The *only* class

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http://kvf.me/cssl19-only

Day One

Medieval work on syncategoremata

- studies of logical vocabulary
- remarkable obsession with exclusives and exceptives

Ockham

Istis igitur modis potest dictio exclusiva accipi improprie; et forte etiam aliis modis potest accipi improprie, sed quia non sunt ita usitati sicut isti, ideo ipsos studiosis relinquo.

A glorious picture indeed: monasteries crammed to the spires with specialists on only*, labouring away on the fine points of the semantics of exclusive propositions. Those were the days!*

Horn 1996

Some notes

- I’m not an expert in onlyology (anymore)
- While most examples will be from English, please think about and discuss other languages
- Readings on website (optional; maybe after the summer school?)
- My office hours: 1pm-2pm every class day

A new beginning

The Fifth Regional Meeting of the Chicago Linguistic Society 1969

A PRESUPPOSITIONAL ANALYSIS OF ONLY AND EVEN

Laurence R. Horn
UCLA

Properties of *only*

- A form of generalized negation
- Asymmetric meaning
- Cross-categoriality
- Focus-sensitivity
- Scalar meaning

A basic example

(1) Only Muriel voted for Hubert.

The two sides of *only*

The prejacent

Muriel voted for Hubert

Negating alternatives

Nobody other than Muriel voted for Hubert

Horn 1969

The two sides of *only* are asymmetric:

- the prejacent is presupposed
- the negation of the alternatives is asserted

Horn's evidence for presupposition

(2) a. It's not true that only Muriel voted for Hubert.

b. Not only Muriel voted for Hubert.

(3) a. Lyndon did too.

b. Somebody else did as well, but I forget who.

c. *She didn't.

Horn's evidence for presupposition

(4) Did only Muriel vote for Hubert?

(5) a. No, Lyndon did too.

b. No, somebody else did as well, but I forget who.

c. *No, she didn't.

We are left with the uneasy feeling in the pit of our stomach which is symptomatic of the 'unhappiness' produced by a violated presupposition.

Horn 1969, p.99

Aspects of presuppositions

Squeamishness

uneasy feeling when not true

To be taken for granted

signaled as to be taken for granted

“Projection”

not affected by many embedding constructions

Shanon's test

Shanon 1976: pragmatically presupposed meanings can be detected by a test

(6) a. I met John's wife.

b. One moment, I did not know that John was married at all.

c. *One moment, I did not know that you met her.

Only's prejacent: not pragmatically presupposed

Shanon 1976:

(7) a. Did you meet anybody?

b. I met only one woman.

c. *One moment, I did not know that you met one woman.

A still thriving subindustry

- What is the proper analysis of the asymmetry in the meaning of exclusives?
- The prejacent is less “at issue” than the negative component but exactly what is going on?

Back to Horn 1969

Horn didn't just spark one subindustry. He also noted three other features of *only*:

- cross-categoriality
- focus-sensitivity
- scalar readings

Ambiguities

(8) a. Muriel only voted for Hubert.

b. Muriel voted $\left\{\begin{matrix}\text{only for}\\ \text{for only}\end{matrix}\right\}$ Hubert.

Muriel only voted for Hubert

Three readings:

- she voted for Hubert and nobody else
- she voted for Hubert and did nothing else for him
- she voted for Hubert and did nothing else

Cross-categoriality

- *only* can combine with expressions other than names

Focus-sensitivity

Horn: “the evident ambiguity disappears if stress is indicated”

(9) a. Muriel only voted for [Hubert]$_F$.

b. Muriel only [voted]$_F$ for Hubert.

c. Muriel only [voted for Hubert]$_F$.

Scalar readings

(10) Muriel only voted for Hubert, she didn’t campaign for him.

