

## Gundel & Fretheim (in press)

- A: We are now passing the oldest winery in the region.  
B: Why?  
(Chao)
- Topic: what the sentence is about.  
Focus: what is predicated about the topic.

*Topic and Focus*

1

## The Given-New Distinction

- Referential givenness/newness
  - A relation between a linguistic expression and a corresponding non-linguistic entity.
  - Existential presupposition, referentiality and specificity, familiarity condition on definite descriptions, activation and identifiability, hearer-old/new and discourse-old/new status, cognitive status.

*Topic and Focus*

2

- Relational givenness/newness
  - Partition of the semantic/conceptual representation into two complementary parts, X and Y, where X is what the sentence is about and Y is what is predicated about X.
  - X is given in relation to Y in that it is independent, and outside the scope of, what is predicated in Y.
  - Y is new in relation to X in that it is new information that is asserted, questioned, etc. about X.
  - Reflects how the informational content of a particular event or state of affairs expressed by a sentence is represented and how its truth value is to be assessed.
  - Psychological subject/predicate, presupposition/focus, topic/comment, theme/rheme; topic/predicate; topic/focus

*Topic and Focus*

3

- The two types of givenness/newness are logically independent.
  - A: Who called?  
B: Pat said SHE called.
  - A: Did you order the chicken or the pork?  
B: It was the PORK that I ordered.
- Relational givenness/newness is necessarily a property of linguistic representations; referential givenness/newness is not specifically linguistic.
  - A house or a tune can be familiar or not, in focus or not, etc.

*Topic and Focus*

4

- Referential givenness statuses are uniquely determined by the knowledge and attention state of the addressee; the speaker has no choice.
- Relational givenness statuses may be constrained or influenced by the discourse context, but they are not uniquely determined by it.
  - There was a soccer game last night.
  - Poland beat Sweden/Sweden was beaten by Poland.
- Question-answer pairs do seem to determine a unique topic-focus structure:
  - Who did the Red Sox play?  
The Red Sox played the YANKEES/#The RED SOCKS played the Yankees/#I love baseball.

*Topic and Focus*

5

## Referential properties of Topic

- The phrase marked by a topic marker in Japanese and Korean necessarily has a ‘definite’ (including generic) interpretation:
  - Neko ga kingyo o ijit-te .....  
cat NOM goldfish OBJ play with-and  
‘The/A cat is playing with the/a goldfish, and....’
  - Neko wa kingyo o ijit-te .....  
cat TOP goldfish OBJ play with-and  
‘The/\*A cat is playing with the/a goldfish, and....’

*Topic and Focus*

6

- In prototypical topic-comment structures, the topic phrase adjoined to the left of the clause is definite:
  - My sister, she's a High School teacher.  
That book you borrowed, are you finished reading it yet?
  - The window, it's still open.  
\*A window, it's still open.
- Gundel (1985, 1988) proposes that topics must be familiar, in that the addressee must have an existing representation in memory.
- Reinhart (1981), Prince (1985) dispute this:
  - An old preacher down there, they augured under the grave where his wife was buried.
- Tomlin (1995) and Erteschik-Shir (1997) equate topic with current center of attention.

*Topic and Focus*

7

## Information focus vs. contrastive focus

- Information focus:
  - Relational sense, complement of topic.
- Contrastive focus:
  - Referential sense, material which the speaker calls to the addressee's attention, thereby often evoking a contrast with other entities that might fill the same position.
  - Rooth (1985): evoking alternatives is the primary function of focus, the 'contrast set' evoked provides the locus for focus sensitive operators such as *only*, *even*, and *also*.

*Topic and Focus*

8

- Contrastive focus can fall on the topic:
  - We have to get rid of some of these clothes. That COAT you're wearing I think we can give to the Salvation ARMY.
- Contrastive focus can fall on the information focus:
  - A: Who made all this great food?  
B: BILL make the CURRY.
- It is widely assumed (though not uncontroversial) that in languages that use pitch accent to mark information focus, when a sentence contains only a single prominent pitch accent this will necessarily fall on the information focus.

*Topic and Focus*

9

- Büring (1999) restricts the term topic to contrastive material within the non-focus, the rest he calls “background”.
- “Topicalization” can mark preposed information foci that are also contrastive foci:
  - A: Which of these clothes do you think we should give to the Salvation Army?  
B: That COAT you're wearing (I think we can give away).

*Topic and Focus*

10

# Focus and Intonation

- The association between prosodic prominence and focus is widely believed to be universal.
- A difference between information focus accent and a topic accent is not attested in all languages:
  - Finnish: both information focus and contrastive (maybe topical) focus are marked with a high tone accent.
  - Norwegian: no distinction
    - FRED spiste BØNNENE  
Fred ate the.beans  
'Fred ate the beans'
    - Du ma se pa de BILDENE ETTERPA  
you must look at those pictures afterwards  
'You have to look at those pictures afterwards.'

*Topic and Focus*

11

- However, some languages do make the distinction:
  - English:
    - Information focus: Jackendoff's A accent, or Pierrehumbert's H\*
    - Topic: Jackendoff's B accent, or Pierrehumbert's L+H\*
- Focus projection:
  - A: Who did the Red Sox play?  
 B: The Red Sox played [the YANKEES].  

F                  H\*
  - A: What did the Red Sox do today?  
 B: The Red Sox [played the YANKEES]  

F                  H\*
  - A: Did anything interesting happen today?  
 B: [The Red Sox played the YANKEES]  

F                  H\*

### Thetic or “all news” sentence

*Topic and Focus*

12

- [The RED SOX] played the Yankees.  
F
  - Narrow focus only on subject
  - Answers question: Who played the Yankees?
  - Focus generally projects from the right.
- [The DOOR's open], [Her UNCLE died], etc.  
F    F
  - Some intransitive sentences with prominence on the subject are all-focus sentences.
- Nazis tear down antiwar posters
  - H\* on direct object, a comment about Nazis.
  - H\* on subject, people who tear down antiwar posters are Nazis.

*Topic and Focus*

13

## Topic, focus and syntactic structure

- Displaced constituents:
  - Fred ate the beans.  
The beans Fred ate.  
It was the beans that Fred ate.  
The beans, Fred ate them.  
Fred ate them, the beans.
  - Preposing
    - Marks either topic or focus, with different pitch accents.
    - Birner & Ward (1998): preposing marks the preposed constituent as representing “information standing in a contextually licensed partially ordered set relationship with information invoked in or inferable from the prior context”
      - a referentially given function.

