

Focus

Lecture 7

Varieties of focus sensitivity

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1 Free foci

So far we have been discussing **association with focus**, where focus systematically interacts with operators like *only*.

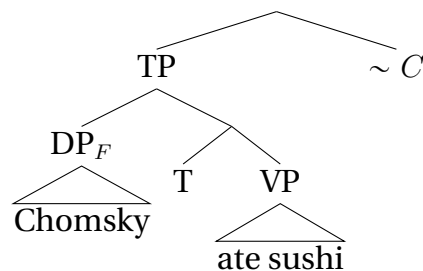
[Rooth 1992](#) uses his theory of association with focus for cases without such operators—or **free foci**—as well (see also [Krifka 1991, 2001, 2004, 2006](#)).

(1) *Question-answer pairs*

A: Who ate sushi?

B: [Chomsky]_F ate sushi.

(2)



(3) (2) is a felicitous answer to question Q (wrt to g) only if $g(C) = Q$.

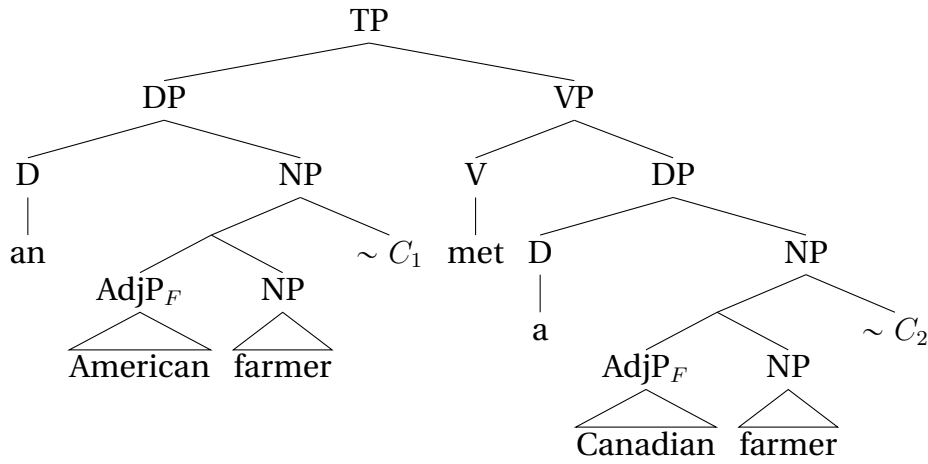
(4) $\llbracket \text{Who ate sushi?} \rrbracket_o^g = \{ \lambda w_s. x \text{ ate sushi} \mid x \in D_e \}$

Similarly for contrastive foci:

(5) *Contrastive foci*

An [American]_F farmer met a [Canadian]_F farmer.

(6)



(7) (6) is felicitous (with respect to g) only if $g(C_1) \in \llbracket \text{American}_F \text{ farmer} \rrbracket_f^g$ and $g(C_2) \in \llbracket \text{Canadian}_F \text{ farmer} \rrbracket_f^g$

2 Association with focus or with a question?

Rooth 1985, 1992 generalizes association with focus to all other cases of focus (see also Krifka 1991, 2001, 2006).

But the other reduction is also a theoretical possibility:

- Free foci put felicity conditions on discourse: There must be an appropriate question, or Question under Discussion (QuD). Suppose that there's a *pragmatic* theory that explains this (see Roberts 2012, for example).
- Association with focus could be indirect:
 - A focus requires a salient QuD Q that it is congruent to.
 - *only* refers to Q as well, rather than the focus itself.

(8) $\llbracket \text{only}_Q \text{ VP} \rrbracket^g = \lambda w_s. \lambda x_e: \llbracket \text{VP} \rrbracket^g(w)(x) = 1. \forall p \in g(Q)[p(w) = 1 \rightarrow p = \lambda w'_s. \llbracket \text{VP} \rrbracket^g(w')(x)]$

Roberts 2012 and Schwarzschild 1999 pursue such a theory of 'indirect/pragmatic' association with focus.

