# Evaluativity in *even*-hosting comparatives: Information structure and salient scales

Zhuang Chen
Bar-Ilan University
Ramat Gan, Israel
chenzhuangcq@gmail.com

**Abstract**

*Even*-hosting comparatives trigger an evaluative inference that is absent in *even*-less counterparts. Greenberg 2018 offers a degree-based account to formally explain this phenomenon, but this account is criticized by Bi 2022 for (i) failure to capture cases where *even* associates with the comparison target and, more fatally, (ii) running the risk of over-generation. Arguing for the degree-based account, this work shows how it can systematically explain this phenomenon. More crucially, by offering a novel, information structure-based argument, we claim that this account is free of any over-generation risk, and further demonstrate how this novel perspective presents a simple account for cases involving negation. Thus, apart from addressing this phenomenon per se, this work sheds light on how information structure helps to constrain the choice of the salient scales with scalar, alternative-sensitive expressions.

## 1 Introduction

English comparatives per se do not trigger any evaluative inference in the sense of Rett 2014, but intriguingly, it is observed that with the particle *even*, an evaluative inference arises. For instance, (1) triggers no evaluative inference that Alex and Bill are both tall, nor the inference that they are both short. In contrast, (2-a), where *even* associates with Bill, implies that they are both tall (see e.g., Ippolito 2007; Greenberg 2015; Greenberg 2018); and (2-b), where *even* associates with Alex, implies that they are both short (see e.g., Bi 2022). Why does such an evaluative inference arise in *even*-hosting comparatives? There must be some underlying systematic mechanism since similar observations are also made for Russian *daže*, Hebrew *afilu* and German *sogar* (Miashkur and Greenberg 2019), and Mandarin *even*-like *dōu* (Guo 2022).

(1) Alex is taller than Bill. ⇝ no **Both are tall / short** inference

(2) a. Alex is **even** taller than $[\text{Bill}]_F$ ⇝ implying **Both are tall**
b. $[\text{Alex}]_F$ is **even** taller than Bill. ⇝ implying **Both are short**

In the formal linguistics literature, Greenberg 2018 offers an account that assumes a degree-based semantics of English *even* (the degree-based account below), partly addressing the evaluativity issue in *even*-hosting comparatives. This account, however, is criticized by Bi 2022 for, among other issues, (**i**) failure to capture cases like (2-b) where *even* associates with the comparison target and, more fatally, (**ii**) running the risk of over-generation regarding the choice of the salient scale (see below). Instead, Bi 2022 offers an alternative account that assumes the canonical likelihood-based semantics of *even*.[1] This paper argues in defense of the degree-based account. Specifically, we will illustrate how it CAN systematically capture the evaluative inference with both (2-a) and (2-b) (Sect. 2), and more crucially, we offer a novel, information structure-based argument which displays that the choice of the salient scale can be independently made, thus ruling out the over-generation risk (Sect. 3). Then, this novel argument, with the degree-based account, is extended to cases involving negation (Sect. 4) before we conclude (Sect. 5).

[1] For space limits, we refer readers to Bi 2022 for details.

## 2 Systematically capturing (2) via the degree-based account

### 2.1 Greenberg's (2018) degree-based account for English *even*

Canonically, English *even* is argued to presuppose that the prejacent $p$ is less likely than all its distinct alternatives $q$ in the context $C$ and assert that the prejacent is true (Karttunen and Peters 1979; Rooth 1985; Chierchia 2013), roughly formulated as (3) [2]:

(3) $\|even\|^{g,c} = \lambda C \lambda p. : \forall q \in C\ p \neq q \rightarrow p <_{likely} q.p(w)$

This line of analysis has been challenged in terms of, among other issues, the nature of the scale *even* operates on (see e.g., Kay 1990; Rullmann 1997; Zhang 2022). In particular, Greenberg (2016, 2018) shows that $p$ being less likely than $q$ is neither necessary nor sufficient to license *even*, as respectively illustrated in (4), where the prejacent is actually more likely than its alternative but *even* is felicitous, and in (5), where giving birth to a boy and to a girl are equally likely and are both less likely than giving birth, but *even* is felicitous only with giving birth to a boy. Instead, as argued by Greenberg, the scale in (5) is contextually decided, e.g., happiness of Princess Jane.

