

Given Foci

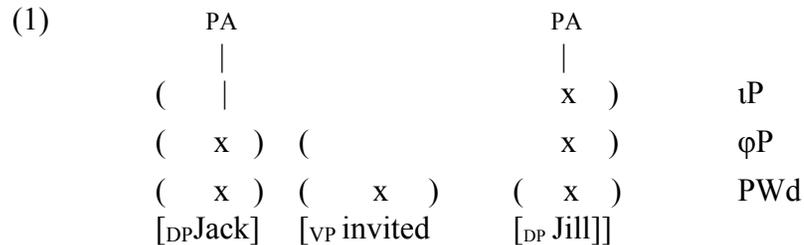
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Penn Linguistics Speaker Series

November 11, 2016

Ingredients for Intonation

Syntax



□ Büring 2016, Truckenbrodt(2007). This structure is assigned via constraints that refer to syntax. Note how it pans out on the φP level. The final constraint applying here is:

- (2) **tP-Head-Right**
Align the head of tP with the head of its right-most daughter φP.

□ if we add an adjunct – stress moves over. caps mark most prominent:

- (3) Jack invited Jill to LUNCH.

- (4) a. He named his CAT.
b. He named his cat INTEGRITY.
c. What did he name his CAT?

Novelty/Givenness

- (5) A: Jack is getting better. He now has an apartment and a dog.
B: Really, what did he NAME the dog?

- (6) Do you go to Venice much?
I eat LUNCH in Venice.

□ Novelty/Givenness Constraint is ranked above tP-Head-Right

Association with a focus-sensitive operator

- (7) a. He only eats LUNCH at home. ('dinner out')
b. He only eats lunch at HOME. ('go home for lunch')

Today's puzzles

- (8) Q: What foods will Renee only eat in Paris?
A: She'll only eat CRÊPES in Paris.

- (8)A sounds right – until you think about it. Theorists disagree.
- Putting nuclear accent on *Paris* only makes things worse.
- Rooth(2010): it's perfect rising intonation on *crêpes*.
- Intuition: the prominence on *crêpes* interferes with association with *Paris*.

- (9) Q: Phonology? Why did you take phonology?
A: because they only OFFERED phonology.

- Why doesn't the prominence on *offered* interfere with association with *only*?
- In (9), the more emphatically you pronounce *offer*, the better it gets. In (8), the more emphatically you pronounce *crêpes*, the worse it gets.

(10) A: Jack had a car and a yacht.
 B: What did he do when he lost his money?
 A: He sold the YACHT.

- *yacht* is given, why isn't it deaccented?
- There's a sense in which *yacht* is 'focused' – it contrasts with *car*.
- But as (8)-(9) show, focus doesn't override givenness.

N marking

□ in the *crêpes* example, *Paris* is a **second occurrence focus**. According to most, this has to do with givenness, following Beaver and Velleman's discussion, I'll define givenness as in Schwarzschild (1999)

(11) Generalized implication

Jack bought a big car IMPLIES *Jack bought a car*.
dog IMPLIES *animal*
eat crêpes in Paris IMPLIES *eat crêpes*
read a boring novel IMPLIES *read a novel*

If A and B corefer then A IMPLIES B.

if [*my mother*]_i and *she*_i corefer, then [*my mother*]_i IMPLIES *she*_i.

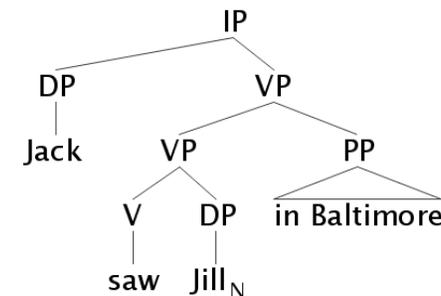
[Wh_i [...t_i]] IMPLIES [someone/thing_i [...t_i]].

Who saw Bill? IMPLIES *Someone saw Bill*

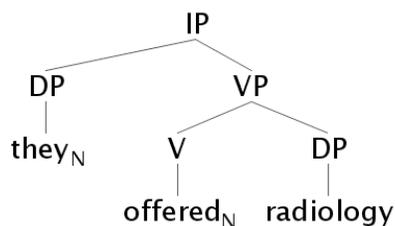
Who saw Bill? IMPLIES *saw someone*

What did Jennifer play on Sunday? IMPLIES *play something on Sunday*

- (12) If an expression α is not N-marked then:
- α is IMPLIED by a piece prior discourse.
- or
- the result of existentially quantifying any N-marked parts of α is IMPLIED by a piece of prior discourse.
- (13) N-mark as little as possible.
- (14) {What's that smell?}
 Jack_N made_N soup_N
- (15) Who did Jack see in Baltimore? (= $\exists X$ Jack saw X in B.more)
 Jack saw JILL in Baltimore.