*Topic and Focus*

14

– Cleft sentences

- Widely assumed that the clefted constituent is the information focus, and the open proposition expressed by the cleft clause is presupposed and topical (and unaccented).
- However, Hedberg (1990) argues that the cleft clause is also the locus of information focus in “informative presupposition clefts” (Prince 1978) where there is an additional and primary accent on the cleft clause.
  - [Beginning of a newspaper article]. **It was just about 50 years ago that Henry Ford gave us the weekend.** On September 25, 1926, in a somewhat shocking move for that time, he decided to establish a 40-hour work week, giving his employees two days off instead of one. [Philadelphia Bulletin, cited in Prince 1978]

- Hedberg also argues that the clefted constituent can refer to the topic:
  - The federal government is dealing with AIDS as if the virus was a problem that didn’t travel along interstate highways and was none its business. **It’s this lethal national inertia in the face of the most devastating epidemic of the late 20th century that finally prompted one congressman to strike out on his own.** [Minneapolis Star and Tribune]
- There is thus no unique one-to-one mapping between the clefted constituent and the information focus of the sentence.



– Left and Right Dislocation

- Presumably universal; relatively unmarked structures in “topic-prominent” languages like Chinese and Japanese; can’t carry the sole pitch accent of the sentence.
- Prince (1998) argues that left dislocation serves a variety of functions. Gundel (1999b) argues that this is not inconsistent with the claim that dislocation serves to partition the sentence into a topic and a comment.
- More seriously, Prince presents evidence that indefinite phrases can be dislocated:
  - Most middle-class Americans, when they look at the costs plus the benefits, they’re going to be much better off.  
(Prodigy 1993, cited in Prince 1998)
- Gundel: these are partitives, it’s the N-set, not the whole quantified phrase that is the topic:
  - (As for) Middle-class Americans, when most of them look at the costs plus the benefits, they’re going to be much better off.

*Topic and Focus*

17

- Norwegian, like other Scandinavian languages, allows right dislocation of a pronoun with a full coreferring nominal inside the clause:
  - ISKREMEN har JEG kjøpt.  
the.ice.cream have I bought
  - ISKREMEN har JEG kjøpt, den.  
the.ice.cream have I bought it  
‘I bought ice cream’
- Fretheim (in press) argues that such constructions encode the topic-focus structure of an utterance, as the dislocated pronoun necessarily refers to the topic.
- This disambiguates the topic-focus structure.
  - YES: I know Tor bought cake, but do we have ice cream?
  - NO: What did YOU buy?

*Topic and Focus*

18

- Pronoun right-dislocation can also disambiguate sentences:
  - SCOTT heter Glen til ETTERNAVN.  
Scott is.named Glenn as surname.  
a. ‘Scott’s surname is Glenn’  
b. ‘Scott is the surname of Glenn’
  - SCOTT heter Glenn til ETTERNAVN, han.  
Scott is.named Glenn as surname he  
‘Scott’s surname is Glenn.’
  - SCOTT heter Glenn til ETTERNAVN, det.  
Scott is.named Glenn as surname it  
‘Scott is the surname of Glenn.’

## Meaning and truth-conditional effects

- Strawson 1950
  - Sentences lack a truth value when their presuppositions are not met.
- Strawson 1964
  - Definite descriptions are associated with presuppositions only if they are topics.
    - The King of France is BALD. lacks a truth value.
    - The King of FRANCE is bald. false

- Other truth-conditional effects
  - DOGS must be carried.  
Dogs must be CARRIED.
  - Only voiceless OBSTRUENTS occur in word final position.  
Only VOICELESS obstruents occur in word final position.
  - Clyde gave me the TICKETS by mistake.  
Clyde gave ME the tickets by mistake.

*Topic and Focus*

21

- Gundel (1998) argues that it is information focus, and not purely contrastive focus, that results in these effects.
  - The largest demonstrations took place in PRAGUE in November (in) 1989. H\*
  - The largest demonstrations took place in Prague in NOVEMBER (in) 1989. H\*
  - The largest demonstrations took place in PRAGUE in NOVEMBER (in) 1989. L+H\*  
H\*

*Topic and Focus*

22

## Conclusion

- a. What's Jane doing?
  - b. Jane's walking her DOG.
  - c. As for Jane, she's walking her DOG.
  - d. Someone said about Jane that she's walking her dog.
- Topic tests provide evidence that a given topic-focus structure is possible in a given context, but they don't show that the structure is necessary.
  - b. above could have an all-focus (thetic) interpretation even in the context of a.
- Pragmatic tests can't be used for identifying linguistic categories, because pragmatics is not deterministic.

*Topic and Focus*

23

- Gundel (1999b) proposes that topic-focus structure is an essential component of the semantic/conceptual representation associated with sentences by the grammar.
  - A semantic/conceptual representation is well-formed only if the topic is referential, and thus capable of combining with a predicate to form a full proposition.
  - If a topic is unfamiliar, the utterance may fail to yield adequate contextual effects (Sperber & Wilson 1986/1995), since assessment can only be carried out if the processor already has a mental representation of the topic. Such utterances are pragmatically deviant.
  - The familiarity constraint applies at the grammar-pragmatics interface.

*Topic and Focus*

24

## Vallduvi & Engdahl (1996)

- Chafe (1976)
  - I have been using the term packaging to refer to the kind of phenomena at issue where, with the idea that they have to do primarily with how the message is sent and only secondarily with the message itself, just as the packaging of toothpaste can affect sales in partial independence of the quality of the toothpaste inside.
- Mary hates chocolate.  
Chocolate Mary hates.  
Chocolate Mary loves.
  - We will say that each sentence encodes a meaning, expressed as a logical formula ( $\phi$ ,  $\psi$ , ...), and an information-packaging instruction (A, B, ...)

*Topic and Focus*

25

## Two informational articulations

- Ground-Focus
  - What about the pipes? In what condition are they?  
The pipes are [<sub>F</sub> RUSTY].
  - What about the pipes? What's wrong with them?  
The pipes [<sub>F</sub> are RUSTY]
  - Why does the water from the tap come out brown?  
[<sub>F</sub> The PIPES are rusty].
  - I have some rust remover. You have any rusty things?  
[<sub>F</sub> The PIPES] are rusty.
  - I wonder whether the pipes are rusty.  
The pipes [<sub>F</sub> ARE] rusty      [“Verum focus”]

*Topic and Focus*

26

- Ground
  - Noninformative, known, or expected part.
- Focus
  - Informative, newsy, dominant, or contrary-to-expectations part.
- Other terminology
  - Phonologists use “focus” to refer to intonationally prominent parts of a sentence.
  - Semanticists use “focus” to refer quantificational nuclear scope, ground being an excellent candidate for restrictorhood.
  - Artificial intelligence researchers use “focus” for psychological salience.

