The *only* class

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http://kvf.me/cssl19-only

Today

1. Quick reminder
2. Greenberg 2019 and the scalarity of *only*
3. *only*, NPIs, and the syntax of focus

Where we ended up on Friday

Klinedinst

$\text{only}_{C,\leq}(p)$

- presupposes that either p or some r in C such that $p < r$ is true
- asserts that all alternatives r in C such that $p < r$ are false

plus some presupposition that p is somehow low in $C, \leq$

Full slate of options for the scalar presupposition

1. p is not highest in $C, \leq$
2. p is low in $C, \leq$
3. p is unexpectedly low in $C, \leq$
4. p is lowest in $C, \leq$

NB$_1$: All but (3) are only non-trivial if the *at least*-proposition, while semantically presupposed, is not taken for granted (otherwise *p* would already be pragmatically presupposed to be lowest on the scale).

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NB$_2$: (1) probably wouldn't need to be stated separately because it's a requirement for the assertion to be non-trivial.

Greenberg 2019

Infelicitous scalar *only*

(1) Mira has 2 kids, Paul has 4 kids, and/but
     Jim has (#only) 3 kids.

Infelicitous scalar *only*

(1) Mira has 2 kids, Paul has 4 kids, and/but Jim has (#only) 3 kids.

Greenberg argues we should adopt a strong scalar presupposition.

Strong scalar presupposition

$\text{only}_{C,\leq}(p)$ presupposes that $\forall r \in C \colon p \leq r$

p is at the lowest rank of the scale

No mirativity

The prejacent being weaker than all the **relevant** alternatives doesn't necessarily mean that the prejacent is absolutely low. And that seems correct:

(2)   Bill won gold, John only won silver.

But often there's mirativity … Why?

- When *C* isn't specifically given, it needs to be "accommodated" or constructed "on the fly".
- Principle: accommodate only alternatives that are reasonable, entertainable
- so since *p* is the lowest among reasonable, entertainable alternatives it is felt to be noteworthily low.

Sequences of *only*'s

(3)   Most people here have many children. Not
       so Bill and John. John only has 2 children.
       And Bill only has 3.

(4)   [How much are these shoes?] Well, this
       pair is only $40, and this one is (only) $50.

Greenberg's suggestion

"It seems as though the presence of the only in the first sentence 'shields' [the prejacent], and indicates that [it] does not need to be considered a 'contextually relevant' alternative. Thus, the prejacent of the second only should not be compared to it, but to another higher alternative."

Possible alternative: sequences of *only* are possible when both alternatives are considered as essentially the same, with some amount of grain

Day Five:
only, NPIs, and the syntax of focus

The plan

- NPI-licensing by *only* (von Fintel 1999)
- Wagner 2006's argument from NPI-licensing for Theory 2
- Erlewine & Kotek's 2018 argument from Tanglewood for Theory 2

von Fintel 1999:
Strawson Entailment

The central fact

Klima (1964, 311) observes that negative polarity items are licensed by *only*:

(5)   Only young writers ever accept suggestions with any sincerity.

Inference-Based Theories of NPI-Licensing

- Fauconnier-Ladusaw: the main licensing condition for NPIs is the presence of a c-commanding *downward entailing* operator.

- An operator *f* is downward entailing iff for any *x* and *y* in its domain such that *x* entails *y*, $f(y)$ entails $f(x)$.

- While *John ate broccoli* entails *John ate a vegetable*, *John didn't eat a vegetable* entails *John didn't eat broccoli* — entailment reversal!

Triumph

(6)   Every student [who has ever seen any movie by Buñuel] [has (*ever) told (*anyone)/someone about it].

Refinements

- NPIs that need stronger licensers: *lift a finger* → licensed by *anti-additive* operators (Zwarts)

- (N?)PIs that make do with weaker licensers: certain indefinites in St'át'imcets (Matthewson), Chinese (Lin), Greek (Giannakidou), etc. → licensed by *non-veridical* operators

What Kind of Entailment?

- No equivocation: Odd things arouse human suspicion. But seventeen is an odd number. Therefore, seventeen arouses human suspicion.

- No context changes: Imagine someone walking by a farmer's yard that has a number of pigs in it, all of whom are quite dirty. The stranger says to the farmer: "Every pig is dirty". The farmer says "Yes, but every pig in the barn is clean".

A Tricky Case

(7)   John failed to buy any shirt.

    a.   John failed to buy a shirt.

    b. $\Rightarrow$? John failed to buy a red shirt.

Ladusaw 1979: "Since entailment depends only upon truth-conditional meaning, it will be true that (a) entails (b), even though that intuition is confused by the fact that (b) implicates something that is not implicated or entailed by (a). (a) implicates that John tried or was expected to buy a shirt, but (b) implicates that he tried to buy a red shirt. The implicature is irrelevant to the question of whether (a) entails (b)."

