

# **The *only* class**

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<http://kvf.me/css119-only>

# Today

- Liz Coppock's legal opinion on clausal exceptives
- Scalarity in the meaning of exclusives

## Liz Coppock

was asked to provide an expert opinion on the following sentence in a legal contract:

- (1) The grants of right of way, telephone easements and energy supply easements shall be free of and appurtenant to each and every part of the land **save that** the Easement of Right of Way shall **only** service **one dwelling** on the dominant land.

*the semantics of “A save/except that B”, where B is a sentence is: Wherever A and B do not conflict, A and B both hold, but where A and B conflict, B takes precedence over A. Thus a sentence of the form “A save/except that B” does not always imply “A”. For example, “You may have any of the candies except that you may not have the blue one” does not imply “You may have any of the candies”. In other words, the second clause may “override” part of what is expressed in the first clause.*

*There are a number of further constraints on the appropriate use of exceptives, however. One is that the first clause must express a universal claim that ranges over a certain domain (e.g. candies, or parts of the land). Another is that the second clause must specify an element of that domain to which the generalization does not apply.*

*Furthermore, crucially, the second clause cannot, without violation of linguistic norms, override the first clause to the point that there is no generalization left. Exceptives are only appropriate when the result of removing the exception from the original generalization still constitutes a generalization over the same domain.*

*“The easement shall service each and every part of the land, except that it shall service only the main house” is not pragmatically felicitous, because “it shall service only the main house” does not leave a generalization over parts of the land behind.*

## Take-away

$\phi$  *except*  $\psi$

=  $\phi$  expresses a generalization, part of which is overridden by the fact that  $\psi$



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We need a theory of parts of a generalization.

Stay tuned ...

# **Day Four:**

# **Scalarity**

## **The story so far**

*Only* is a generalized negation, asserting that all alternatives to the prejacent are false.

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*Only* is a generalized negation, asserting that all alternatives to the prejacent are false.

“all” = “contextually relevant (+ focus-related)”

## **A small problem**

(2) Pauline only saw Alexia and Delphine.

Arguably the alternatives will include Alexia by herself and likewise with Delphine, plus of course Abby and all the others. But (2) doesn't say that Pauline didn't see Alexia.

## The standard solution

**before**  $\text{only}_C(p) = \forall r \in C: r \rightarrow r = p$

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## The standard solution

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**after**  $\text{only}_C(p) = \forall r \in C: r \rightarrow p \subseteq r$

*Only* excludes all alternatives that are not entailed by the prejacent



“not entailed by the prejacent”

=

“not (logically) weaker than the prejacent”

# Terminology

This meaning for *only* is sometimes called “logical *only*” or “complement exclusion *only*”.

## Some non-logical *only*'s

We encountered some *only*'s that don't fit this mold on Monday.

## Oh Arsenal

- (3) A: How did Arsenal do last season?  
B: They only finished in 5th place.

## **Mailroom clerks**

(4) 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 prejaacent is true, it's the only true proposition. A team can only finish in one place, an individual has one job (ish).

## Non-logical uses with no uniqueness

- (5) I was only [watching TV]<sub>F</sub> (when you called).
- (6) I only have [the jack of hearts]<sub>F</sub>.
- (7) Peter only saw [the secretary of state]<sub>F</sub>.

## **Scalar *only***

Intuition: these *only*'s exclude propositions that are higher on some relevant scale.



- I didn't do anything more important than watching TV.
- I don't have any card of higher value than the jack of hearts.
- Peter didn't see any higher-ranking official than the secretary of state.

# What's a scale?

- A scale is a set ordered by a relation  $\leq$ .
- The relation is reflexive and transitive (it's a preorder).
- If it is also antisymmetric, it's called a partial order.

## **Reflexivity**

$R$  is reflexive on  $S$  iff  $\forall x \in S: R(x, x)$ .

## **Irreflexivity/Anti-reflexivity**

$R$  is irreflexive/antireflexive on  $S$  iff

$\forall x \in S: \neg R(x, x)$ .

## **Transitivity**

$R$  is transitive on  $S$  iff

$\forall x, y, z \in S: R(x, y) \ \& \ R(y, z) \rightarrow R(x, z)$ .

