

Even and Only: Arguing for parallels in scalarity and in constructing focus alternatives¹

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0. Introduction and goal:

- An old intuition about *only* and *even* is that they are **opposites**, or **antonyms**:

(1) a. *David only wears a bow tie when [teaching]_F*

b. *David even wears a bow tie when [teaching]_F*

“Whereas the function of exclusives is to comment on an overly **strong** expectation.... the function of a scalar additive is to comment on an overly **weak** expectation ...whereas (1a) is appropriate if wearing a bow tie when teaching is **less**, e.g., eccentric than had been expected or previously indicated, (1b) is appropriate if wearing a bow tie when teaching is regarded as significantly **more**, e.g., eccentric than has been expected or previously indicated”. (Beaver & Clark 2008, p. 71)

- This ‘antonymy’ intuition is common, but it is many time **NOT reflected** in the entries often given to *even* and to *only* in the literature:

- *Even* is usually given an entry along the lines of (2) (cf. Horn 1969, Karttunen & Peters 1979, Rooth 1985, 1992)

(2) $\llbracket \text{even} \rrbracket^{\mathcal{C}} = \lambda C. \lambda p. \lambda w. \exists q \in C q \neq p \wedge q(w) = 1 \wedge \forall q \in C q \neq p \rightarrow p >_C q. p(w) = 1$

- *even* **presupposes** that there is at least one true focus alternative to its prejacet (*p*) in the contextually relevant set of focus alternatives, *C* (**‘additive ps.’**), and that *p* is the strongest alternatives in *C* on a scale (**‘scalar ps.’**). It **asserts** that *p* is true.
- (Notice: we postpone discussion of debated components in (2) to later):
 - the necessity of the additive ps. (cf. Krifka 1991, Rullmann 1997, 2007, Lahiri 2008, Wagner 2014, Greenberg 2016, Sabolzi 2017, Francis 2018)
 - the universal quantification in the scalar ps. (cf. Kay 1990, Rullmann 1997, 2007, Greenberg 2016)
 - The nature of the scale (Karttunen & Peters 1979, Rooth 1985, 1992, Kay 1990, Herburger 2000, Rullmann 1997, 2007, Greenberg 2016, 2018))

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- ❖ *Only* has been given various entries: I will concentrate here on three versions: **NON-SCALAR**, **SCALAR**, and **HYBRID** (I ignore here many sub-versions)

- For all entries I adopt the assumption that *p* is presupposed (debated):

(3) //only//^{g,c} -

a. **NON-SCALAR** - $\lambda C. \lambda p. \lambda w: p(w)=1. \forall q \in C \ q \neq p \rightarrow q(w)=0$ - (cf. Horn 1969, Karttunen & Peters 1979, Rooth 1992, Krifka 1992)

- Presupposition: *p* is true. Assertion: **All** distinct alternatives to *p* in C are **false**.

b. **SCALAR** $\lambda C. \lambda p. \lambda w: p(w)=1. \forall q \in C [q \neq p \wedge q >_C p] \rightarrow q(w)=0$ (cf. Klinedinst 2005, Beaver and Clark 2008, Roberts 2011, Coppock & Beaver 2014, Alxatib 2013, Liu 2017):

- Presupposition: *p* is true. Assertion: **All** distinct alternatives to *p* in C, **which are stronger than *p*** on a scale (entailment / or evaluative), are **false**

- Entailment scales

- *I only invited [John]_F { I invited John < I invited John and Bill < I invited John and Bill and Harry }*

- Evaluative / rank order scales

- *John is only [a clerk]_F { John is a clerk < John is a teacher < John is a lawyer < John is a university professor }*

- **Crucially - neither these entries of *only* capture the ‘antonymy-with-even’ intuition:**

- They require **all / all stronger** alternatives to *p* in C **to be false**

- But **DON’T** make any requirement as to the **strength** of all alternatives to *p* to start with.