Even Harder Cases

(8) Only John *ever* ate *any* kale for breakfast.

    a.   Only John ate vegetables for breakfast.

    b. $\nRightarrow$ Only John ate kale for breakfast.

(9)   Sandy regrets that Robin bought *any* car.

    a.   Sandy regrets that Robin bought a car.

    b. $\nRightarrow$ Sandy regrets that Robin bought a Honda Civic.

(10) Emma is the tallest girl to *ever* win the dance contest.

    a.   Emma is the tallest girl in her class.

    b. $\not\Rightarrow$ Emma is the tallest girl in her class to have learned the alphabet.

(11)   If he has *ever* told a lie, he must go to confession.

  a. If John stole the earrings, he must go to jail.

  b. $\not\Rightarrow$ If John stole the earrings and then shot himself, he must go to jail.

Strawson to the Rescue

- Strawson proposes to rescue the traditional square of opposition, by saying that all of the quantifiers presuppose existence of their subject term.

- But that threatens some traditional inferences such as *No S is P ≡ No P is S*.

- Strawson's proposal: "We are to imagine that every logical rule of the system, when expressed in terms of truth and falsity, is preceded by the phrase 'Assuming that the statements concerned are either true or false, then …'" (Strawson 1952: p. 176).

- Call this notion of validity *Strawson Validity*.

Strawson Downward Entailment

- An operator *f* is *Strawson downward entailing* iff for any *x* and *y* in its domain such that *x* entails *y*, the inference from $f(y)$ to $f(x)$ is Strawson valid.

- In other words: An operator f is Strawson downward entailing iff for any x and y in its domain such that x entails y, $f(y)$ together with the presuppositions of $f(y)$ and of $f(x)$ entails $f(x)$.

The SDE Analysis of *any* and *ever*

- The licensing condition for *any* and *ever* is that they require a c-commanding SDE operator.

- *Only* is an SDE operator: Only John ate vegetables for breakfast. + John ate kale for breakfast. (the presupposition of the conclusion) ⇒ Only John ate kale for breakfast.

- NPIs that are sensitive to SDE do not care about anything other than the main assertoric meaning of the licenser, ignoring any presuppositional parts of the meaning.

The Blindness of the Grammar

- Why should the grammar of (some) NPIs be sensitive to SDE?

- The grammar is known to be quite blind sometimes.

- The grammar rules out some contradictions (*There is every horse in the garden* (Barwise & Cooper), *Some student but John was there.* (von Fintel 1993)) but not others: *There are fewer than zero horses in the garden*.

- The grammar blindly computes scalar implicatures and rules out certain sentences because of them, even though common knowledge should cancel the implicature: *John was found dead with some of his hands tied together.* (Magri 2006, see also Fox & Hackl 2005).

- Given that the grammar is blind elsewhere, maybe we shouldn't be surprised that in some languages some NPIs are sensitive to a notion of entailment that ignores presuppositional and other non-asserted parts of meaning.

Research Project

Explore the modular semantics of various operators (for example: adversatives, superlatives, conditionals) via the distribution of *any* and *ever*.

$\Rightarrow$ the bulk of von Fintel 1999 is devoted to that project.

Wagner 2006

only, NPIs, and Theory 1

The approach based on Strawson Entailment predicts that NPIs should be licensed within all parts of a sentence containing 'only' that are not the focus that 'only' associates with.

Wagner 2006, see also Beaver & Clark 2002

(12)   Only JOHN$_F$ read any papers.

(13)   Mary only gave any books to JOHN$_F$.

Wagner's first observation

When *only* attaches to a DP, no NPIs are licensed within it, even in those parts of the DP that are not part of the focus.

(14) a. *Only [any inhabitant of [Twin Earth]$_F$] met Particle Man

   b. *Only [an [author]$_F$ of any comic] met Particle Man.

Wagner's descriptive generalization

Type-shifted *only* doesn't license NPIs in the non-focused part of its first argument.

Wagner's second observation

VP-only does not license an (unfocused) NPI if this NPI and the focused item appear within the same island.

(15)   The president only met with [a CHAIR$_F$ of a/*any humanities department].

(16)   The president only met with [someone's/*anyone's ADVISOR$_F$].

Wagner's conclusion

Theory 2 is correct!

- The focus associate of VP-*only* moves to become *only*'s first argument.
- When the focus associate is in an island, it pied-pipes the island.
- *only* only licenses NPIs in its second argument.

(17)   The president only met with [a CHAIR$_F$ of a/*any humanities department].

$\Rightarrow$

(18)   [only [a CHAIR$_F$ of a/*any humanities department]] λx. the president met with *x*.

Complications and alternatives

- Wagner, Michael. 2006. Association by movement: Evidence from NPI-licensing. *Natural Language Semantics* 14(4). 297–324. doi:10.1007/s11050-007-9005-z.
- Krifka, Manfred. 2006. Association with focus phrases. In Valerie Molnar & Susanne Winkler (eds.), *The architecture of focus*, 105–136. Berlin: Mouton de Gruyter.
- Xiang, Yimei. 2017. *Only*: An NPI-licenser and NPI-unlicenser. *Journal of Semantics* 34(3). 447–481. doi:10.1093/jos/ffx006.

