB: Yes, and they also called up Mary
#Not true. They also called up MARY
- (25) (24) holds in English. In Hungarian it's the other way around
- (26) a. Speaker A: Who did you meet yesterday? (*Contrastive Focus in Italian*)
Speaker B: #MARY, I met
b. Speaker A: I heard you met Anna
Speaker B: No, MARY I met
- (27) *The semantics of Information Focus in Rooth 1992*
a. Presupposition: $\exists x$ (I invited x)
b. Assertion: I invited Mary
- (28) *A proposal for the semantics of Contrastive Focus as an Exhaustivity Operator*
a. Presupposition: I invited Anna
b. Assertion: I invited Mary, and I did not invite Anna
- (29) *A potential problem for Contrastive Focus as EO*
a. Speaker A: I heard you met Mary

Speaker B: No, LISA I met
... and actually, I also met Anna

- (30) *A familiarity constraint on the comparison set to which EO applies*
- a. Speaker A: Did you invite your friends Andrea, Carlo and Giorgio?
Speaker B: No, GIOVANNI I invited
Speaker C: That's not true! LUIGI you invited
 - b. Speaker A: Did you invite your friends? (*D-linking irrelevant*)
Speaker B: #No, CARLO ho invitato
- (31) Conclusion: In Italian the Exhaustivity-operator applies to a contextually relevant set of familiar objects, and excludes that the relevant property truly applies to these objects
- (32) *What about Contrastive Focus in situ?*
- a. Speaker A: I heard that you invited Andrea
Speaker B: No, I invited CARLO
 - b. Problem: The EO should trigger movement.
We may assume remnant movement for CF in situ (cfr. Belletti 2004)
- (33) *A number of interesting conclusions*
- a. The prohibition on multiple Foci (as well as the incompatibility with wh-movement) derives from the quantificational nature of Contrastive Focus
 - b. Information Focus is assigned by the Nuclear Stress Rule (cf. Reinhart 2006)
 - c. Both in Hungarian and in Italian, exhaustivity is *implicated* with Information Focus and *entailed* with Contrastive Focus
 - d. Contrastive Focus is not encoded at PF: The prosodic pattern found with CF extends to the contexts of stress-shift (in the sense of Reinhart 2006)
 - e. A: Who invited Mary?
B: MY NEIGHBOURS invited Mary

Section 5. Grammar and Information Structure: Focus-Topic Interaction

- (34) a. TOPIC [COMMENT FOCUS [BACKGROUND ...]]
b. *FOCUS [BACKGROUND ... [TOPIC [...]]]
- (35) *Neeleman's analysis of A'-scrambling in Dutch: Movement triggers Contrast*
- a. Ik geloof dat [alleen *DIT* boek] Jan Marie *t* gegeven heeft
I believe that only this book John Mary given has
'I believe that John has given only this book to Mary.'
 - b. Ik geloof dat [*zo'n* boek] alleen *JAN* Marie *t* gegeven heeft
I believe that such-a book only John Mary given has
'I believe that only John has given such a book to Mary.'
- (36) *Neeleman's analysis of A'-scrambling in Dutch: Focus across Topic*
- A: Hoe zit het met het dressoir? Wie heeft grootvader dat nagelaten?
'How about the sideboard? To whom has granddad bequeathed that?'

- B: Nou, dat weet ik niet, maar ik geloof
 ‘Well, I don’t know, but I believe ...’
- a. dat grootpapa zijn burens de klok heeft willen nalaten
that granddad his neighbours the clock has want bequeath
- b. # dat zijn burens grootpapa *t* de klok heeft willen nalaten.
that his neighbours granddad the clock has want bequeath
 ‘that granddad wanted to bequeath the clock to his neighbours.’

(37) *Neeleman’s analysis of A’-scrambling in Dutch: Topic across Focus*

- A: Hoe zit het met tante Jo? Wat heeft grootpapa haar nagelaten?
 ‘How about auntie Jo? What has granddad bequeathed to her?’
- B: Nou, dat weet ik niet, maar ik geloof
 ‘Well, I don’t know, but I believe ...’
- a. dat grootpapa zijn burens de klok heeft willen nalaten.
that granddad his neighbours the clock has want bequeath
- b. dat [DP zijn burens] grootpapa *t*-DP de klok heeft willen nalaten
that his neighbours granddad the clock has want bequeath
 ‘that granddad wanted to bequeath the clock to his neighbours.’

(38) *Neeleman’s analysis of A’-scrambling in Dutch: (topic cannot move below a displaced focus)*

- A: Hoe zit het met de nietmachine? Wie heeft Jan daarom gevraagd?
 ‘What about the stapler? Who has asked John for that?’
- B: Nou, dat weet ik niet, maar...
 ‘Well, I don’t know, but...’
- a. ik geloof dat *PIET* Jan om de liniaal heeft willen vragen.
I believe that Peter John for the ruler has want ask
- b. # ik geloof dat *PIET* [PP om de liniaal] Jan *t* PP heeft willen vragen.
I believe that Peter for the ruler John has want ask
- c. ik geloof dat [PP om de liniaal] *PIET* Jan *t* PP heeft willen vragen.
I believe that for the ruler Peter John has want ask
 ‘I believe that Peter has wanted to ask John for the ruler.’