Beaver & Clark 2008 put forward a more intricate position, which they call the *QFC theory* of focus.

- Quasi association, e.g., negation.
- Free association, e.g., *always*
- Conventional association, e.g., *only*

For Beaver & Clark 2008, conventional association is assumed to be QuD-based.

3 Negation: quasi association

Jackendoff 1972: §6.6 discusses negation as a case of association with focus.

(9) a. Kim doesn't study [linguistics]_F at Northwestern.

- b. Kim doesn't study linguistics at [Northwestern]_F.

(Beaver & Clark 2008: p. 45)

Beaver & Clark 2008 argue that the interpretive difference between these two sentences follow from the pragmatics of intonation alone. So negative sentences are no more focus sensitive than positive sentences.

- (10) a. Kim studies [linguistics]_F at Northwestern.
b. Kim studies linguistics at [Northwestern]_F.

- (9a) normally is taken as answering the following questions, usually with different intonation patterns.

- (11) a. What doesn't Kim study at Northwestern?
b. What does Kim study at Northwestern?

	Kim	doesn't	study	[linguistics] _F	at Northwestern
a)				H*	L-L%
b)				L+H*	L-H%
c)		L*		L*	L-H%

- The (a) intonation is typically used when (9a) is intended to be a complete answer to the question in (11a) (possibly with an exhaustivity inference that she does study all other relevant things). It is not compatible with the other question in (11b).
 - The (b) intonation is compatible with (11b), but the utterance is taken to be a partial answer.
 - The (c) intonation is typically used to deny a prior positive statement to the effect that Kim studies linguistics at Northwestern.
- If the negative sentence (9a) is presented on its own, one would have to guess what question it is answering, as well as plausible intonation patterns. (11a) is sort of a weird question, so the best guess is that it answers (11b). Then the intonation is probably (b), or perhaps (c). Either way, we obtain the inference that Kim studies something else at Northwestern.
 - By the same token, (9b) is often read with an inference that Kim studies linguistics somewhere/at some university.
 - But these inferences are defeasible. The existential inference depends on the QuD. If a question like (11a) is taken to be the QuD, the inference is relatively easily defeasible.

4 *Always*: free association

Always seems to be focus sensitive.

- (12) a. Kim always serves Sandy [expensive wine]_F.
b. Kim always serves [Sandy]_F expensive wine.

Compare:

- (13) a. Kim only serves Sandy [expensive wine]_F.
 b. Kim only serves [Sandy]_F expensive wine.

A rough analysis of *always* with an implicit domain *D*.

- (14) “always ϕ ” is true iff for each situation $s \in D$, ϕ is true in (some extension of) s .

- For (12a), the domain *D* is the set of situations where Kim serves Sandy something.
- For (12b), the domain *D* is the set of situations where Kim serves someone expensive wine.

Despite the similarity, Beaver & Clark 2008 argue that the way *always* interacts with focus is not the same as *only*.

4.1 *Always* vs. *only*: phonetically reduced material

Always can associate with the reduced pronoun *'im*, but *only* cannot.

- (15) *Context*: You had many discussions with Sandy, but what I want to know is the extent to which you talked about Fred. Of all the times you talked with Sandy, how often was Fred the person you talked about?
- a. I always_F discussed'im with Sandy.
 b. #I only_F discussed'im with Sandy.
 c. I only discussed Fred_F with Sandy.
 d. I only discussed HIM_F with Sandy.

(adapted from Beaver & Clark 2008: p. 150)

Another example:

- (16) a. People who grow rice only [eat]_F rice.
 b. #People who grow rice only [eat]_F it.
 c. People who grow rice always [eat]_F it.

(adapted from Beaver & Clark 2008: p. 153)

4.2 *Always* vs. *only*: displaced material

Only cannot associate with displaced material (Jackendoff 1972, Erlewine 2018), but *always* can.

- (17) a. We should thank the man whom Mary always took ____ to the movies.
 b. We should thank the man whom Mary only took ____ to the movies.