Erlewine & Kotek 2018: The argument from Tanglewood

Erlewine, Michael Yoshitaka & Hadas Kotek. 2018. Focus association by movement: Evidence from Tanglewood. *Linguistic Inquiry* 49(3). 441–463. doi:10.1162/ling_a_00263.

Tanglewood (Kratzer 1991)

Imagine you are angry at me and start voicing the following accusations. "What a copycat you are! You went to Block Island because I did. You went to Elk Lake Lodge because I did. And you went to Tanglewood because I did."

I feel you exaggerate and reply:

(19)   I only went to [Tanglewood]$_F$ because you did.

(19)   I only went to [Tanglewood]$_F$ because you did.

Paraphrase: Tanglewood is the only place x such that I went to x because you went to x.

What's the problem?

(20)   I only went to [Tanglewood]$_F$ because
         you did go to Tanglewood$_F$.

. . .

Even assuming that we can deal with
focus-marking in elided materials, how do we
ensure that the two foci are co-vary?

High-tech extensions to Theory 1

- Kratzer, Angelika. 1991. The representation of focus. In Arnim von Stechow & Dieter Wunderlich (eds.), *Semantics: An international handbook of contemporary research*, 825–834. Berlin: de Gruyter.
- Wold, Dag. 1996. Long distance selective binding: The case of focus. *Semantics and Linguistic Theory (SALT)* 6. 311–328. doi:10.3765/salt.v6i0.2766.

Erlewine & Kotek

Theory 2 straightforwardly accounts for the Tanglewood sentence.

Interpretation of Kratzer's Tanglewood example (4) using covert focus movement

a. *LF:* only ([Tanglewood]$_F$)$_{=\alpha}$(λx . I [$_{antecedent}$ go to x] because you [$_{ellipsis}$ go there$_x$])$_{=\beta}$

b. *Presupposition:* $\beta(\alpha)$ = I go to Tanglewood because you go to Tanglewood

c. *Assertion*

$\forall\gamma \in$ {Tanglewood, Block Island, Elk Lake Lodge}[($\gamma \neq$ Tanglewood) $\rightarrow \neg\beta(\gamma)$]
   $\Leftrightarrow \neg\beta$(Block Island) $\wedge \neg\beta$(Elk Lake Lodge)
   $\Leftrightarrow$ it is not the case that [I go to Block Island because you go to Block Island], it is not the case that [I go to Elk Lake Lodge because you go to Elk Lake Lodge]

Kratzer's argument against Theory 2

The movement would have to be
island-violating:

A Tanglewood construction with the focus inside an island (Kratzer 1991:831)
Context: "You always contact every responsible person before me."
No, I only contacted [$_{island}$ the person who chairs [the Zoning Board]$_F$] before you did
△.

Paraphrase: The Zoning Board is the only *x* such that I contacted the person who
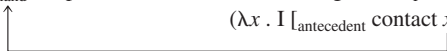chairs *x* before you contacted the person who chairs *x*.

Erlewine & Kotek

But: pied-piping!

LF structure for (16) using covert focus movement with pied-piping (cf. (18))

only ([$_{island}$ the person who chairs [the Zoning Board]$_F$])

(λx . I [$_{antecedent}$ contact x] before you [$_{ellipsis}$ contact x])

A prediction

Theory 2 predicts an asymmetric pattern of island sensitivity: covert movement of the focus (possibly with pied-piping) is subject to island constraints, but variable binding is not.

Focus in a relative clause, without a matching island in the intended ellipsis site

Context: Our son speaks Spanish, French, and Mandarin. At one point we hired a nanny that happened to speak French, but that wasn't why we hired her. Another time we hired a nanny that spoke Mandarin, but that too was a coincidence . . .

*[TW] We only hired [$_{island}$ a nanny that speaks [Spanish]$_F$] because our son does $\triangle$.

Intended Tanglewood reading: Spanish is the only language x such that we hired [a nanny that speaks x] because our son speaks x. ($\triangle$ = "speak . . .")

My conclusion

- Theory 1 should not be automatically assumed.
- Theory 2 has some advantages.
- Both theories should be considered when confronting challenging data sets.

Three more classes

Day Six (tomorrow, Tue July 23)

Only, bare plurals, and bare conditionals

Day Seven (Thu July 25)

(Minimal) Sufficiency

Day Eight (Fri July 26)

The *only* connectives

Audience survey

Please judge the acceptability of the following two sequences:

(1) Only Muriel voted for Hubert. Nobody else did.

Please judge the acceptability of the following two sequences:

(1) Only Muriel voted for Hubert. Nobody else did.

(2) Nobody but Muriel voted for Hubert. Only she did.

Question to ponder

If (1) is better than (2), how come?