Even as a scalar additive: Some last pieces of the puzzle

Yesteday we looked at *even:* A particle described in the literature as **scalar additive**

• We started with the traditional entry of *even* as a scalar additive focus particle:

||even||g,c λC . $\lambda p.\lambda w$: $\exists q \ q \neq p \land q(w) = 1 \land \forall q \in C \ q \neq p \rightarrow p >_{unlikely} q. \ p(w) = 1$ In prose: even (C)(p)(w):

- Assertion: p is true in w
- <u>An additive presupposition (=also):</u> At least one distinct alternative in C is true in w
- A scalar presupposition: p is less likely than any distinct alternative in C
- We raised issues for both the <u>scalarity</u> as well as for the <u>additivity</u> of even:

Even as a scalar additive particle

· Regarding the additivity of even:

- We claimed that unlike also, even is actually NOT inherently additive
 - We also saw that cross-linguistically additivity is a parameter along which even-like particles vary (additive / exclusive / unspecified even-like particles)
 - So additivity is not inherent to an even-like operation

· Regarding the scalarity of even:

- We pointed out challenges for the 'comparative-unlikelihood' scalar presupposition of even:
 - We saw that there are many cases where even p is perfectly felicitous although no 'less likely' inference arises.
 - And that contextual factors affecting the felicity of even do not have to do with (un)likelihood judgements
- We also saw that the 'comparative' requirement is not enough even also makes an evaluative ('above the standard')requirement)

We suggested that the traditional scalar presupposition of *even* should be replaced by a <u>degree-based presupposition</u>

- This presupposition relies on scales associated with contextuallysupplied gradable properties
- It includes not only a comparative, but also an **evaluative** component:
 - It requires p and its alternatives to lead to degrees above the standard on these scale
- We furthermore suggested that the common / default 'less likely' inference of even is NOT hardwired (i.e. even is not a 'mirative' particle, designed to encode 'surprise' /'above expectations').
- Rather, the common 'less likely' / unexpected inference can be <u>derived</u> from
 - This 'above the standard' requirement +
 - the fact that default standards are 'distributional' (=represent normal distribution
 - ➤ With functional standards the 'less likely' inferences of even disappear

Three last pieces of the puzzle: even vs. only

- In class 1 we spoke about *only*
- In class 2 we spoke about even
- <u>Conclusion so far:</u> Both particles end up being <u>scalar</u> focus sensitive particles, and <u>neither is additive</u>.
- 3 last points concerning the comparison between *even* and *only*:
 - A. Both only and even have a superlative scalarity with opposite ordering
 - So, both are not only scalar, but also constrain the set of alternatives .
 - B. But, unlike *even*, *only* also says something about the <u>truth</u> of these alternatives
 - C. In addition, whereas sthe scalarity of *even* is *evaluative*, that of *only* is not.

Last point (I): The opposite 'superlative' semantics of only and even

- In class #1 we looked at the scalar entry for *only*:
- ➤ It's assertion negates all alternatives which are stronger than p on the scale (rank order / entailment-based).
- Guerzoni 2003 added an interesting component to this kind of entry:
 - She suggested that <u>only</u> presupposes that p is the **weakest** alternative in C
 - And that in this sense only requires the opposite of even
 - Since *even* presupposes that *p* is the **strongest** alternative in C
- ➤ Notice: There are debates about whether these requirements are too strong or not (cf. Kay 1990, Xiang 2020, Greenberg 2021)

Last point (I): The opposite 'superlative' semantics of *only* and *even*

- Last time we gave a support for Guerzoni's claim about *only*:
- When there is a salient alternative weaker than *p only* is infelicitous (Greenberg 2019, 2021):
- (1) Last year John won bronze. And this year he (#only) won $[silver]_F$
- Now we can give a support for Guerzoni's claim about *even*:
- When there is a salient alternative stronger than *p* even is infelicitous (Greenebrg 2016):

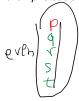
(2) Last year he won gold. This year he (#even) won [silver] $_F$

Last point (I): The opposite 'superlative' semantics of *only* and *even*

- I.e. even and only are not only <u>scalar</u> (= impose an order on the set of alternatives), but also <u>constrain</u> the set of alternatives – and in opposite ways:
 - Only presupposes that p is the weakest alternative in C –
 So any alternative weaker than p is cut out of C
 - Even presupposes that p is the **strongest** element in C –
 - \triangleright So any alternative stronger than p is $\underbrace{\mathsf{cut}}$ out of C