(adapted from Beaver & Clark 2008: p. 163)

- (18) a. What do you think Kim always gives his mother ____?
 b. What do you think Kim only gives his mother ____?

(adapted from Beaver & Clark 2008: p. 165)

- (19) a. Guinness is what I think Kim always wants to drink ____.
 b. Guinness is what I think Kim only wants to drink ____.

(adapted from Beaver & Clark 2008: p. 165)

4.3 *Always* vs. *only*: elided material

Always can associate with ellipsis, but *only* cannot.

- (20) a. Kim always salutes_F because Sandy always does.
b. *Kim only salutes_F because Sandy only does.

Beaver & Clark 2008: §7.8 mention some counterexamples:

- (21) A: Which store do your friends prefer to shop at?
B: John sometimes goes to the fancy_F store, and Sue only_F does.
(Beaver & Clark 2008: p. 180)
- (22) A: Mary never feeds nutrapup_F to Fido.
B: Whaddya mean? She only_F does.
(Beaver & Clark 2008: p. 180)

4.4 *Always* vs. *only*: inferred domains

- (23) a. Mary always managed to complete her [exams]_F.
(i) In every situation where Mary took an exam, she completed it.
(ii) In every situation where Mary managed to complete something, she completed an exam.
b. Mary only managed to complete her [exams]_F.
(i) *In every situation where Mary took an exam, completing it is the only thing she did.
(ii) In every situation where Mary managed to complete something, she completed an exam.
(adapted from Beaver & Clark 2008: p. 204)
- (24) a. Mary always remembers to go to [church]_F.
(i) In every situation where it's time (for her) to go to church, she remembers to go to church.
(ii) In every situation where Mary remembers to go somewhere, she remembers to go to church.
b. Mary only remembers to go to [church]_F.
(i) *In every situation where it's time (for her) go to church, she remembers to go to church but nothing else.
(ii) In every situation where she remembers to go somewhere, she remembers to go to church.
(adapted from Beaver & Clark 2008: p. 206)

4.5 Conventional association

Based on the above differences, Beaver & Clark 2008 argue that *only* requires a phonetically focussed material to be in its syntactic domain = the constituent it c-commands in the surface structure (see Beaver & Clark 2008: Ch. 6 and references therein for evidence that second-occurrence foci have phonetic prominence).

The implicit domain of *always* is basically inferred, based on the overall truth-conditional meaning, focus structure, and QuD.

5 The QFC taxonomy

Table 3.1 The QFC taxonomy of focus sensitive expressions

<i>Quasi-association</i>	<i>Free association</i>	<i>Conventional association</i>
negation	q-adverbs	exclusives
disjunction	q-determiners	scalar additives
verbs of appearance	generics	non-scalar additives
modals	counterfactuals	particularizers
	reason clauses	minimizing downtoners
	emotive factives	maximizing downtoners
	verbs of desire	intensifiers
	modals (<i>via modal base</i>)	

(Beaver & Clark 2008: p. 78)

- Exclusives: *only, just, merely*
- Scalar additives: *even*
- Non-scalar additives: *too, also*
- Particularizers: *in particular, for example*
- Minimizing downtoners: *kind of, barely, hardly, at the very minimum, to say the least, at the very least, scarcely*
- Maximizing downtoners: *at the very most, at most, at a maximum, at best, the most you can say is*
- Intensives: *really, totally*

6 Backwards association with *even*

Pre-VP *only* must associate with the VP or a sub-part of the VP.

- (25)
- *[Rich linguists]_F only live here.
 - *[Rich]_F linguists only live here.
 - Rich linguists only live [here]_F.
 - Rich linguists only [live]_F here.

Pre-VP *even* can associate with a preceding focus, unlike *only* (Jackendoff 1972, Erlewine 2018).

- (26)
- [Rich linguists]_F even live here.
 - [Rich]_F linguists even live here.
 - Rich linguists only live [here]_F.
 - Rich linguists only [live]_F here.