*Topic and Focus*

27

- Topic-Comment
  - Gundel (1988)
    - “An entity, E, is the topic of a sentence, S, iff in using S the speaker intends to increase the addressee’s knowledge about, request information about, or otherwise get the addressee to act with respect to E.”
  - Halliday (1967)
    - The theme [topic] is the “point of departure for the clause as a message.”
    - Themes are sentence initial in English.
  - Topic phrases display a characteristic “aboutness” feeling.
  - Sentences may be topicless:
    - Presentational, news sentences, neutral descriptions,thetic sentences, all focus sentences
      - *The screen* DIED.                      Topic-comment
      - The SCREEN died.                 All-comment

*Topic and Focus*

28

## Conflating topic-comment and ground-focus

- A. What about *Mary*? What did *she* give to Harry?  
*She* gave [<sub>F</sub> a SHIRT] to Harry.
- B. What about *Harry*? What did Mary give to *him*?  
*To Harry* she gave [<sub>F</sub> a SHIRT].
- C. What about *Mary*? What did *she* give to Harry?  
*She* [<sub>C</sub> gave a SHIRT to Harry].
- D. What about *Mary*? What did *she* do?  
*She* [<sub>C</sub> gave a shirt to HARRY].

*Topic and Focus*

29

- E. What about John? What does he do?  
[<sub>T</sub> John][<sub>C</sub> drinks BEER].  
[<sub>G</sub> John][<sub>F</sub> drinks BEER].
- F. What about John? What does he drink?  
[<sub>T</sub> John] [<sub>C</sub> drinks BEER].  
[<sub>G</sub> John drinks][<sub>F</sub> BEER].
- S = {focus, ground}  
ground = {link, tail}
- G. What about John? What does he do?  
[<sub>G</sub> [<sub>L</sub> John]][<sub>F</sub> drinks BEER].
- H. What about John? What does he drink?  
[<sub>G</sub> [<sub>L</sub> John] drinks][<sub>F</sub> BEER].

*Topic and Focus*

30

## An instruction-based approach

- Sentences may have the same propositional content but encode different instruction types, different ways of indicating how the meaning of the sentence should be “unpacked.”
- The *focus* is the actual update potential of a sentence *S*, the only contribution that *S* makes to the information state of the hearer at the time of utterance
- The *ground* is already subsumed by the input information state and acts as an usher for the focus: it indicates how the information update is to be carried.
- *Links* indicate WHERE the focus should go in the input information state: they establish a particular locus of update in the input information state.
- A *tail* indicates HOW the focus fits there: indicates that the nondefault mode of update is required at that point.

*Topic and Focus*

31

- An information state can be viewed as a file-like data structure.
- Files are collections of file cards.
- Each file card has a number of records or conditions written on it listing attributes and relations about the entity it denotes.
- The content of these file cards is updated during communication.
- The marking of cognitive status is responsible for providing H with instructions for file-card management: indefinite NP instructs H to create a new file card, definite NP to activate a dormant, already existing file card.
- Links designate a specific file card in the input file where information update is to be carried out.
- The tail further indicates that focus must complete or alter a condition that is already on the card, rather than add a new condition.

*Topic and Focus*

32



- There are four instruction types
  - Link-focus instruction
    - Tell me about the people in the White House. Anything I should know?  
The president [<sub>F</sub> hates CHOCOLATE]
  - Link-focus-tail instruction
    - And what about the president? How does *he* feel about chocolate?  
The president [<sub>F</sub> HATES] chocolate.
  - All-focus instruction
    - The president has a weakness.  
[<sub>F</sub> He hates CHOCOLATE]
  - Focus-tail instruction
    - You shouldn't have brought chocolates for the president.  
[<sub>F</sub> He HATES] chocolate.

*Topic and Focus*

33

- Every sentence has a focus.
- Not every sentence has a link or a tail
  - Linkless sentences occur when the locus of update of  $S_n$  is inherited from  $S_{n-1}$
  - Tails indicate that a non-default mode of update is required.
- Another type of all-focus instructions occurs when no specific file card is designated as a locus of update, but rather a general-situation file card is used:
  - So, did anything happen while I was gone?  
[<sub>F</sub> The PRESIDENT called].
  - In suchthetic sentences, the ground is the time and space information that either has been mentioned or can be inferred.
- The structural realization of the four instruction types varies from language to language.
  - English, Catalan, Dutch, German, Hungarian, Turkish, Japanese, Navajo, Vute

*Topic and Focus*

34

# English

- Focushood is associated with nuclear stress
- Focal phrases normally don't undergo any syntactic operations like movement, they appear in their canonical position.
- Different ground-focus partitions are structurally encoded by shifting the position of nuclear stress on one invariable syntactic structure.
  - The pipes are [<sub>F</sub> RUSTY].  
 The pipes [<sub>F</sub> are RUSTY].  
 [<sub>F</sub> The PIPES are rusty].  
 [<sub>F</sub> The PIPES] are rusty  
 The pipes [<sub>F</sub> ARE] rusty.

*Topic and Focus*

35

- Focus pitch accent is Jackendoff's A accent or Pierrehumbert's level high tone (H\*)
- Strings that are prosodically identical may be informationally ambiguous:
  - John [<sub>F</sub> left a note [<sub>F</sub> on the TABLE]].  
 John [<sub>F</sub> left [<sub>F</sub> a NOTE]] on the table.
- Links may be fronted, but also may appear in situ.
  - Where can I find the cutlery?  
*The forks* are in the CUPBOARD ...  
 (i) but *the knives* I left in the DRAWER.  
 (ii) but I left *the knives* in the DRAWER.
- Link pitch accent is Jackendoff's B accent or Pierrehumbert's L+H\* (a high tone preceded by a distinctive low level).  
 Topicalized and nonsubject links are always realized with L+H\*; L+H\* on in situ subjects is optional, contrastive links are always so marked.