(4) (Seller to client:) Both tools are strong. The one on the right is made of strong aluminum, and the one on the left is **even** made of $[\text{steel}]_F$. (Greenberg 2016)

(5) Context: Any princess who gives birth can stay in the palace. If she gives birth to a boy, she becomes a queen.
Princess Jane gave birth. She (**even**) gave birth to $[\text{a boy}]_F$/#$[\text{a girl}]_F$. (Greenberg 2018)

In addition, Greenberg 2018 observes that *even* requires both the prejacent and its contextually salient alternative to indicate a degree above the standard on some scale. Consider (6). *Even* is licensed only in Seller A's reply, where both tools are above the standard on the scale of strength.

(6) Context: W.r.t. strength, plastic < aluminum < NORM < iron < steel. (Greenberg 2018)
Client:I need a strong tool. What about the red and blue tools over there?
Seller (a):The red one is made of iron and the blue one is (**even**) made of $[\text{steel}]_F$.
Seller (b):The red one is made of plastic and the blue one is (#**even**) made of $[\text{aluminum}]_F$.
Seller (c):The red one is made of plastic and the blue one is (??**even**) made of $[\text{steel}]_F$.

Given such observations, Greenberg 2018 proposes a degree-based semantics of *even*, which carries a twofold presupposition (7). (see Zhang 2022 for a similar view) Specifically, as in (7), *even* contributes (**i**) a comparative presupposition (7-a) that some non-focused item $x$ in the prejacent $p$ has a higher degree on a scale associated with a contextually supplied gradable property $G$ in accessible $w_1$ worlds, worlds where the prejacent $p$ holds, than in accessible $w_2$ worlds, worlds where the alternative $q$ holds but the prejacent $p$ is false, and (**ii**) an evaluative presupposition (7-b) that this $x$ is above the standard on the $G$ scale in accessible $w_2$ worlds (; given that $x$ ranks higher on the $G$ scale in accessible $w_1$ worlds, $x$ is above the standard on the $G$ scale in accessible $w_1$ worlds as well).

(7) $\|even\|^{g,c} = \lambda C.\lambda p.\lambda w. : \forall q \in C[q \neq p \rightarrow \forall w_1, w_2[w_1 R w \wedge w_2 R w \wedge w_1 \in p \wedge w_2 \in [q \wedge \neg p] \rightarrow$
a. $[\max(\lambda d_1.G(d_1)(x)(w_1)) > \max(\lambda d_2.G(d_2)(x)(w_2)) \wedge$ **Comparative Ps.**
b. $\max(\lambda d_2.G(d_2)(x)(w_2)) > \text{Stand}_G]]]$ **Evaluative Ps.**
c. $p(w)$ **Assertion**

[2] Debates exist regarding whether *even* also has an additive presupposition that some alternative to $p$ is true in the world of evaluation, which is orthogonal to us. See e.g., Rullmann 1997; Wagner 2013; Greenberg 2016.

## 2.2 How the degree-based account systematically captures (2-a) and (2-b)

First, let's illustrate how entry (7) accounts for (2-a) (repeated as (8-a)), where *even* associates with the comparison standard Bill.[3] For simplicity, let's assume that the focused item Bill has only one relevant alternative in the context, say, Chris, thus an alternative set as in (8-b).

(8) a. Alex is **even** taller than $[\text{Bill}]_F$. $\rightsquigarrow$ implying **Both are tall**
b. Alt. Set ={Alex is taller than Bill, Alex is taller than Chris.}(prejacent underlined)

Assuming for (8-a) that the non-focused item is Alex and that the contextually salient gradable property $G$ is `tallness` (see more on this below), we obtain interpretation (9) via entry (7):

(9) $\|(8\text{-a})\|^{g,c} = . : \forall q \in C[q \neq p \rightarrow \forall w_1, w_2[w_1 R w \wedge w_2 R w \wedge w_1 \in p \wedge w_2 \in [q \wedge \neg p] \rightarrow$
a. $[\max(\lambda d_1.\text{tallness}(d_1)(\text{Alex})(w_1)) > \max(\lambda d_2.\text{tallness}(d_2)(\text{Alex})(w_2)) \wedge$ **Com. Ps.**
b. $\max(\lambda d_2.\text{tallness}(d_2)(\text{Alex})(w_2)) > \text{Stand}_{\text{tallness}}]]]$ **Eval. Ps.**
c. Alex is taller than Bill. **Assertion**

where $p$ = Alex is taller than **Bill**, $q$ = Alex is taller than **Chris**.