There is a sense in which the only of (24) involves the notion of expectation rather than the mere exclusion proposed by the above formulation. Assuming that there is some set E of scales of degree of strength such that each member $E_i \in E$ is a two-place relation which partially orders a (semantic) class of predicates, we can rewrite (24) in the form

(25) Only $(F, Fx, E_i \in E)$

P: (i) Fx

(ii) $(\exists G)(G \neq F \ \& \ E_i(G,F))$

A: $-(\exists G)(G \neq F \ \& \ E_i(G,F) \ \& \ Gx)$

(25) describes this only as a three-place predicate taking as arguments a predicate, a proposition containing that predicate, and a scale of degree. This predicate-scope only is furthermore purported to presuppose that the property F hold for some object x, and that there is another property G which is ranked "stronger" than F on the scale E_i; it asserts that no such property G holds for x. The availability of such scales explains why both (22) and

After Horn 1969

Contextual domain restriction

(11) Only Muriel voted for Hubert.

- In the 1968 US presidential election, 31,271,839 people voted for Hubert Humphrey.
- But (11) could still be asserted in a context where we are discussing the politics of Larry's friends.

The pragmatic wind

Remember that part of the ordinary meaning of any idiom of quantification consists of susceptibility to restrictions; and that restrictions come and go with the pragmatic wind" (Lewis 1986: 164)

Bad things that could have happened

An example due to Irene Heim:

(12) The barbecue went fairly well. **It only rained**. It wasn't windy, there are enough beer, and there weren't any mosquitoes.

Cross-categoriality

(13) a. Only Muriel voted for Hubert.

b. It only rained.

c. Muriel only danced.

d. Muriel [only introduced] them to each other. (?)

How many different *only*'s?

Two frameworks

Theory 2 *only* in general is a two-place operator

Theory P *only* is at heart a propositional operator

Theory 2: Cross-categorial two-place operator

only$_C$ (α_σ) ($\beta_{\langle\sigma,t\rangle}$)

= α is the only thing of its kind (in the contextually restricted domain *C*) that truthfully combines with β.

$\textit{only}_C$ (Muriel)$_e$ (voted for Hubert)$_{\langle e,t\rangle}$

= Muriel is the only individual in *C* who voted for Hubert.

$only_C$ (it rained)$_{\langle s,t\rangle}$ (“true”)$_{\langle st,t\rangle}$

= that it rained is the only proposition in *C* that is true

$\textit{only}_C$ (danced)$_{\langle e,t\rangle}$ (λP. P(Muriel))$_{\langle et,t\rangle}$

= dancing is the only property in C that is true of Muriel

and so on

Theory P: Cross-categorial propositional operator

only$_C$ (p)

= p is the only true proposition in *C*

But what about the cases where *only* doesn't seem to be propositional?

Type-shifting (simplified)

- The base case is propositional *only*^{t}
- For any type that "ends in *t*", say $\langle \sigma, t \rangle$, we can define a higher type *only*$^{\sigma}$ = $\lambda X_{\langle \sigma, t \rangle}.\ \lambda y_{\sigma}.\ \textit{only}^{t}(X(y))$
- These higher *only*'s assemble a proposition from their two arguments and say that it is the only true one (in *C*).

(14) Muriel only danced.

= only$^{\langle e,t \rangle}$ (danced$_{\langle e,t \rangle}$) (Mary$_e$)

= The only true proposition in *C* is that Muriel danced.

(15) Only Muriel danced.

can't be analyzed as *only* taking an individual
must be analyzed as *only* taking a quantifier (type $\langle et, t \rangle$)
= The only true proposition in *C* is that Muriel danced.

One salient difference between the theories

Theory 2 the sister of *only* is fed as the argument to the remainder of the structure

Theory P the sister of type-shifted *only* is a function takes the remainder of the structure as its argument

Theory 2

Cross-categorial *only* says that its sister is the only one among a relevant set *C* of things of that kind that gives a true proposition when combined with the remainder

Theory P

Type-shifted *only* takes its two arguments and says that the proposition that they deliver when combined (the prejacent, in other words) is the only true one in *C*.

Wait a minute!

Muriel only danced $\neq$ *Only Muriel danced*!

but both supposedly say that the only true proposition in C is that Muriel danced.

Muriel only danced $\neq$ *Only Muriel danced*!

but both supposedly say that the only true proposition in *C* is that Muriel danced.

So … the *C*'s must be different.