*Topic and Focus*

36

- Tails are typically deaccented, and are free to remain in situ.
  - [<sub>L</sub> John] loves [<sub>F</sub> BEER] (and Mary loves CIDER).
  - [<sub>L</sub> John] [<sub>F</sub> LOVES] beer (but Mary HATES it).
  - John [<sub>F</sub> LEFT]
    - could be a link-focus sentence, or a focus-tail sentence
- The focus does not remain in situ in focus preposing:
  - Did you get wet?
    - [<sub>F</sub> Bloody SOAKING] I was.
    - The fronted phrase refers to a scale (the scale of wetness) and to a specification of a value on that scale (bloody soaking).
  - [<sub>F</sub> FIDO] they named their dog.
    - The fronted phrase refers to a set (the set of dog names, ordered in terms of clichédness), value is extremely clichéd *Fido*.
  - They named their dog [<sub>F</sub> FIDO]
    - No such interpretation.

Topic and Focus

37

- Weak proforms are included in the focus.
  - [<sub>F</sub> He hates CHOCOLATE]
  - The president* [<sub>F</sub> hates CHOCOLATE]
  - [<sub>L</sub> John] [<sub>F</sub> LOVES] [<sub>G</sub> beer].
  - [<sub>F</sub> He LOVES it].
  - Canonical intonation:
    - John loves BEER.
    - ?He loves IT.
  - English doesn't allow for null argument slots.
  - How does John feel about beer?
    - [<sub>F</sub> He LOVES it]
  - What drink does John love?
    - [<sub>F</sub> BEER]
  - English doesn't allow sentence fragments with just a verb.
  - The weak pronouns are informationally inert, so it doesn't matter if they appear inside [<sub>F</sub> ]

Topic and Focus

38

# Catalan

– Assumptions about syntax:

- Underlying VOS: verb-object-oblique-subject-adjuncts
- Null subject language, verbal complements gaps are associated with a clitic on the verb.
- Left detachment is left-adjunction to IP (S), right detachment is right-adjunction to IP; more than one phrase may be left- or right-detached; verbal complement detachment is associated with a verbal clitic; the verb may undergo detachment.
- Heavy NP shift reorders elements in the clause.
- Wh-phrases in wh-questions and other quantificational elements raise to the Specifier of IP position, and do not necessarily bind a clitic.

*Topic and Focus*

39

– Information packaging is realized primarily through syntax, although the rightmost item within the focus is marked with nuclear stress.

- A. El Joan<sub>1</sub> [<sub>F</sub> va deixar una nota damunt la TAULA t<sub>1</sub>]
- B. El Joan<sub>1</sub> [<sub>F</sub> hi<sub>2</sub> va deixar una NOTA t<sub>2</sub> t<sub>1</sub>], damunt la taula<sub>2</sub>.
- C. El Joan<sub>1</sub> [<sub>F</sub> l<sub>3</sub>'hi<sub>2</sub> va DEIXAR t<sub>3</sub> t<sub>2</sub> t<sub>1</sub>], una nota<sub>3</sub>, damunt la taula<sub>2</sub>.  
Joan        obj.loc 3s-pst-leave        a note    on        the table
- 'Joan left a note on the table.'

– A is a typical link-focus instruction: What did Joan do?

– B is a link-focus-tail instruction:

- S<sub>1</sub>: [Narrating] Then, after lunch I laid out all the gifts on the table.  
S<sub>2</sub>: [Interrupting] Oh, by the way, John had left a NOTE on the table.  
Did you see it?

– C is link-focus-tail instruction with two tails, since they are verbal complements they must bind a clitic, since the subject is preverbal it must be detached.

*Topic and Focus*

40

- Only focal (nonweak) elements may remain within the core clause; ground elements must be detached; focal elements may not be detached.
- In all-focus instructions, even the subject remains in its base position:
  - [<sub>F</sub> Deu estar rovellada la CANONADA]  
 3s-must be-inf rusty the pipe  
 ‘The PIPES must be rusty.’
- Links are left detached; tails are right-detached.
- In English, unaccented subjects can be either tails or noncontrastive links; in Catalan these differ syntactically:
  - Why didn’t she come with John?  
 [<sub>F</sub> Se’n va ANAR], el Joan. ‘John left.’  
 Refl.loc 3s-past-leave the John
  - How come she’s all alone? ‘John left’  
 El Joan [<sub>F</sub> se’n va ANAR]

*Topic and Focus*

41

- Contrastive and noncontrastive links are encoded alike.
- If a sentence  $S_n$  shares its locus of update with  $S_{n-1}$ ,  $S_n$  need not have a link; therefore, use of a link will imply a change in locus of update and maybe a contrast.
  - [<sub>L</sub> La Sió<sub>1</sub>] [<sub>F</sub> va insultar la COIA<sub>2</sub> t<sub>1</sub>]  
 the Sió 3s-pst-insult the Coia  
 i [<sub>L</sub> ella<sub>2</sub>] [<sub>F</sub> li<sub>1</sub> va fotre una HÓSTIA t<sub>2</sub>]  
 and she iobj 3s-pst-do a blow  
 ‘Sió insulted Coia<sub>2</sub> and she<sub>2</sub> hit HER<sub>1</sub>’
  - [<sub>L</sub> La Sió<sub>1</sub>][<sub>F</sub> va insultar la COIA t<sub>1</sub>]. [<sub>F</sub> Li va fotre una HÓSTIA].  
 ‘Sio insulted Coia. She hit her.’ [ambiguous]
  - In English this distinction is realized by stressed versus unstressed pronouns, rather than full versus null pronouns.
- Verum focus in Catalan is realized as nuclear stress on the verb, the same as verb focus; in English verum focus falls on the auxiliary or on the negative word.

*Topic and Focus*

42

## West Germanic: German & Dutch

- Has a malleable intonational structure, allows for strings that are informationally ambiguous out of context.
- Nuclear stress on immediately preverbal position is default.
  - Karl hat [<sub>F</sub> dem Kind [<sub>F</sub> [<sub>F</sub> das BUCH] geschenkt]].  
'Karl gave the book to the child.'
  - Karel heeft [<sub>F</sub> het kind [<sub>F</sub> [<sub>F</sub> het BOEK] gegeven]].  
'Karl gave the book to the child.'
  - What did Karl give to the child?  
What did Karl do for the child?  
What did Karl do?