In prose, the comparative presupposition says that Alex ranks higher on the `tallness` scale in accessible $w_1$ worlds, worlds where $p$ (Alex exceeds Bill in height) holds, than in accessible $w_2$ worlds, worlds where $[q \wedge \neg p]$ (Alex exceeds Chris but not Bill in height) holds. This is trivially satisfied. But crucially, the evaluative presupposition says that Alex is above the standard on the `tallness` scale in $w_2$ worlds; given that in $w_2$ worlds Alex does not exceed Bill in height, Bill must be also above the standard on the `tallness` scale.[4] Note that the focused item, i.e., Bill in this case, remains invariant across $w_1$ and $w_2$ worlds w.r.t. $G$ (i.e., `tallness`), and is thus above the standard on the `tallness` scale in accessible $w_1$ worlds, too. Now the prejacent asserts that in height Alex exceeds Bill, whose `tallness` is invariant and above the standard on the `tallness` scale, Alex is therefore also inferred to be above the standard on the `tallness` scale, thus the evaluative inference that they are both tall. (see Fig. 1)

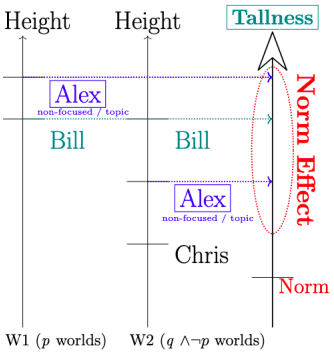


Figure 1: Interpretation of (8-a) via (7)

Crucially, pace Bi 2022, we argue that entry (7) naturally accounts for (2-b)(repeated as (10-a)) as well, where *even* associates with the comparison target Alex, and evokes the inference that Alex and Bill are both short. Likewise, for simplicity, we assume Chris as the only relevant alternative to the focused item Alex in the context, thus the alternative set (10-b).

(10) a. $[\text{Alex}]_F$ is **even** taller than Bill. $\rightsquigarrow$ implying **Both are short**
b. Alt. Set = {Alex is taller than Bill, Chris is taller than Bill.}(prejacent underlined)

Let's assume for (10-a) that the non-focused item $x$ is Bill, and that the contextually supplied gradable property $G$ is `shortness` (see more on this below). Then, applying entry (7) to (10-a) returns interpretation (11):

(11) $\|(10\text{-a})\|^{g,c} = . : \forall q \in C[q \neq p \rightarrow \forall w_1, w_2[w_1 R w \wedge w_2 R w \wedge w_1 \in p \wedge w_2 \in [q \wedge \neg p] \rightarrow$
a. $[\max(\lambda d_1.\text{shortness}(d_1)(\text{Bill})(w_1)) > \max(\lambda d_2.\text{shortness}(d_2)(\text{Bill})(w_2)) \wedge$ **C. Ps.**
b. $\max(\lambda d_2.\text{shortness}(d_2)(\text{Bill})(w_2)) > \text{Stand}_{\text{shortness}}]]]$ **Eval. Ps.**
c. Alex is taller than Bill. **Assertion**

where $p$ = **Alex** is taller than Bill, $q$ = **Chris** is taller than Bill.

[3] Note in the original example by Greenberg 2018, *even* is assumed to associate with comparative marker *-er*.
[4] Whether the alternative Chris is above the standard on the $G$ (i.e., `tallness` for (8-a)/(9)) scale or not is unknown and makes no difference. This is also the case for the interpretation in (11) and (18) later.