- (16) Novelty/Givenness Constraint
 If α and β are sisters, and α is N-marked or contains an N-marked expression and β is not N-marked and does not contain N-marking, then α is more prominent than β .
- probably need more N-marking in (14), but it won't affect prosody.
- *object deaccented*
- (17) {Radiology? Why did you take radiology?}
 because // they_N [VP OFFERED_N radiology].



(18) What did Mary do when Doug was in the room?
She [GREETED_N him]_N.

(19) Who did Mary attack when Doug was in the room?
She attacked DOUG_N.

(19) is an example where an expression is “N-marked for the sake of the larger expression” (Beaver and Velleman 2011:1677)

(20) {Does she eat meat?}
She ONLY_N eats meat.

- In ‘all-new’ sentences Katz and Selkirk report a “super-high H tone” on focus particles.
- Lee(2012) reports the same for the Korean adverb *ozik* ‘only’.

F marking – association with only

(21) a. He only eats LUNCH at home.
b. He only eats lunch at HOME.

□ In (21), there’s a correlation between interpretation and intonation. Perhaps that correlation is indirect. The intonation reflects what’s given in the discourse. What’s given in the discourse affects our interpretation of quantifiers including *only*.

□ Problem: phonetics makes too many distinctions.

(22) Phonetics of associated foci

If an expression is N-marked,
adding association with *only* increases duration and pitch prominence.

If an expression is post-nuclear and not N-marked:
adding association with *only* increases duration and intensity

If an expression is pre-nuclear and not N-marked:
adding association with *only* increases duration and pitch prominence.

Expressions associated with *only* have greater prominence when N-marked than when not N-marked.

In general, association with *only* boosts prominence – the net result depends on whether the boosted expression is N-marked or not.

(23) a. He only₁ eats [LUNCH]_{F1} at home.
b. He only₁ eats lunch at [HOME]_{F1}.

Exhaustivity

(24) Q: Who did Jack invite?
A: Jack invited Jill_N.

□ N-marking is justified and explains why *Jill* is locus of prominence.

(25) [Who did Jack invite?] IMPLIES [Jack invited someone]
IMPLIES $\exists X$ [Jack invited X].

□ There is an intuition that (24)A can be used as an exhaustive answer. Following Katzir(2013:341) and references therein, take that to be the result of attaching a silent EXH operator:

(26) Q: Who did Jack invite?
A: EXH₁ Jack invited [Jill_N]_{F1}.

(27) For any sentence α , “EXH_i α ” is true just in case α is true and every F_i-alternative to α is false, unless it is entailed by α .

(28) With (27), (26) says “Jack invited Jill and nobody else.”

□ Now we have an apparent problem with givenness. (25) was ok, but can we say:

(29) [Jack invited someone] IMPLIES $\exists X(\text{EXH}_1 \text{ Jack invited } [X]_{F1})$

The answer is yes!

(30) Suppose Jack invited just Jill.
There is someone such that Jack invited that person and nobody else.

Suppose Jack invited just Jill and Lane

There is a plurality, Jill \oplus Lane, Jack invited Jill \oplus Lane and nobody else.

....

Suppose Jack invited everyone.

There is a plurality A consisting of the entire domain. Jack invited A . Jack’s inviting any singularity is entailed so it’s not negated.

Puzzles again – this time with N-marking, F-marking & EXH

(31) Q: What foods will Renee only eat in Paris?
A: EXH₁ She’ll only₂ eat [crêpes_N]_{F1} [in Paris]_{F2}.

- lack of N-marking correlates with no accent on *Paris*.
- presence of N-marking (and F-marking) leads to nuclear accent on *crêpes*. Justified because *crêpes* is novel.
- EXH accounts for the intuition that crêpes are the only thing Renee eats in Paris and nowhere else.
- N-marking just *crêpes* is sufficient in this context, so no more N-marking is allowed.

(32) Phonology? Why did you take phonology?
They only_{2,N} OFFERED_N [phonology]_{F2}.

- lack of N marking correlates with no accent on *phonology*. Since *phonology* is given, it doesn’t by itself require N-marking.
- N-marking requires *offer* to be more prominent than *phonology*, and ultimately receive the nuclear accent. The N-marking is required because *offer* is new.
- there is no EXH, because there is no exhaustivity inference.
- *only* is N-marked because it’s new. cf (20).
- N-marking is sufficient, so no more is allowed.

□ comparing the examples what we see is that in (31), there are two foci, with two exclusive operators and a crossing-dependency. None of that obtains in (32). The problem in (31) is a kind of focus interference – not intonational interference!

(33) There difference between (31) and (32) has to do with focus-interference. (31) has interleaving focus association. (32) does not.
There is no ‘intonational interference’.

(34) Rising intonation effect

“Rooth (2010) points out that (31)A becomes felicitous if uttered with ‘a rising intonation indicating a partial answer on the first focus *crêpes*’ We agree with these judgments, and have verified them with several consultants.”