*Topic and Focus*

43

- Nuclear stress on IO indicates narrow focus.
  - Who did Karl give the book to?  
Karl hat [<sub>F</sub> dem KIND] das Buch geschenkt.  
Karel heeft [<sub>F</sub> het KIND] het boek gegeven.  
Karel heeft het boek [<sub>F</sub> aan het KIND] gegeven.  
'Karl gave the book to the child.'
  - What did Karl do with the book?  
Karel heeft het boek [<sub>F</sub> aan het KIND] gegeven.]
- Some sentences with nuclear stress on subject are ambiguous.
  - What's happened?  
[<sub>F</sub> GORBATSCHOW] ist verhaftet worden  
[<sub>F</sub> GORBATJOV] is gearresteerd  
'GORBACHEV has been arrested.'
  - Who has been arrested?  
[<sub>F</sub> GORBATSCHOW] ist verhaftet worden.  
[<sub>F</sub> GORBATJOV] is gearresteerd.

*Topic and Focus*

44

- German declarative focus pitch accent: a bitonal falling accent (H\*L)
- Links require a pitch accent as well, either a rising tone (L\*H) or a falling tone (H\*L)
- L\*H ... H\*L ‘hat pattern’
- H\*L ... H\*L no difference but the second (focal) one is not downstepped with respect to the other one, so subjects in experiments can tell them apart.
- In focus-only sentences, there is only one H\*L.
- Dutch also has two pitch accents, and can use either one for links.

- Links may be fronted or left in situ.
  - De *vorken* zijn in de KAST... ‘the forks are in the cupboard.’
  - (i) ...maar de *messen* liet ik in de LA. ‘but the knives I left in the drawer
  - (ii)...maar ik liet de *messen* in de LA ‘but I left the knives in the drawer.
- Contrastive dislocation is a fronting operation, but it binds a pronominal that appears in a lefthand slot but to the right of the contrastive-dislocated phrase.
  - [<sub>L</sub> De vijf laatste films van *Godard*]<sub>1</sub> die<sub>1</sub> heeft Jan gezien.  
The five last movies of Godard that has Jan seen  
‘Godard’s last five films Jan has seen.’
  - [<sub>L</sub> De vijf laatste films van *Godard*] heeft Jan gezien.
  - \* [<sub>F</sub> De vijf laatste films van GODARD]<sub>1</sub> die<sub>1</sub> heeft *Jan* gezien

## Hungarian

- The structural realization of ground-focus relationships involves syntactic strategies, as in Catalan, but they do not remove ground elements FROM a default focus slot, but rather move focus elements TO a default focus slot.
- Hungarian is a VO language, but focus must be moved to preverbal slot.
  - \*Attila félt [<sub>F</sub> a FÖLDRENÉSTÖL].  
Attila 3s-pst-fear the earthquake.from
  - Attila [<sub>F</sub> a FÖLDRENÉSTÖL.] félt.
  - ‘Attila feared [<sub>F</sub> the EARTHQUAKE].’
- Ground elements appear post-verbally or in a lefthand position that precedes the focus position, these latter are links.

*Topic and Focus*

47

- Wh-words, verb particles, some quasi-incorporated complements, and some adverbs may appear in the focus slot, but when a focus appears there, these elements appear post-verbally.
  - EL aludt a gyerek  
PRT 3s-pst-sleep the child-nom  
‘the child fell sleep’
  - \*Aludt el a gyerek.
  - KÉSÖN aludt el a gyerek.  
late  
‘it was late the child fell asleep.’

*Topic and Focus*

48



- Normally, the preverbal focus is a narrow one, but wide foci may be possible when the element that appears in focus position appears there as a default.
  - Mari [<sub>F</sub> [<sub>F</sub> [<sub>F</sub> ALMÁT] eszik] a kertben.]  
 Mary          apple-acc   3s-eat the garden-in  
 ‘Mary eats apples in the garden.’
- When the focus position is empty, the focal pitch accent falls on the verb; in such cases focus ambiguity is present.
  - Mari [<sub>F</sub> [<sub>F</sub> [<sub>F</sub> LÁTTA] Jánost] a kertben.]  
 Mary          3s-pst-see   John-acc the garden-in  
 ‘Mary saw John in the garden.’
- In Hungarian focus projects to the right; in English, to the right.

## Turkish

- An OV language; default nuclear stress is on the immediately preverbal slot; narrow focus can go there as well:
  - Fatma [<sub>F</sub> AHMET-i] arriyor  
 Fatma Ahmet-acc seek-3S  
 ‘Fatma is looking for Ahmet.’      ‘Who is Fatma looking for?’
  - Ahmet-i [<sub>F</sub> FATMA] arriyor.  
 Ahmet-acc FATMA seek-3S  
 ‘Fatma is looking for Ahmet’      ‘Who is looking for Ahmet?’

– Focus phrases can appear preverbally, or in situ.

- Bir hizmetçi yemek-ten önce masa-nin üzer-i-ne [<sub>F</sub>NOT-u] bırak-ti  
a servant meal-abl before table-gen top-poss-dat note-acc leave-pst-3s  
'A servant put the note on the table before lunch.'
- When did a servant put a note on the table?  
a. Bir hizmetçi önce masa-nin üzer-i-ne not-u [<sub>F</sub>YEMEK-ten] bırak-ti  
b. Bir hizmetçi [<sub>F</sub>YEMEK-ten] önce masa-nin üzer-i-ne not-u bırak-ti
- Who put a note on the table before lunch?  
a. Yemek-ten önce masa-nin üzer-i-ne not-u [<sub>F</sub>bir HİZMELCI] bırak-ti  
b. [<sub>F</sub>bir HİZMELCI] yemek-ten önce masa-nin üzer-i-ne not-u bırak-ti

– Focus projects to the left; unlike Hungarian where focus often does not project at all, and if it does, to the right.

- Bir hizmetçi [<sub>F</sub>yemek-ten önce [<sub>F</sub>masa-nin üzer-i-ne [<sub>F</sub>[<sub>F</sub>NOT-u] bırak-ti]]]  
a servant meal-abl before table-gen top-poss-dat note-acc  
leave-pst-3s  
'A servant put the note on the table before lunch.'
- What did a servant leave on the table before lunch?  
What did a servant do before lunch having to do with the table?  
What did a servant do before lunch?  
What did a servant do?

– In the preverbal focus cases, the ground material is moved to the left, as in Catalan.

- Not-u<sub>1</sub> [<sub>F</sub> MASA-nin üzer-i-ne t<sub>1</sub> bırak-ti]  
note-acc table-gen top-poss-dat leave-pst-3S  
'The note (s/he) left on the table.'