- In contrast – the entry for *even* **DOES** make a requirement regarding the **strength** of all alternatives to *p* in C (they must all be weaker than *p*)

- But **DOESN’T** require anything regarding the **truth / falsehood** of **all** these alternatives.

- An entry for *only* which gets closer to capturing the ‘antonymy-with-even’ intuition is the **HYBRID** one in (4), inspired by König 1991 Guerzoni 2003)
 - ‘**HYBRID**’- since it has both **scalar** and **non-scalar** components (independent)

(4) **HYBRID** - $\lambda C. \lambda p. \lambda w: p(w) = 1 \wedge \forall q \in C q \neq p \rightarrow p <_C q. \forall q \in C q \neq p \rightarrow q(w) = 0$

- Presupposition I: p is true + Presupposition II (scalar): p is the weakest alternative in C (=all alternatives to p in C are stronger than it).
 - (Notice: This is a mirror image of the scalar ps. of *even* - requiring p to be strongest alternative in C , i.e. that all other alternatives are weaker)
- Assertion (classical exclusive non-scalar): All distinct alternatives in C are false (i.e. none of them is true)
 - (Notice: This is a mirror image of the additive presupposition of *even* - requiring that some distinct alternative in C is true)

Goal of this paper:

Provide arguments for the **HYBRID** entry of *only* as in (4) over the **NON-SCALAR** and the **SCALAR** entries in (3a-3b) – so the antonymy of *only* and *even* is better captured.

1. First argument for the HYBRID entry: Explaining infelicitous cases of *only*

- Consider *only* in (5) (cf. Orenstein & Greenberg 2013, Orenstein 2016):
- (5) a. *John has 2 kids. Henry has 4 kids and Bill (#only) has 3 kids.*
 (cf. *John has 4 kids. Henry has 3 kids and Bill (only) has 2 kids*)
- b. *Ian won the gold medal, John won bronze, and Bill (#only) won silver*
 (cf. *Ian won the gold medal, John won silver, and Bill (only) won bronze*)
- c. (Who did each of the reporters interview yesterday?)
 John interviewed the minister’s assistant, Henry interviewd the prime minister, and Bill (??only) interviewed the minister.
 (cf. *John interviewd the prime minister, Harry interviewed the minister,, and Bill (only) interviewed the minister’s assistant.*)

- We assume that the salient VPs in the preceding sentences help construct the contextually relevant set of alternatives C – at least partially (Cf. Fox & Katzir 2011, Katzir 2014, see discussion below)

(6) Sets of alternatives for (5a-c)

- a. {.... *Bill has 2 kids, Bill has 4 kids, Bill has 3 kids*}
 - b. {...*Bill won gold, Bill won bronze, Bill won silver*}
 - c. {...*Bill interviewed the prime minister, Bill interviewed the minister's assistant, Bill interviewed the minister*}
- Crucially, given these sets, **the infelicity of *only* in (5a-c) is unexplained** by both the **NON-SCALAR** and the **SCALAR** entries of *only*:
 - for both entries the assertions and presupposition of the infelicitous sentences can be fulfilled in a consistent way, with no problems:
 - E.g. for (5c) both entries presuppose that Bill interviewed the minister, and assert that
 - Bill interviewed no other individual (**NON-SCALAR** entry)
 - Bill interviewed no more important individual (**SCALAR** entry)
 - There is no problem with fulfilling the assertion and presupposition!

- **Question: So how CAN we derive the infelicity of *only* in these sentences?**
- **A possible answer (to be rejected ☹):** Perhaps using ‘**mirativity**’ constraints on *only*?
- These constraints were taken to require the prejacent of *only*, *p*, to be
 - lower than expected (Zeevat 2008),
 - to express ‘not so much’ / be lower than most alternatives (Klinedinst 2005),
 - to be lower than at least one alternative (Alxatib 2013).