But backwards association is not completely unrestricted:

- (27) [John]_F said that Bill even read *Syntactic Structures*. (Erlewine 2018: p. 173, attributed to Nakanishi 2012)
- (28) a. The [Canadians]_F, the report even convinced the judges that we spied on ____.
 b. The [Canadians]_F, the report convinced the judges that we even spied on ____.
 c. The [judges]_F, the report even convinced ____ that we spied on the Canadians.
 d. *The [judges]_F, the report convinced ____ that we even spied on the Canadians.
- (29) a. A [professor]_F seems to even be at the party.
 b. *A [professor]_F wants to even be at the party. (Erlewine 2018: p. 174)

Erlewine's generalization: the *F*-marking needs to originate in the c-command domain of the pre-VP *even*.

He points out that backwards association does not force scope reconstruction.

- (30) Every [student]_F didn't even sing karaoke.
 a. It's surprising that no student sang karaoke. ($\forall > \neg$)
 b. It's surprising that not every student sang karaoke. ($\neg > \forall$)

Erlewine proposes that pre-VP *even* can associate with *F*-marking in a trace, but *only* cannot.

To do: Which conventional associators can associate with foci in traces?

7 Anti-Pied-Piping

Some languages mark focus with a focus particle and/or focus movement.

- (31) Hanako-wa hon-**mo** kat-ta.
 Hanako-TOP book-also buy-PAST
 'Hanako also bought [a book]_F.'
 (Japanese; Branan & Erlewine 2023: p. 604)
- (32) A házigazda [Katinak]_F mutatta be Jánost _____.
 the host Kati.DAT show VM János.ACC
 'The host introduced János [to Kati]_F.'
 (Hungarian; Branan & Erlewine 2023: p. 603)

These can trigger 'pied-piping' in the sense that the target of suffixation/movement can be larger than the semantic focus.

- (33) Hanako-wa [[hon]_F-o kai]-**mo** shi-ta.
 Hanako-TOP book-ACC buy]-also do-PAST
 'Hanako also bought [books]_F (in addition to pens).'
- (34) Anna [a [használt]_F autót] adta el. _____.
 Anna the used car.ACC sold VM
 'It's the [used]_F car that Anna sold (not the new one).'
- (Japanese)
- (Hungarian; Branan & Erlewine 2023: p. 604)

Furthermore, the target can be smaller than the semantic focus, which Branan & Erlewine 2023 call *anti-pied-piping*.

- (35) Kaze-ga fui-tei-ta. sorekara [ame-**mo** furi hajime-ta]_F.
 wind-NOM blow-PROG-PAST. then rain-**also** fall-NML begin-PAST
 ‘The wind was blowing. Then it started to rain.’ (Japanese)
- (36) Péter [a Hamletet] [olvasta fel ____ a kertben]_F, nem pedig [úszott]_F.
 Péter the Hamlet.ACC read VM the garden.INE not rather swim
 ‘Peter read Hamlet in the garden, rather than swim.’
 (Hungarian; [Branan & Erlewine 2023](#): p. 605)

Idioms:

- (37) Taro-wa [michi-kusa] -**mo** kut-ta.
 Taro-TOP road-grass -also ate
 ‘Taro also [loitered on the way]_F.’
 (Japanese; [Branan & Erlewine 2023](#): p. 627, attributed to Ohno 2003)
- (38) Nem [a lóbő] húzza ____, hanem keményen dolgozik.
 not the horsehide.ACC scrapes but hard works
 ‘He’s not [sleeping]_F, but is working hard.’
 (Hungarian; [Branan & Erlewine 2023](#): p. 628, attributed to Kenesei 1998)

[Branan & Erlewine 2023](#) report such cases of anti-piped-piping in many languages from different language families.