Beaver&Velleman(2010)

□ On that rendition we have no EXH operator.

(35) A: Jack owned a car and a yacht.

B: What did he do when he lost his money?

A: EXH₁ He sold_N [the-YACHT_N]_{F1}

- EXH₁ ...F1 is there for pragmatic reasons. If he sold both the car and the yacht, it would odd to just report on one. But if you’re saying it’s just the yacht – that’s fine. Speakers/linguists intuit the exhaustive inference. (moreover, if yacht selling but not car selling were at play – we’d get nuclear accent on *sold*).
- N-marking on *sold* because it hasn’t been mentioned.
- N-marking just on *sold* is not enough!

(36) [Jack owned a car and a yacht] DOESN’T IMPLY
∃X(EXH₁ He Xed [the-yacht]_{F1})

□ But if [the yacht] is N-marked, then it can be ‘replaced’ with ‘the car and the yacht’.

(37) [Jack owned a car and a yacht] IMPLIES
∃X∃Y (EXH₁ He Xed [Y]_{F1})

(38) (35) is an example where an expression is “N-marked for the sake of the larger expression” or better “for the sake of EXH”.

□ Conclusion: we were right that *the yacht* was focused. We were wrong in thinking it was a given focus. EXH forces N-marking. That’s why it has F,N phonology.

Conclusions

crêpes conclusions:

- EXH participates in association with focus.
- Crossing association lines for EXH-foci and *only*-foci leads to infelicity

offer phonology conclusions:

- Given-foci have intermediate-prominence. This is the result of being F-marked but not N-marked. It isn’t due to competition among foci (or to repetition foci). There isn’t ‘intonational interference’
- The prosody of focus can not be captured by a simple rule that says the most prominent element in the prejacent of *only* is the focus:

(39) In a configuration of the form: *only*_i [Prejacent...[X]_{Fi}...]
The strongest stress in the phonological realization of Prejacent, falls in X.

We might consider a constraint like (39) that is lower ranked than novelty/givenness constraints (eg (12)). But that won’t get enough phonetic distinctions.

yacht conclusions

N marking is sometimes ‘triggered’ by a higher EXH by the logic of N-marking.

General conclusions

- Focus and novelty/givenness are separate ingredients affecting intonation
- Novelty/givenness constraints compete with other constraints on prosodic structure.
- Focus constraints do not outrank novelty/givenness constraints.
- Novelty/givenness constraints do not simply outrank focus constraints (phonetics)
- EXH associates with focus and can ‘force’ the presence of N-marking giving the illusion that contrastive-exhaustive focus is immune to givenness effects.

Hypotheses

- Foci don’t compete for prominence within an tP.
- Focus is not a determinant of prosodic structure.

(40) “Contrary to the widely accepted assumption that focus directly or indirectly modifies prosodic phrasing, various studies have shown that prosodic boundaries remain unchanged when a focus is added to a sentence.” Ishihara(2011)

Refinements and more evidence

□ Pronouns can’t be given-foci (v.Fintel, Hoeksema&Zwarts, Rooth)

- (41) Why did you take phonology?
because they OFFERED it.
- (42) Why did you take phonology?
#because they only OFFERED it.

□ striving for minimal *crêpes/offer* pairs

(43) A: I steam any kind of vegetable – even eggplant or potatoes.
Then there are special techniques that I reserve for particular vegetables.
B: Really, what method do you only use on celery?
A: #I only BRAISE celery.
EXH₁ I only₂ [braise_N]_{F1} [celery]_{F2}

(44) A: I gave Stella a book.
B: Just a book? why?
A: because I only_{1,N} gave MANNY_N a book_{F1}.

(45) Why did you use Form 1A?
because they only SENT me Form 1A.

□ focus interference in denials

(46) Darlene only gave peanuts to the ELEPHANTS.
No, she only gave water to the elephants.

□ Is it important for interference that both are exclusives?

(47) We only introduced Marilyn to [JOHN]_F Kennedy. (Rooth 1996)
(i.e. not to Bobby and Edward Kennedy)
We also₁ only₂ introduced [Sue]_N_{F1} to [JOHN]_{F2} Kennedy.

(48) Alan Bob and Carl are sitting together in Dante’s, a small Italian restaurant. Alan orders a bottle of red wine for them all to share. As they’re sipping their wine, Alan says “Bob only drinks wine in restaurants”. Bob corrects him with “I only said I only drink WHITE wine in restaurants”.

(49) I only₁ said I only₂ drink [WHITE]_N_{F1} wine in [restaurants]_{F2}.

□ Is it important for interference that there be crossing?

(50) A: At that point he had a choice. He could either fire the contractor or only paint the BATHROOM red.

Q: What did he choose?

A: He chose to only paint the bathroom red.

□ another case of EXH triggering N

(51) Q: Did Karen get the money or did Marc get the money?

A: EXH₁ [KAREN_N]_{F1} got the money.

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