- The order of major constituents is free, just as in Catalan.
  - What did a servant put on the table?  
Bir hizmetçi yemek-ten önce masa-nin üzer-i-ne [<sub>F</sub> NOT-u] bırak-ti.
  - Yemek-ten önce bir hizmetçi masa-nin üzer-i-ne [<sub>F</sub> NOT-u] bırak-ti.  
Masa-nin bir hizmetçi yemek-ten önce üzer-i-ne [<sub>F</sub> NOT-u] bırak-ti.
- Tails can appear prefocally (as above), in their canonical position (as in English), or postfocally (as in Catalan)
  - What did a servant put on the table?
  - [<sub>F</sub> NOT-u] bırak-ti bir hizmetçi yemek-ten önce masa-nin üzer-i-ne.  
[<sub>F</sub> NOT-u] bırak-ti yemek-ten önce masa-nin üzer-i-ne bir hizmetçi.  
[<sub>F</sub> NOT-u] bırak-ti masa-nin üzer-i-ne bir hizmetçi yemek-ten önce.

- Links must be sentence-initial and have a rising tone pitch accent:
  - Caydanlık masa-nin üst-ü-nde...  
teapot table-gen above-poss-dat  
‘The teapot is on the table ...’
  - a. ...fakat *sekerlig-i* dolab-a koy-du-m  
but sugar.bowl-adcc cupboard-dat put-pst-3sg  
‘...but the sugar bowl I put in the cupboard.’  
b. \*...fakat dolab-a *sekerlig-i* koy-du-m  
c. \*...fakat dolab-a koy-du-m *sekerlig-i*
- As in Germanic, an A accent on subject of some intransitive sentences can be narrow focus orthetic, but the latter are SV instead of VS as in Catalan.
  - [<sub>F</sub> BASKAN] öldü. ]  
president die-pst-3s  
‘The PRESIDENT died.’

## Morphological strategy

- Japanese
  - WA marks links, may be contrastive or not.
    - John-wa sono hon-o yonda.  
John the book read  
'John read the book.'
- Navajo (SVO)
  - Focus marker
    - Jáan chidíísh yiyííłcho.  
John car.Q 3s-past-wreck  
'Did John wreck the car?'
    - Nda, (Jáan) [<sub>F</sub> chidítsoh ga'] (yiyííłcho).  
No John truck F 3s-past-wreck'  
'No John wrecked the TRUCK'

*Topic and Focus*

55

- Many languages have more than one focus marker (including Navajo)
- Vute
  - tí verb or verum focus
  - á non-verbal narrow focus
    - Mvèin yì ßwáb tí ngé cene  
chief past perf-buy-iobj perf-F him chicken  
'The chief bought him a chicken.'
    - Mvèin yì ßwáb-na-á ngé cene ?á.  
chief past perf-buy-iobj-perf him chicken F  
'The chief bought him a chicken.'
  - á is used for some verbal categories, when there is a tail.

*Topic and Focus*

56

## Hedberg & Sosa 2002

- Topic
  - An entity, E, is the topic of a sentence, S, iff, in using S, the speaker intends to increase the addressee's knowledge about, request information about or otherwise get the addressee to act with respect to E.
- Comment
  - A predication, P, is the comment of a sentence, S, iff, in using S the speaker intends P to be assessed relative to the topic of S.
- Focus
  - That part of the linguistic expression that realizes the comment.

*Topic and Focus*

57

- (1) Ms. Clift:  
Look, John McCain would be the first one to say *this* doesn't improve the system to **perfection**; *it* makes it marginally **better**. And there's still a possibility that Tom DeLay, who is an enemy of the bill, will forge an unholy alliance with Democrats in the House. Because Democrats have figured out, *they* do worse under this bill than **the Republicans** do. But the big thing that comes out of this, to me, is that it's John McCain who gets the big legislative triumph so far in this first 100-day period, while President Bush is looking rather passive on a number of issues across **the board**, especially foreign policy.  
(3/31/01)

- *Ratified Topic*
- *Contrastive Topic*
- *Unratified Topic*
- *Contrastive Focus*
- **Plain Focus**

*Topic and Focus*

58

Table 1. Distribution of Information Structure Types across the Six Transcripts

Transcript	Ratified Topic	Contrastive Topic	Un-ratified Topic	Contrastive Focus	Plain Focus	Total
1	109 33.4%	16 4.9%	45 13.8%	14 4.3%	142 43.6%	326
2	61 22.2%	7 2.5%	45 16.4%	24 8.7%	138 50.2%	275
3	36 21.4%	7 4.2%	39 23.2%	15 8.9%	71 41.2%	168
4	79 28.5%	17 6.1%	36 13.0%	31 11.2%	114 41.2%	277
5	84 25.7%	15 4.6%	57 17.4%	20 6.1%	151 46.2%	327
6	89 30.1%	10 3.4%	44 14.9%	23 7.8%	130 43.9%	296
Total	458 27.4%	72 4.3%	266 15.9%	127 7.6%	746 44.7%	1669

Topic and Focus

59

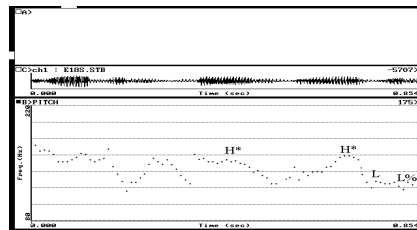
- Pitch accents
  - H\*, L\*, L+H\*, H\*+!H, H\*+L, L\*+H, H+L\*
- Boundary tones
  - H%, L%
- Intermediate phrase tones
  - L, H
- Downstep (!H), upstep (¡H), increased range (↑H)
- ToBI (Tone and Break Indices) standard except for H\*+L, ¡H and ↑H.