## Symmetry

$R$  is symmetric on  $S$  iff

$$\forall x, y \in S: R(x, y) \leftrightarrow R(y, x)$$

## Antisymmetry

$R$  is antisymmetric on  $S$  iff

$$\forall x, y \in S: R(x, y) \ \& \ R(y, x) \rightarrow x = y$$

## Asymmetric

$R$  is asymmetric on  $S$  iff

$$\forall x, y \in S: R(x, y) \rightarrow \neg R(y, x)$$

## **Completeness/Connectedness/Connexity**

$R$  is complete/connected/connex on  $S$  iff

$$\forall x, y \in S: x \neq y \rightarrow R(x, y) \vee R(y, x)$$

| Properties satisfied   | Name to be used in this work | Other names used in the literature                            |
|--|------------------------------|---|
| 1. reflexivity and transitivity                              | quasi-ordering               | pre-ordering  |
| 2. reflexivity, transitivity and completeness                | ordering                     | complete pre-ordering; complete quasi-ordering; weak ordering |
| 3. reflexivity, transitivity and anti-symmetry               | partial ordering             | ordering  |
| 4. reflexivity, transitivity, completeness and anti-symmetry | chain                        | linear ordering; complete ordering; simply ordering           |
| 5. transitivity and asymmetry                                | strict partial ordering      |   |
| 6. transitivity, asymmetry and completeness                  | strong ordering              | ordering; strict ordering; strict complete ordering           |

From Amartya Sen's *Collective Choice and Social Welfare*, 1979

# **Part-whole scale of sets or pluralities**

# **A possible scale of activities**



## Scalar *only* (1st attempt)

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

- presupposes the prejacent  $p$
- asserts that all alternatives  $r$  in  $C$  such that  $p < r$  are false

all alternatives higher on the scale are false

## **Problem: prejacent doesn't project**

Klinedinst:

- (8) There is no way that Bill only got his BA from [Cal State]<sub>F</sub> (his parents were very rich, he was a great student, etc.)

calls into doubt whether Bill got his BA from Cal State

## Wrinkle

It seems that it's harder to get a non-logical scalar reading when *only* is negated.

Compare:

(9) Zlatan isn't  $\left\{ \begin{array}{c} \text{only} \\ \text{just} \\ \text{merely} \end{array} \right\}$  a mailroom clerk.

(10) Zlatan isn't a mere mailroom clerk.

See Coppock & Beaver for a closer look at scalar readings.

## Scalar *only* (2nd attempt)

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

- presupposes there is a proposition  $r$  in  $C$  such that  $p \leq r$  that is true
- asserts that all alternatives  $r$  in  $C$  such that  $p < r$  are false

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$\approx$  at least  $p$  and at most  $p$

## **Problem: simple scalar *only* too weak**

(11) She's only a mailroom clerk.

predicted to be satisfied by her having a job  
that is at the same level of the scale as  
mailroom clerk

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This is incorrect.

## Scalar *only* (3rd attempt, 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



## **Simple *only***

(12) She's only a mailroom clerk.

now conveys that she's a mailroom clerk and nothing more.

## **Embedded *only***

(13) There is no way that Bill only got his BA from [Cal State]<sub>F</sub>.

now conveys that the prejacent is false and that something higher on the scale is true.

# Unification?

Many people: the “logical/complement exclusion” reading can be seen as a special case of the scalar reading, one where the scale is given by logical entailment

$p \leq r$ :  $r$  entails  $p$  ( $p$  is logically weaker than  $r$ )

is this order a preorder or a partial order?

## **But isn't there more to scalarity?**

Recall the cases of mutually exclusive alternatives:

(14) Arsenal only finished in 5th place last year.

*Only* seems to say that 5th place is “low” on the scale in a noteworthy way.

## Klinedinst (final)

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

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

# Full slate of options for the scalar presupposition

- $p$  is low on the scale
- $p$  is unexpectedly low
- $p$  is lowest in  $C$

**Greenberg 2019**

## **Infelicitous scalar *only***

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



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- (15) 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  $\forall r \in C: p \leq r$

$p$  is at the lowest rank of the scale

To make space for partial preorder scales, we can change this to:

$\text{only}_{C,\leq}(p)$  presupposes that  $\neg \exists r \in C: r < p$

Nothing is strictly lower than  $p$ .

## Obvious problems

(16) Arsenal only finished in 5th place.

There are 15 lower places.

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

What about bronze (or even a non-medal finish)?

## Sequences of *only*'s

- (18) Most people here have many children.  
Not so Bill and John. John only has 2 children. And Bill only has 3.
- (19) [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 preadjacent], and indicates that [it] does not need to be considered a ‘contextually relevant’ alternative. Thus, the preadjacent of the second only should not be compared to it, but to another higher alternative.”*

## 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:

(20) 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 noteworthy low.

**Next week**

## **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)**

(Minimal) Sufficiency

## **Day Eight (Fri July 26)**

The *only* connectives