- (39) Tā liàn [tòufa] dōu bù shū ____.
 3SG even hair DOU NEG comb
 a. ‘He doesn’t even comb [his hair]_F.’
 b. ‘He doesn’t even [comb his hair]_F.’
 (Mandarin Chinese; [Branan & Erlewine 2023](#): p. 616)
- (40) C’est [maman] qui ____ me bat.
 it=is mom who ____ 1SG hit
 ‘[Mom’s hitting me]_F.’ (French; [Branan & Erlewine 2023](#): p. 616)

[Branan & Erlewine 2023](#) propose that focus association involves two elements: an operator (which is interpreted) and a particle (which is not).

- Recall that the scope of pre-VP *only* in English is fixed, unlike the scope of pre-DP *only*.

- (41) a. I only knew that he had learned [Spanish]_F. (only > know)
 b. I knew that he had only learned [Spanish]_F. (know > only)
 c. I knew that he had learned only [Spanish]_F. (only > know, know > only)
 (adapted from [Branan & Erlewine 2023](#): p. 624)

- Analysis:** Pre-VP *only* is the spell-out of the operator. Pre-DP *only* is the spell-out of the particle.

- (42) a. I OP_{only} knew that he had learned [PRT_{only} Spanish]_F.
 b. I knew that he had OP_{only} learned [PRT_{only} Spanish]_F.

- The particle indicates that there is an operator somewhere higher in the structure that Agrees with it (in [FOC]).
- The Agreement may trigger movement.
- The particle is preferably attached to the left most item of the semantic focus (modulo independent morphosyntactic requirements, e.g., nominality, second-position, etc.)

(43) CONTEXT: At yesterday's party, not only did Hanako dance, but ...

- a. Taro -**mo** piano-o hiita.
Taro -also piano-ACC played
- b. %Taro-ga [piano] -**mo** hiita.
Taro-NOM piano -also played
'[Taro played piano]_F, too.'

(Japanese; [Branan & Erlewine 2023](#): p. 618, attributed to Aoyagi 1998)

- The left-most requirement skips adjuncts and certain functional items like indefinites.

8 *Even*

Even triggers a scalar presupposition.

- (44) Tim even called Gump_F.
 $\rightsquigarrow$ It's surprising that Tim called Gump, in comparison to to Tim calling other people.

A simple semantics based on likelihood (see [Rooth 1985](#), [Kay 1990](#), [Herburger 2000](#), [Greenberg 2018](#) for different ideas):

- (45) $w \in \text{dom}(\llbracket \text{even}_C \varphi \rrbracket_o^g)$ only if for each $p \in g(C)$, $\llbracket \varphi \rrbracket_o^g$ is less likely than p .

It is observed that *even* in negative contexts (can) give rise to an opposite inference.

- (46) Tim didn't even call Gump_F.
 $\rightsquigarrow$ It's unsurprising that Tim called Gump, in comparison to to Tim calling other people.

Given that negation is a presupposition hole, it shouldn't change the scalar presupposition of *even*.

There are two ways to account for this:

- Scope theory ([Karttunen & Peters 1979](#), [Wilkinson 1996](#), [Guerzoni 2004](#), [Nakanishi 2008, 2012](#)): *Even* in English is a PPI and takes scope over the negation.

- (47) It is surprising that Tim didn't call Gump, in comparison to Tim not calling other people.

- Ambiguity theory ([Rooth 1985](#), [Rullmann 1997](#), [Schwarz 2005](#), [Giannakidou 2007](#), [Erlewine 2018](#)): English has a PPI *even* and an NPI *even*.

- (48) $w \in \text{dom}(\llbracket \text{even}^{\text{NPI}}_C \varphi \rrbracket_o^g)$ only if for each $p \in g(C)$, $\llbracket \varphi \rrbracket_o^g$ is more likely than p .

Both theories have pros and cons.

- Lexical ambiguity is uncomfortable, unless there's evidence.
 - NPI *even* in other languages, e.g., *einmal* (vs. *sogar*) in German.
 - Island insensitivity
- (49) a. Nobody thought that Gump even read one_F paper.
 b. I don't have classmates who even speak English_F.
- ...