C

Muriel only$_{C_1}$ *danced*

Only$_{C_2}$ *Muriel danced*

C_1: propositions of the form “Muriel X-ed”

C_2: propositions of the form “X danced”

We could build into the meaning of the higher type *only*'s that they construct *C* for themselves.

When we have the sentence "$only_C$ (X) (y)" then every proposition in *C* is of the form "X′ y" (where X′ are alternatives to X).

But Theory P is naturally paired with the assumption that an independent theory of focus will deliver the right *C*.

Adding focus to the mix

only and its "associate"

(16) Muriel only voted for [Hubert]$_F$

= Only Hubert is such that Muriel voted for him.

Natural extensions of the two theories of *only*

Theory 2 scope theory: the associate moves to *only*

Theory P in-situ theory: the association is mediated

The scope theory

$\Rightarrow$ we will look at this next Monday!

Association with focus

All the alternatives in *C* are of a form assembled as follows:

- take the sister of *only*
- compute all alternatives to it that differ from the sister just where there is focus in the sister
- combine these alternatives with the second argument of *only*

(17) Muriel only$_C$ voted for [Hubert]$_F$

C: propositions of the form “Muriel voted for x”

(17) Muriel only$_C$ voted for [Hubert]$_F$

C: propositions of the form “Muriel voted for x”

NB: the inaccuracy of ”propositions of the form ...”

Where you could go next

- Read Rooth's work on alternative semantics and association-with-focus
- Read Beaver & Clark's book
- Read Coppock & Beaver

Only as a determiner?

only students

(18) Only students attended the show.

only students

(18) Only students attended the show.

How does this fit into our theories?

only students$_{\langle e,t\rangle}$ attended$_{\langle e,t\rangle}$

only students$_{\langle e,t\rangle}$ attended$_{\langle e,t\rangle}$

two predicates don't combine to give a proposition

but both of our theories depend on that

Two options

- *only* as a determiner ($\langle et, \langle et, t \rangle \rangle$)
- *only students* = *only (some [students]$_F$)*
  (operating on a quantifier)

Determiner *only*

- would be non-conservative
- but mirror image of a conservative determiner (∀)

Next Tuesday

A closer look at *only students* under the second option

Scalarity

Oh Arsenal

(19) A: How did Arsenal do last season?

B: They only finished in 5th place.

(20) A: Can your friend Jade help us? She works there right?

B: I doubt it. She's only a mailroom clerk.

NB: in both cases, it’s given that if the prejacent is true, it’s the only true proposition. A team can only finish in one place, an individual has one job (ish).

$\Rightarrow$ on Friday, we'll look at these so-called "scalar" uses of *only*

An oddball?

- Jim McCawley (pc): “whatever *only* is categorized as, it’s an oddball, and its oddity has to be localized somewhere”
- Keenan & Paperno 2017 (p.944): all 18 languages in their sample have at least one lexical exponent of *only*

Beyond *only*

Coppock & Beaver 2014 survey the entire exclusive muddle.

Beyond *only*, there are at least:

just, exclusively, merely, purely, solely, simply, sole, mere, pure, exclusive, alone

Adjectival exclusives

One interesting case that we won't have time for here:

(21) a. the only Congolese NBA player

b. a mere child

Exclusives and Exceptives

Only Muriel voted for Hubert.

No x other than Muriel voted for Hubert.

Nobody but Muriel voted for Hubert.

(22) a. I only introduced [Vivianne]$_F$ to Carli.

b. I did not introduce anybody but Vivianne to Carli.

$\Rightarrow$ Tomorrow & Thursday: exceptives

$\Rightarrow$ next Thursday & Friday: even more connections

The rest of the course

Day Two (Tue July 16)

Exceptives (basics)

Day Three (Thu July 18)

Clausal exceptives

Day Four (Fri July 19)

More on scalarity and mirativity

Day Five (Mon July 22)

Only, NPI licensing, and the syntax of focus

Day Six (Tue July 23)

Only, bare plurals, and bare conditionals

Day Seven (Thu July 25)

Sufficiency

Day Eight (Fri July 26)

The *only* connectives