Topic and Focus

60

Even **Dan Goldin** (unratified topic, 5.18)

H\* H<sub>2</sub>L%



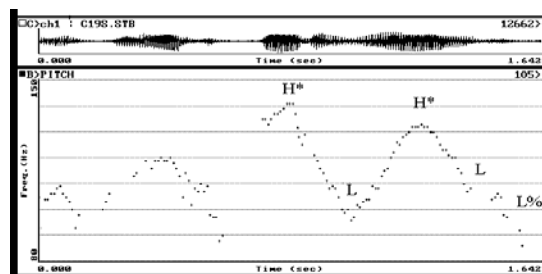
*Topic and Focus*

61

**Thirty years** [of serious anthropological consideration] (plain

H\*+L H\* LL%

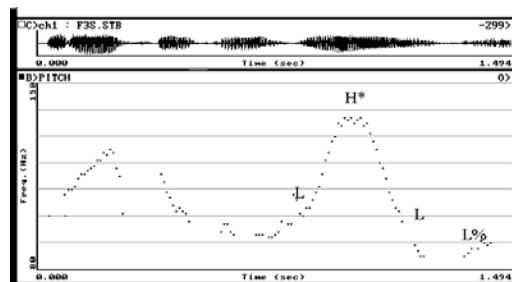
focus, 3.19)



*Topic and Focus*

62

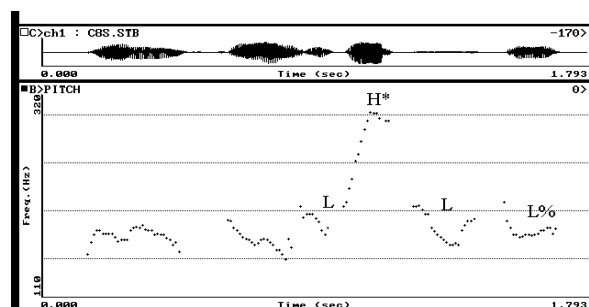
Our **voyeurism** (plain focus, 6.3)  
 L+H\* LL%



*Topic and Focus*

63

In **Britain**, in fact... (contrastive topic, 3.8)  
 L\*H\* LL%



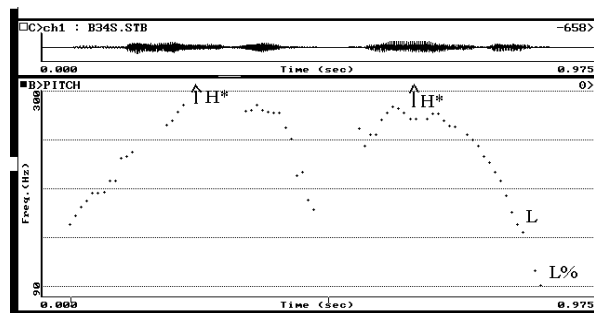
*Topic and Focus*

64



**Made in China** (plain focus, 2.34)

↑H\*    ↑H\* LL%

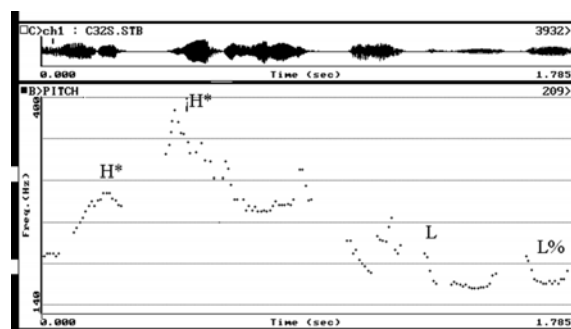


*Topic and Focus*

65

**Not a PBS documentary** (contrastive focus)

H\*    ̩H\* LL%



*Topic and Focus*

66

## Topic accent vs. Focus accent hypotheses

	Topic accent	Focus accent
Pierrehumbert 1980	H* LH%	H* LL%
Steedman 1991	L+H* LH%	H* LL%
Vallduvi & Engdahl 1996, Gundel 1999, Steedman 2000a,b, Gundel & Fretheim (in press)	L+H*	H*
Lambrecht & Michaelis 1998	H%	L%

*Topic and Focus*

67

## L+H\* vs. Information Structure Type

	L+H*	% out of 42
Ratified topic	1	2%
Contrastive topic	10	24%
Unratified Topic	13	31%
Contrastive Topic	11	26%
Plain Focus	6	14%

*Topic and Focus*

68

## L+H\* can mark contrast

- (3) Mr. Kudlow: And we need to drill oil and gas in the Rockies. And **Jeb Bush** is wrong and **George Bush** is right; we need to drill in the Gulf of Mexico. (contrastive topic, 6.27, 28)  

$$\text{L+H* !H*} \qquad \text{L+H* !H*}$$
- (4) Mr. McLaughlin: This exit question may be superfluous, but I'm going to hit you with it anyway. Tito cracked the space barrier between civilians and professionals. For the most part, was his way the right way, or for the most part was his way the **wrong** way, as Goldin would lead you to believe, Michael Barone? (contrastive focus, 5.32)  

$$\text{L+H* LH\%}$$

*Topic and Focus*

69

## L+H\* can mark plain focus

- (7) Mr. McLaughlin: Well, what is – do you think that NASA has **egg** on its **face**?  

$$\text{L+H*} \qquad \text{!H* HL\%}$$
 (plain focus, 5.29)
- (8) Mr. Kudlow: I have a different view, with all respect. I think it turns this guy into a **celebrity**, and I think that actually encourages more of these heinous actions. (plain focus, 6.5)  

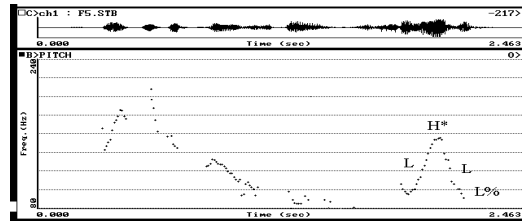
$$\text{L+H* LL\%}$$

*Topic and Focus*

70

I think it turns this guy into a celebrity. (plain focus, 6.5)

L+H\*LL%



Topic and Focus

71

## L+H\* can mark noncontrastive topics

- (5) Ms. Clift: A good working-class guy may well be what Jesus was. And in fact, this is discussed in a documentary that was produced in England. And there they can talk about these kinds of things. I think in this country we're still a little nervous about suggesting that Jesus may not fit the Westernized, romanticized ideal. In Britain, in fact, the **archbishop of Canterbury there** has called Britain a nation of atheists. In a country of 60 million people, only a million people go to church. (unratified topic, 3.9)

L+H\*      L+H\*      L\* HH%
- (6) Mr. Barone: I used to be an editorial writer, and I'll tell you something, there's a temptation to harumph when you're an editorial writer – (laughter) – and I'm afraid that that was the New York Times harumphing.