- Motivation: E.g. the need to explain ‘not a lot / less than expected’ inferences (7):

(7) *John only has 2 kids* (having 2 kids is not a lot / less than expected)

- and the infelicity of *only* in sentences like (8):

(8) *John #only has 8 kids* (given typical contexts where 8 kids is a lot)

- So, maybe the infelicity of *only* in (5a-c) is due to breaking the ‘mirativity’ constraint
- **However, there are two main problems with this story ☹ :**

- **First, hardwiring ‘mirativity’ constraints into the semantics of *only* has been debated:** There are many cases where *p* is not ‘unexpected’ in any clear way, or can refer to ‘a lot’ - but *only* is perfectly felicitous
 - (cf. Roberts 2011, Orenstein & Greenberg 2012, Orenstein 2016)
- (9)
 - a. *John is 1.90m tall. His younger brother is only 1.85m tall* (**not unexpected / ‘a lot’**)
 - b. (Context: My mother and I are organizing a weekend for the whole family. We discuss the location where the families of my two sisters, Rina and Esti, will stay)
 Mom: *Rina has four kids so she will stay in the this apartment. Esti has only three kids, so she can stay in the smaller apartment.* (Orenstein 2016) (**not unexpected**)
 - c. *The book costs \$100 and I only have \$99* (Orenstein 2016) (**not unexpected / a lot**)
- **Second, and more importantly** for our point - even if we do add mirativity to the semantics of *only*, **this is not enough to explain the infelicity of *only* in (5):**
 - In all of these cases there is **no problem considering *p* as ‘less than expected’**, and **there is** an alternative **stronger** than it in C.
 - E.g. in *John won gold, Harry won bronze and Bill (#only) won silver*, the prejacent *Bill won silver* can count as ‘less than expected’, and as lower than stronger alternative than it in C (*Bill won gold*)
 - Moreover, the infelicity of *only* is maintained in sentences like (10):
- (10) (Context: How many papers did your faculty members write during the last 5 years?) *Let’s see: Susan wrote 15 papers, Sam wrote 10, Henry wrote 8, Tom wrote 9, Ted wrote 7, Ian wrote 3, and Bill (#only) wrote 4*
 - Here *p* can be clearly considered ‘**not much**’ / ‘**less than expected**’ and / **lower than most alternatives**
 - Nonetheless *only* is odd

Meanwhile conclusion: Hardwiring a mirativity constraint into the **NON-SCALAR** or the **SCALAR** entries of *only* is (a) independently debatable and (b) will not help explain the infelicity of *only* in (5) and (10).

❖ **What CAN explain this infelicity of *only*, then?**

- An intuitive observation (Orenstein & Greenberg's 2013, Orenstein's 2016): The infelicity is due to the presence of a salient VP which is 'weaker' than the VP of *p*
 - E.g. in (5a) (*John won gold, Harry won bronze and Bill (#only) won silver*) – it is the presence of the VP 'won bronze' (weaker than *won silver*)
 - In (10) it is the VP 'wrote 3 papers' (weaker than *wrote 4 papers*)

❖ **How to capture this intuition?²**

- **An important clue:** The infelicity of *only* in (5) and (10) seems like an **exact mirror image** of the infelicity of *even* in (11) and (12):

(11) a. *John has 2 kids. Henry has 4 kids and Bill (#even) has 3 kids.*

(cf. *John has 2 kids. Henry has 3 kids and Bill (even) has 4 kids*)

b. *Ian won the bronze medal, John won gold, and Bill (#even) won silver*

(cf. *Ian won the bronze medal, John won silver, and Bill (even) won gold*)

c. (Who did each of the reporters interview yesterday?)

a. *John interviewed the minister's assistant, Henry interviewed the prime minister, and Bill (??even) interviewed the minister.*

(cf. *John interviewed the minister's assistant, Henry interviewed the minister, and Bill (even) interviewed the prime minister.*)

(12) (How many papers did your faculty members write during the last 5 years?) *Let's see: Susan wrote 6 papers, Sam wrote 4, Henry wrote 7, Tom wrote 5, Ted wrote 13, Ian wrote 9, and Bill (#even) wrote 12³*

- **Crucially, unlike the mysterious infelicity of *only*, this infelicity of *even* is rather easily derivable from its standard entry:**

² Orenstein & Greenberg 2013, Orenstein 2016 proposed supplementing the **SCALAR** entry of *even* in (2b) with the presupposition that all 'salient' alternatives to *p* are stronger than it. We believe that the **HYBRID** entry in (3) is a better solution, since it is more general, and less 'ad hoc', and is (indirectly) supported by cross linguistic data.