References

- Beaver, David & Brady Clark. 2008. *Sense and sensitivity: how focus determines meaning*. Wiley-Blackwell.
- Branan, Kenyon & Michael Yoshitaka Erlewine. 2023. Anti-pied-piping. *Language* 99(3). 603–653. <https://doi.org/10.1353/lan.2023.a907013>.
- Erlewine, Michael Yoshitaka. 2018. *Even* doesn't move but associates into traces: A reply to Nakanishi 2012. *Natural Language Semantics* 26. 167–191. <https://doi.org/10.1007/s11050-018-9142-6>.
- Giannakidou, Anastasia. 2007. The landscape of EVEN. *Natural Language and Linguistic Theory* 25(1). 39–81.
- Greenberg, Yael. 2018. A revised, gradability-based semantics for *even*. *Natural Language Semantics* 26(1). 51–83. <https://doi.org/10.1007/s11050-017-9140-0>.
- Guerzoni, Elena. 2004. *Even*-npis in yes/no questions. *Natural Language Semantics* 12. 319–343.
- Herburger, Elena. 2000. *What Counts: Focus and Quantification*. Cambridge, MA: MIT Press.
- Jackendoff, Ray. 1972. *Semantic interpretation in Generative Grammar*. Cambridge, MA: MIT Press.
- Karttunen, Lauri & Stanley Peters. 1979. Conventional implicature. In Choon-Kyu Oh & David Dinneen (eds.), *Syntax and semantics 11: presupposition*, 1–56. New York: Academic Press.
- Kay, Paul. 1990. *Even*. *Linguistics and Philosophy* 13(1). 59–111.
- Krifka, Manfred. 1991. A compositional semantics for multiple focus constructions. In Steven K. Moore & Adam Zachary Wyner (eds.), *Proceedings of SALT 1*, 127–158. <https://doi.org/10.3765/salt.v1i0.2492>.
- Krifka, Manfred. 2001. For a structured account of questions and answers. In Caroline Féry & Wolfgang Sternefeld (eds.), *Audiatur vox sapientiae: a festschrift for Arnim von Stechow*, 287–319. Berlin: Akademie-Verlag.
- Krifka, Manfred. 2004. The semantics of questions and the focusation of answers. In Chung-min Lee, Matthew Gordon & Daniel Büring (eds.), *Topic and focus: a cross-linguistic perspective*, 139–151. Dordrecht: Kluwer.
- Krifka, Manfred. 2006. Association with focus phrases. In Valéria Molnár & Susanne Winkler (eds.), *The architecture of focus*, 105–136. Berlin: Mouton de Gruyter. <https://doi.org/10.1515/9783110922011.105>.
- Nakanishi, Kimiko. 2008. Scope of *even*. In Anisa Schardl, Martin Walkow & Muhammad Abdurrahman (eds.), *Proceedings of NELS 38*, 179–192. Amherst, MA: GLSA.
- Nakanishi, Kimiko. 2012. The scope of *even* and quantifier raising. *Natural Language Semantics* 20. 115–136. <https://doi.org/10.1007/s11050-011-9077-7>.

- Roberts, Craige. 2012. Information structure: towards an integrated formal theory of pragmatics. *Semantics and Pragmatics* 5(6). 1–69. <https://doi.org/10.3765/sp.5.6>.
- Rooth, Mats. 1985. *Association with focus*. University of Massachusetts, Amherst dissertation.
- Rooth, Mats. 1992. A theory of focus interpretation. *Natural Language Semantics* 1(1). 75–116.
- Rullmann, Hotze. 1997. *Even*, polarity, and scope. In *Papers in Experimental and Theoretical Linguistics*, vol. 4, 40–64. University of Alberta Working Papers in Linguistics.
- Schwarz, Bernhard. 2005. Scalar additive particles in negative contexts. *Natural Language Semantics* 13(2). 125–168.
- Schwarzschild, Roger. 1999. GIVENness, AvoidF and other constraints on the placement of accent. *Natural Language Semantics* 7(2). 141–177.
- Wilkinson, Karina. 1996. The scope of *even*. *Natural Language Semantics* 4(3). 193–215.