<u>Last point II:</u> Unlike *even, only* also says something about the truth of the alternatives to *p*:

- We looked at the mirror-imaged scalarity of only and even
- But there is also a clear asymmetry between them:
 - Only also says something about the truth of the stronger alternatives:
 - It negates them
 - Even doesn't say anything about the truth of the weaker alternatives. It indicates a strength relation only – p is stronger than all of them.
 - This motivates claims in the literature that *even* is an 'argumentative' particle: It is used to strengthen a conclusion (Winterstein 2018)
 - In a sense: It does not add information about the world, but about the way we view strength relations in the world (cf. Umbach 2012 for a similar distinction)

only P

Last point III: Do *even* and *only* also have an opposite evaluative scalarity? (Greenberg 2019, 2021)

- In class # 2 we saw that even is an evaluative particle:
 - It presupposes that p (and its alternatives) indicate a degree which is above the standard on the scale
- Is only an evaluative particle as well?
 - I.e. Does it require that *p* indicates a degree which is **below the standard** on the scale?
- On the surface, this seems to be the case -
- only was observed to have 'smallness' effects:
 - (1) John only has $[2]_E$ kids (\approx > a little)
 - (2) John (??only) has $[14]_F$ kids

Last point II: Do even and only also have an opposite evaluative scalarity? (Greenberg 2019, 2021)

- Moreover, even and only were explicitly argued to have opposite 'evaluative' effects:
 - "Only.. expresses that the size of something is disappointingly small: one expected more. Similarly, even expresses that one expected less". (Zeevat 2009)
- This intuition is supported by the opposite felicity of even and only in (1) (Greenberg 2021):
- (1) (How do you think John will do in the quiz?)
 - a. He won't do so well. I think he can **only / #even** solve [6]F problems
 - b. He will do great. I think he can even / #only solve [6]F problems
- So, do even and only really have an opposite evaluative scalarity (above vs. below the standard?)
 - The answer seems to be negative -
 - There is an 'evaluative asymmetry' between the two:

An 'evaluative asymmetry' between even and only

- The evaluative 'below the standard' inference of only is cancellable:
- (1) A: Both these pairs of shoes are expensive. The average price for a pair here is around \$50, and these two pairs cost more than \$100!
 - B: Wow. That's really expensive! Do both cost the same?
 - A: No. The red pair is \$130 and the green one is less only [\$110]_F (so it is cheaper, but not cheap it is still very expensive)
- > I.e. for only to be felicitous it is enough that p is lower than its alternatives, without being 'low'
- The evaluative 'above the standard' inference of even cannot be cancelled:
- (2) A: Both green and red pairs of shoes are cheap. The average price for a pair is around \$100, and this one costs less than \$50!
 - B: Wow, that's really cheap! Do both cost the same?
 - No. The red pair is 20\$ and the green one is (**#even**) [\$40]_F. (So it is more expensive though still very cheap).
- ➤ I.e. for even to be felicitous it is not enough that p is higher than its alternatives it has to be 'high' too

An 'evaluative asymmetry' between *even* and *only*

- So, although *even* and *only* are 'superlative scalar antonyms', they are not 'evaluative scalar antonyms':
 - The evaluativity of even (p indicates 'higher than the standard') is hardwired
 - That of only) (p indicates 'lower than the standard') is cancellable
 - ▶It is mainly found in default, 'out of the blue' cases (John only has [3]_F / #[11]_F kids)
 - > But it disappears when the sentence with *only* appears after an explicit stronger alternative:
- (1) A: Bill has 12 kids.
 - B: Wow, that's a lot! And what about John?
 - A: He has less: Only has [11]_E kids
- Why is that? (See Greenebrg 2021 for a suggestion ©)

Questions? / Comments?



Taking stock:

- Both only and even are scalar particles: Impose an ordering on the set of alternatives
- The scalarity of both is 'superlative' with an opposite ordering:
 - Even presupposes that p is the strongest alternative in C
 - Only presupposes that p is the weakest alternative in C
- On the surface, they also seem to be both 'evaluative' with opposite ordering
 - Even seems to presuppose that p indicates 'higher than the standard' / a lot
 - only seems to presuppose that p indicates 'lower than the standard' / a little
- But we argued that this is an illusion:
 - Even is a true evalutive its evaluativity effect cannot be cancelled
 - Only is not a true evaluative its evaluativity effect appears in 'out of the blue' contexts, but disappears
 if the sentence with only is utred after explicitly uttered stronger alternatives
- Notice: We will see a similar picture when we get to even vs. noch with comparatives!