³ The infelicity of *even* in such sentences supports the universal quantification over alternatives in the scalar ps. ('*p* is stronger than all alternatives in C') over accounts as in e.g. Kay 1990, arguing that *p* just needs to be stronger than a 'context proposition' (see e.g. Greenberg 2016 for a discussion)

- We again assume, following Fox & Katzir 2011, Katzir 2014, that discourse salient VPs help construct alternatives in the C sets.

- E.g. for (11a) (*John has 2 kids. Henry has 4 kids and Bill (#even) has 3 kids*), we take C to be (13):

(13) {*Bill has 2 kids, Bill has 4 kids, Bill has 3 kid*}

- ❖ Thus, *even* is **infelicitous in (11a) since** its (standard) scalar presupposition, requiring that *p* is the strongest alternative in *p*, **fails**:

- **The C set has an alternative (*Bill has 4 kids*) which is stronger than *p***

- **Back to only:** Now we can see that the **HYBRID** entry can straightforwardly account for its infelicity in the sentences above in an exact parallel fashion (↺):

- Take again (5a) (*John has 2 kids. Henry has 4 kids and Bill (#only) has 3 kids*)

- ❖ *Only* is **infelicitous here since the scalar presupposition** in the **HYBRID** entry (requiring that *p* is the weakest element in C) **fails**:

- **Here the C set has an alternative (*Bill has 2 kids*) which is weaker than *p***

Meanwhile conclusion: The **HYBRID** semantics of *only* fares better than the (more popular) **NON-SCALAR** and **SCALAR** entries: It can account for the infelicity of *only* in mirror imaged cases to infelicitous uses of *even*.

2. **Second argument for the HYBRID entry: Deriving ‘mirativity’ of only:**

- We saw before that although *only* tends to trigger a mirative, ‘below than expected / from’ effects, its debatable whether mirativity should not be hardwired into its semantics
 - Since, e.g. there are cases where these mirativity effects disappear.
- **But then, how CAN we explain the common presence of such effects with *only*?**
- **An answer:** We can try to derive these effects from the interaction between:
 - the scalar presupposition in the **HYBRID** entry in (2c), and
 - the assumption (cf. Krifka 2000 on *still*, Beaver & Clark 2008, Orenstein 2016) that since alternatives in C are those which are contextually relevant / entertainable, using *only* puts constraints on the context.

- Specifically : In the null context the use of *only* leads to accommodating into C only alternatives stronger than *p* (given the scalar ps. in the **HYBRID** entry)
 - Thus, such an accommodation indicates that ‘stronger’ alternatives are contextually entertainable, reasonable and, ‘expected’.
 - So relative to these accommodated – and contextually entertainable - alternatives, *p* is indeed considered ‘not a lot’ / ‘less than expected’.
 - Moreover, when such an accommodation clashes with existing contextual assumptions about what is reasonable / expected (e.g. regarding number of kids), we end up with infelicity (*John (#only) has 8 kids*)
 - A novel support for this line of thought:
 - We observe that **the cases where mirativity effects of *only* are reported to disappear** (as in (9)) are exactly those where **there is discourse salient material** (e.g. VPs) which can be used to **construct stronger alternatives**:
- (9) a. *John is 1.90m tall. His younger brother is only 1.85m tall*
 b. (Context: My mother and I are organizing a weekend for the whole family. We discuss the location where the families of my two sisters, Rina and Esti will stay):
 Mom: *Rina has four kids so he will stay in this apartment. Esti has only three kids, so she can stay in the smaller apartment.* (Orenstein 2016, p. 46)
 c. *The book costs \$100 and I only have \$99* (Orenstein 2016, p. 113)
- So perhaps mirativity effects disappear in such cases exactly since **accommodating alternatives into C is not needed in them**:
 - In such cases the speaker can exploit the discourse salient VPs (in the preceding sentences) for constructing the alternatives.
 - Thus - no assumptions about what is or what is not reasonable / expected in the context are made in such cases
 - so no ‘less than expected’ inferences are triggered.