(39) *Fronted Focus and Contrastive Topic in Italian: The interface Condition (29) is confirmed!*

- A. Che mi dici del comodino? A chi l’ha lasciato il nonno?
 What about the bedside table? To whom did granddad bequeath it?
- B: Credo proprio che AI SUOI VICINI (non alla moglie!) il comodino il nonno l’abbia lasciato
 I really believe that TO HIS NEIGHBOURS (not to his wife!) the bedside table granddad bequeathed it
- C: Non lo so, ma credo che *l’armadio* il nonno l’abbia lasciato AI SUOI VICINI
 I don’t know, but I believe that the wardrobe granddad bequeathed it TO HIS NEIGHBOURS
- D: #Non lo so, ma credo che AI SUOI VICINI (non alla moglie!) *l’armadio* il nonno l’abbia lasciato
 I don’t know, but I believe that TO HIS NEIGHBOURS (not to his wife!) the wardrobe granddad bequeathed it

(40) *Multiple Contrastive Topics are admitted (modulo conflicts of NSR with destressing: Torregrossa 2011)*

- A: Il nonno ha lasciato l'orologio ai cugini?
did granddad bequeath the clock to his cousins?
- B: Non lo so, ma ha lasciato la scacchiera ai fratelli
I don't know, but he bequeathed the chessboard to his brothers
- C: Non lo so, ma la scacchiera, l'ha lasciata ai fratelli
I don't know, but the chessboard, he bequeathed it to his brothers
- D: ?? Non lo so, ma ai fratelli, la scacchiera, gliel'ha lasciata
I don't know, but to his brother, the chessboard, he bequeathed it to them
- E: Non lo so, ma ai fratelli la scacchiera gliel'ha venduta
I don't know, but to his brothers the chessboard, he sold it to them
- F: Non lo so, ma ai fratelli la scacchiera non gliel'ha lasciata
I don't know, but to his brothers the chessboard, he didn't leave it to them
- G. Mario ha consegnato la bicicletta ai suoi clienti in officina?
did Mario deliver the bike to his clients in the repair shop?
- H. Non lo so, ma ai suoi amici il motorino gliel'ha consegnato nel garage
I don't know, but to his friends the scooter he delivered it to them in the garage
- I. Non lo so, ma ai suoi amici il motorino non gliel'ha consegnato in officina
I don't know, but to his friends the scooter he didn't deliver it to them in the repair shop

(41) *Fronted Focus and Topic: A minimal pair*

- A: Il nonno ha lasciato l'orologio ai cugini?
Did granddad bequeath the clock to his cousins?
- B: No, io credo che AI FRATELLI (non ai cugini!) l'orologio il nonno l'abbia lasciato
No, I believe that TO HIS BROTHERS (not to his cousins!) the clock granddad bequeathed it
- C. ?? Non lo so, ma io credo che AI FRATELLI (non ai cugini!) la scacchiera il nonno l'abbia lasciata
I don't know, but I believe that TO HIS BROTHERS (not to his cousins!) the chessboard granddad bequeathed it

Section 6. Focus-Topic Interaction: Comparing Theories

(42) Focus can be moved over a familiar topic but not over a contrastive topic:
(41B) vs (41C)

(43) This follows both from Neeleman's proposal via (34) and from Frascarelli's cartographic proposal (by definition, in (6) the upper topic position is contrastive, and the lower topic position is familiar)

(44) Focus movement to a higher clause across a contrastive topic makes the difference: it should be bad given (34) but it should be ok in the cartographic framework:

- (i) A. Che mi dici del libro di Tomasello? A chi l'ha consigliato il professore?
B. #Non lo so, ma AI SUOI STUDENTI io credo che il libro di Chomsky il professore l'abbia consigliato

- (45) This shows it cannot be a matter of position. It is rather a matter of feature-endowment and locality: a +*Contr* constituent A cannot cross over a +*Contr* constituent B (under Rizzi's Relativized Minimality)
- (46) The semantics of Contrast: If a constituent A is marked as +*Contr*, then the semantic value of A (= A*) must be part of a non-singleton set of familiar objects, to which A* belongs (cf. Pesetsky's D-linking)

For Topic, this entails that the +*Contr* topicalized constituent involves a comparison set, whereas for Focus this entails that Contrastive Focus involves exhaustivity with respect to a familiar set (as opposed to 'logical' exhaustivity in Hungarian Focus)

- (47) Why is the order Topic-Focus admitted in Italian (and in Dutch)?
- (i) A. Che mi dici del libro di Tomasello? A chi l'ha consigliato il professore?
 B. Non lo so, ma il libro di Chomsky io credo proprio che AI SUOI STUDENTI il professore l'abbia consigliato

For Italian, the topic is base-generated and there is then no RM effect. For Dutch, though the problem is compounded by the fact that topic-movement is A'-scrambling, a solution might be empty-operator movement (modeled on the classical analysis of English topicalization), whereby the operator is devoid of the +*Contr* feature.

- (48) The alternative is a non-cartographic approach based on (34).

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