Mr. McLaughlin: Well, **they** could have pointed out that \$20 million given to Russia probably wound up with Russian scientists, and that might keep them from making Iranian nuclear bombs. (unratified topic, 5.26)

L+H\*

Topic and Focus

72

## Pitch accents and information structure type

	H*	H*+L	H*+!H	L+H*	L*	L*+H	H+L*	o
Ratified Topic	10	1	0	1	4	0	0	26
Contrastive Topic	23	1	0	10	1	2	0	5
Unratified Topic	19	4	0	13	0	3	1	2
Contrastive Focus	22	1	0	11	7	0	0	1
Plain Focus	26	1	1	6	8	0	0	0
<b>TOTAL</b>	<b>100</b>	<b>8</b>	<b>1</b>	<b>41</b>	<b>20</b>	<b>5</b>	<b>1</b>	<b>34</b>

Topic and Focus

73

## Contrastive Foci not marked L+H\*

- (9) Mr. Buchanan: What the United States should do, John, is pull the ambassador home right now. The president of the United States should say, 'I understand why Americans are boycotting Chinese goods, and I believe that if this thing is not resolved satisfactorily, it will be time to suspend PNTR for exactly one year.' It is the **Communist Chinese** who are behaving as a Cold War power right now. (contrastive focus, 2.23)  
 $\uparrow H^* \quad !H^* HL\%$
- (10) Mr. McLaughlin: Yeah, what about substance?  
Ms. Clift: Substance, **C-minus**.  
 $H^* !H^* LL\%$  (contrastive focus, 4.25)

Topic and Focus

74

- (11) Mr. Page: Thank you, I want to concur with my colleagues in saying that I think – well, actually, Tito will be remembered as a pioneer; the first space tourist. And this is the wave of the future, and NASA, like most bureaucracies, has a difficult time ‘turning around in the water.’ It’s a **big ship**, not a speedboat.  
**H\* !H\*** (contrastive focus 5.17)
- (12) Mr. McLaughlin: I think we’ve reached the end of our seminar here today. Exit question: Will the Richard Neave Jesus endure Michael Barone?  
Mr. Barone: No. This is just a guess.  
Mr. McLaughlin: Eleanor?  
Ms. Clift: I don’t think so. This is a BBC documentary, not a **PBS** documentary. Republicans on Capitol Hill would go nuts if  
**!H\* LL%**  
this ever showed on PBS. (contrastive focus 3.32.)

Topic and Focus

75

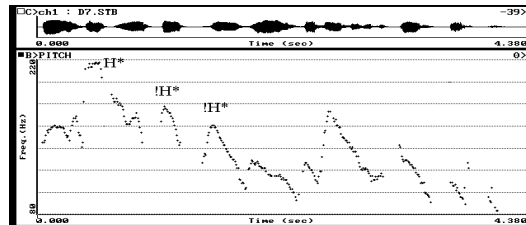
## Topics marked H\*

- (13) Ms. Clift: And the stakes in this confrontation are huge for China. They have 54,000 students in this country. They want to get the Olympics. They want to keep trade going. **And the stakes**  
**H% H\***  
for **this country** are also huge. We don’t want to create an enemy  
**!H\* L\***  
where where there is none. (contrastive topic 2.8)
- (16) Mr. McLaughlin: Tony, what was his best move?  
...  
Mr. McLaughlin: Do you see his best move as the tax cut’s tenacity?  
Mr. O’Donnell: Yes, I do. I agree with Eleanor it’s not a good tax cut, it’s not a good policy; but it is an amazing accomplishment to come from where it’s come from....  
Mr. McLaughlin: **Actually**, his **best move** was the handling of the  
**H\* !H\* !H\***  
China spy plane. He kept his cool; he kept the country cool, he was measured and moderate. And it worked. (unratified topic, 4.7)

Topic and Focus

76

Actually his **best move** was the handling of the China spy  
H\*            !H\* !H\*  
plane. (4.7)



77

## Possibly miscoded all-focus construction

- (17) Mr. Buchanan: I'll just remind you of one thing.  
**Eisenhower** refused to apologize for the U-2, and even  
**H\* !H\* HL%**  
blew up a summit, and we were a lot more at fault then.  
(contrastive topic, 2.25)

*Topic and Focus*

78

## Increased range, upstep and downstep

	Range ↑H	Upstep iH	Downstep !H
Ratified Topic	0	0	3
Contrastive Topic	4	0	15
Unratified Topic	5	0	16
Contrastive Focus	5	4	12
Plain Focus	3	5	12
<b>TOTAL</b>	<b>17</b>	<b>9</b>	<b>58</b>

*Topic and Focus*

79

## Boundary Tones

	Fall	Level	Rise	Rise from Bottom	
	LL%	HL%	HH%	LH%	TOTAL
Ratified Topic	2	0	0	0	<b>2</b>
Contrastive Topic	7	4	1	1	<b>13</b>
Unratified Topic	12	2	6	0	<b>20</b>
Contrastive Focus	29	1	4	5	<b>39</b>
Plain Focus	26	4	4	5	<b>39</b>
<b>TOTAL</b>	<b>76</b>	<b>11</b>	<b>15</b>	<b>11</b>	<b>113</b>

*Topic and Focus*

80



## Entire Tunes

	H*LH%	L+H*LH%
Contrastive Topic		1
Contrastive Focus		5
Plain Focus	4	1

*Topic and Focus*

81

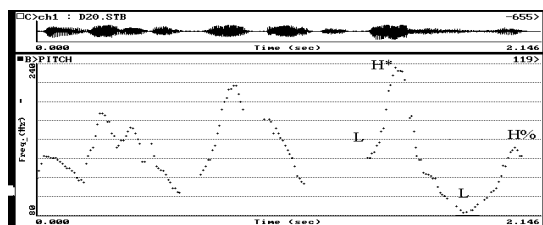
- (19) Mr. McLaughlin: Lawrence and ah two other members are correct. His style rating is probably a B, but your analysis of how much he should be doing in the first 100 days is **absurd**. He's taking **H\* LH%** one piece at a time and he's being very successful. He gets an A on substance. (plain focus, 4.35)
- (20) Ms. Clift: Well, I think definitions of beauty or handsomeness change over the years, and I, frankly, think this guy is pretty attractive. I don't find him **unattractive**. **L+H\* LH%**  
(contrastive focus, 3. 5)
- (21) Mr. McLaughlin: Well, he's been a successful politician, and he's been a successful statesman, has he not?  
Mr. O'Donnell: He's done – the only thing – he was in a box with China. He did the only thing you could do. He hasn't done anything **extraordinary**. (contrastive focus, 4.20)  
**L+H\* LH%**

*Topic and Focus*

82

He hasn't done anything extraordinary. (contrastive focus, 4.20)

L+H\**L*H%



*Topic and Focus*

83