Meanwhile conclusion: Mirativity of *only* is derived (not hardwired). In all its uses *only p* just presupposes that *p* is weaker than all its focus alternatives in C (as in the **HYBRID** entry)

3. Third argument for the HYBRID entry: Cross linguistic parallels

- Various theories see (some) *even*-like and *only*-like particles cross linguistically as part of a family of scalar operators, which differ along parameters like
 - **Additivity** (vs. exclusivity), **Ordering** of the scale ($p > q$ vs. $p < q$), **Dimension of the scale** (entailment-based / rank order etc.), **Degree of context dependency** (high / low), **type of alternatives** (e.g. sum vs. atomic based / overt vs. covert based / ‘propositional’ vs. speech act based), **Scope taking properties**, **Asserted vs. presupposed status**, etc. (e.g. Tomaszewicz 2011, Zimmermann 2014, Grubic 2015, Charnavel 2017, Greenberg & Orenstein 2016, Liu 2017, Greenberg (to appear))
- **Given the HYBRID entry we can now see English *even* and *only* as members of this family as well:**
 - E.g. *even* and *only* get different specifications along the ‘ordering’ parameter:
 - Scalar presupposition for *even*: $p >_C q$
 - Scalar presupposition for *only*: $p <_C q$
 - Moreover, assuming that *even* has an additive presupposition as well (as in (2)), they also differ along the ‘additivity-vs.-exclusivity’ parameter:
 - Additive presupposition for *even*: $\exists q \in C q \neq p \wedge q(w) = 1$
 - exclusive assertion for *only*: $\neg \exists q \in C q \neq p \wedge q(w) = 1$.
 - Theories which doubt that English *even* is a true additive (e.g. Rullmann 1997, Lahiri 2007, Krifka 1995, Greenberg 2016) can take it to be **unspecified** with respect to this parameter.
 - And take other *even*-like particles (Russian *daze* (Miashkur 2017) or Hebrew *af* (Greenberg & Orenstein 2016)) to be necessarily specified for additivity

❖ **There are two types of existing observations which further support this approach:**

- **First observation:** report of particles which are ambiguous between $p <_C q$ vs. $p >_C q$ (in UE contexts), i.e. which are **UNSPECIFIED for ordering of the scale** parameter:
 - E.g. Blackfoot *ikak* (Bliss 2010), West African *kapa* Grubic (2012), Russian *voobsce* (Miashkur 2017)

- **Second observation:** Reports of ‘exclusive *even*-like’ particles
 - They behave like *even* w.r.t. scalarity ($p >_c q$)
 - and like *only* w.r.t. exclusivity $\neg \exists q \in C \ q \neq p \wedge q(w) = 1$
 - E.g. Japanese *deka demo* (Nakanishi 2006), German *auch nur* (Guerzoni 2004), Polish *az* (Tomaszewicz 2011), Russian *voobsce*
 - The presence of such particles is predicted if scalarity and exclusivity are distinct parameters in the semantics of scalar particles –
 - This is exactly what we get if we adopt **the traditional entry of *even***, and the **HYBRID** entry for *only*
 - – In both entries additivity and exclusivity are separated
 - On the other hand - the existence of such particles is less predicted if
 - Exclusivity is just a special case of the scalarity of *only* (employing an ‘entailment-based’ scale), as in existing **SCALAR** approaches
 - or if *only* is not scalar at all, as in **NON-SCALAR** approaches.
- A (partial and preliminary) picture of some of the particles along three parameters
 - Notice: Extendable both **horizontally** and **vertically**, cf. Greenberg (in progress):

Particle ↓ ↓	Parameter →→	Factivity (of p)	Additivity vs. exclusivity	Ordering of the scale (in UE contexts)	→
<i>Only</i> (English) / <i>rak</i> (Hebrew)		Ps.	Exclusive (asserted)	$p <_c q$	
<i>Even</i> (English) / <i>afilu</i> (Hebrew)		Asserted	UNSPECIFIED	$p >_c q$	
<i>Daze</i> (Russian)/ <i>af</i> (Hebrew)		Asserted	Additive (ps.)		
<i>Deka demo</i> (Japanese) / <i>auch nur</i> (German)		?	Exclusive (asserted?)	$p >_c q$	
<i>Ikak</i> (Blackfoot) / <i>Kapa</i> (West African)		?	?	UNSPECIFIED	
<i>Voobsce</i> (Russian)		Ps.	exclusive	UNSPECIFIED	
↓					

Meanwhile conclusion: Adopting the **HYBRID** entry of *only* strengthens a more unified ‘parametric view’ of scalar – *even*-like and *only*-like - particles in natural language.

4. Summary and directions:

4.1 Summary

- ❖ I argued for a **HYBRID** semantics for *only* (Guerzoni 2003) over more commonly used (**NON-SCALAR** / **SCALAR**) entries
 - Given this entry *only* has a **scalar presupposition** – requiring that *p* is the weakest alternative in C (in addition to presupposing the truth of *p*), and a **non-scalar** assertion requiring that all distinct alternatives to *p* in C are false
- ❖ This hybrid entry gets closer to capturing the intuitive ‘antonymy of *even* and *only*’ than has been done so far.
 - **And it has three more specific advantages:**
 - A. It allows us to account for some cases of infelicity of *only*
 - And for the fact that this infelicity is a mirror image of the infelicity of *even*
 - B. It enables us to correctly predict when mirativity effects of *only* will arise and when not (instead of hardwiring them into its semantics)
 - C. It makes English *only* and *even* more easily part of the larger family of scalar particles cross linguistically,
 - which differ along parameters such as scalar ordering, additivity vs. exclusivity, etc.

4.2 Directions and questions for further research:

Main direction here: How far can we push a unified (mirror imaged) semantics for *only* and *even*?

- E.g. how far can we unify
 - ❖ The dimension of the scale for *even* and *only* ? (4.2.1)
 - ❖ ‘Sensitivity to norms’ / mirativity? (4.2.2)
 - ❖ Constraints on constructing and pruning alternatives? (4.2.3)

4.2.1 Can we unify the dimension of the scale for *even* and *only*?

❖ Answer: Possibly yes:

- An obvious problem for such a unification:
 - The dimension of the scale for *even* is traditionally taken to (un)likelihood ($p <_{\text{likely}} q$) (e.g. Karttunen and Peters 1979, Rooth 1992, Lahiri 1998, Chierchia 2013)
 - This does not seem to be operative for *only*, which was reported to involve entailment-based / semi lattice or ‘evaluative’ / rank order scales (e.g. Beaver & Clark 2008, Coppock & Beaver 2014, Roberts 2011, etc.)
- But this likelihood-based story for *even* has been challenged (e.g. Kay 1990, Rullmann 1997, 2007, Herburger 2000, Gast & van der Auwera 2011, Greenberg, 2015, 2016, 2018, Eliot et al 2017)
- Instead – *even* has been argued to rely on scales based on ‘pragmatic strength’ (Kay), noteworthiness (Herburger), a contextually supplied gradable property (Rullman, Gast & van der Auwera, Greenberg).
 - Greenberg 2018: formally models such scales,
 - Suggests that similar modeling can be helpful for capturing ‘evaluative’s for *only*, as well as for entailment-based scales
 - cf. Liu 2017 on potential ‘entailment-based’ scales for *even*-like particles in Mandarin

4.2.2 Can we unify the account of mirativity / sensitivity to standards with *even* and *only*?

- **Answer: Not clear yet:**

- We suggested before that mirativity ('*p* is less than expected / norm') is not hardwired into the semantics of *only*, but can be derived
 - Accommodating into C only contextually relevant alternatives stronger than *p* makes *p* 'less than the norm' in the context.
- **But** it is not clear that a similar story can be told with respect to the apparent mirror imaged mirativity effect with *even* ("*p* is more than expected / norm")
 - Because the 'more than the norm' inference with *even* holds not only for the prejacent of *even*, *p*, but also for its alternatives (Greenberg 2015, 2018):

(14) *John is 1.75m tall. Bill is (even) taller.*

- Without *even*: No entailment that John or Bill are tall ("...and both are short")
- With *even*: Entailing that both John and Bill are tall ("..."and both are short" / #"..."But John is short")

(15) *John is 1.70. He is short. Bill is (#even) taller – he is 1.90.*

- **Conclusion for *even*:** Mirativity / 'more than the norm' effects cannot be derived in the way we tried for *only* - it must be hardwired into its semantics (cf. Greenberg 2018)
- Should be perhaps go for the opposite direction and nonetheless hardwire a mirror imaged mirror constraint into the semantics of *only*?
 - Not clear yet:
 - Unlike the situation with *even*, with *only* the mirativity effects hold just for the prejacent and NOT for the alternatives:
 - E.g. *only* is perfectly felicitous in (16)

(16) *John is 1.90. He is tall. Bill is only 1.70*

4.2.3 Can we unify constructing and pruning alternatives in C for *even* and *only*?

- **Answer: Probably yes, but....**
- Above we assumed that discourse salient material (e.g. VPs in a preceding sentence) is used to **add** alternatives to C for both *even* and *only* (cf. Fox & Katzir 2011, Katzir 2014)
 - This was based on mirror imaged **infelicity of *even* and *only*** where the discourse contained salient VPs which were stronger / weaker than *p*, respectively
- But it seems that similar principles are at work also in **pruning** alternatives from C
 - This is seen when we consider **the mirror imaged felicity of *even* and *only*** – with lexically supplied alternatives which are stronger / weaker than *p*:

(17) *John won the bronze medal in the competition. Bill even won [silver]_F*

(18) Apparent C for (17): { *Bill won bronze_{discourse}*, *Bill won gold_{lexicon}*, *Bill won silver*, }

- But this wrongly predicts that *even* is infelicitous in (17) (C has an alternative stronger than *p*). So the actual C set seems to be (19):

(19) Actual C for (17): { *Bill won bronze_{discourse}*, ~~*Bill won gold_{lexicon}*~~, *Bill won silver*, }

(20) *John won the gold medal. Bill only won [silver]_F*

(21) Apparent C for (20): { *Bill won bronze_{lexicon}*, *Bill won gold_{discourse}*, *Bill won silver*, }

- But this wrongly predicts that *only* is infelicitous in (20) (C has an alternative weaker than *p*) So the actual C set seems to be (22):

(22) Actual C for (20): { ~~*Bill won bronze_{lexicon}*~~, *Bill won gold_{discourse}*, *Bill won silver*, }

- **Preliminary conclusion: When discourse supplied alternatives are available in C, lexically provided ones are / can be pruned – with both *even* and *only*.**
 - **But**More research is needed here: Ignoring contextual alternatives and adding lexical ones into C was claimed to be important for resolving the symmetry problem with *only* (cf. Katzir 2014, and others).⁴

⁴ In this respect it is interesting to compare this priority of contextually supplied alternatives over lexically supplied ones with *even* and *only* to the priority given to contextual alternatives by children in calculating scalar implicatures (as reported in Barner et al 2011)), and in giving some conjunctive readings of disjunctions (cf. Singh et al 2016). Thanks to Roni Katzir for pointing out this connection.

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