The comparative presupposition says that Bill ranks higher on the `shortness` scale in accessible $w_1$ worlds, worlds where $p$ (Alex exceeds Bill in height) holds, than in accessible $w_2$ worlds, worlds where $[q \wedge \neg p]$ (Chris but not Alex exceeds Bill in height) holds. This is trivially satisfied. Crucially, the evaluative presupposition says that Bill is above the standard on the `shortness` scale in accessible $w_2$ worlds; given that in $w_2$ worlds Alex does not exceed Bill in height, Alex must be also above the standard on the `shortness` scale. Recall that the focused item, i.e., Alex in this case, remains invariant across $w_1$ and $w_2$ worlds w.r.t. to $G$ (i.e., `shortness` here), and is consequently above the standard on the `shortness` scale in $w_1$ worlds, too. Now the prejacent asserts that Alex (, who is above the standard on the `shortness` scale and remains invariant across worlds) exceeds Bill in height, Bill is thus also inferred to be above the standard on the `shortness` scale, evoking the inference that they are both short. (see Fig. 2)

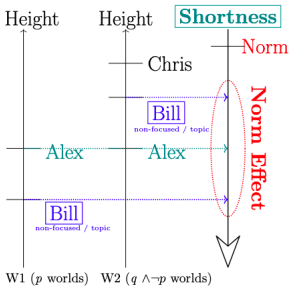


Figure 2: Interpretation of (10-a) via (7)

## 3 No over-generation: Constraining $G$ via information structure

The successful derivation of the evaluative inference above crucially depends on the assumption that the contextually supplied gradable property $G$ is taken to be `tallness` in (2-a) but `shortness` in (2-b). But is this not stipulated? Is the interpretation of $G$ as `tallness` in (2-a) but as `shortness` in (2-b) too flexible, thus running the risk of over-generation? Remember that Bi 2022 argues the $G$ should be `tallness` in both cases in (2), as in both cases we use the salient adjective `tall`. In this section, we show how the information structure helps to determine $G$ independently, thus ruling out the over-generation risk.

First let's recall that following entry (7), *even* maps to a contextually salient scale based on $G$.[5] If we assume, reasonably, that (2), out of the blue, concerns the height of the non-focused item, and assume, quite standardly, that `tallness` and `shortness` are essentially associated with the same height scale with a reversed ordering, then the most plausible $G$ scale *even* maps to in (2) is either `tallness` or `shortness`. Bearing this in mind, we make the novel observation that even without *even* (i.e., for the prejacent 'Alex is taller than Bill' itself), the difference in information structure between (2-a) and (2-b) – namely the difference in the focused material – independently leads to the `tallness` scale in (2-a) and the `shortness` scale in (2-b).

To see this point, let's look at the interaction of the prejacent with the connective *but* and the particle *also* respectively. As per Winterstein 2012; Winterstein 2018, two conjuncts conjoined by *but*, as in $q$ *but* $p$, stand in opposed argumentative orientation; for *but* to be licensed, there must be some apparent goal such that the first conjunct $q$ argues for this goal while the second conjunct $p$ argues against this goal. In contrast, the prejacent of *also*, $p$, and its salient antecedent $q$, as in $q$ *also* $p$, are in argumentative co-orientation. For *also* to be licensed, $q$ and $p$ should argue for the same goal. Now consider (12) (adapted from Winterstein 2012) where the second conjunct of *but* is the prejacent of (2-a).

(12) a. Alex is tall, (#but) he is taller than $[\text{Bill}]_F$.
b. Alex is short, but he is taller $[\text{Bill}]_F$.

Winterstein 2012 observes and experimentally establishes that in data like (12-a) *but*, with no other contextual information, is not licensed. Following Winterstein 2012, this is because out of the blue, there lacks an apparent goal which the first conjunct in (12-a) would argue for but the second conjunct would argue against; instead, in Winterstein's (2012) words, the two conjuncts are 'co-oriented', so *but* is odd. In particular, if we assume, plausibly, that 'Alex is tall', without

[5] See also Zhang 2022 who argues that *even* necessarily addresses a contextually salient degree question.

any other contextual clue, argues for the `tallness` of Alex, this indicates that 'Alex is taller than $[\text{Bill}]_F$' (i.e., the prejacent of (2-a)), also argues for his `tallness` (following Winterstein's (2012) ideas – it raises the conditional probability of 'Alex is tall', although it does not entail that). We now predict then, that *but* would be licensed only if the first conjunct argues for the reversal of `tallness`, i.e., `shortness`. This is indeed borne out in (12-b). We take this to be independent evidence that out of the blue, in (2-a), where Bill is focused, the scale is based on `tallness` but not `shortness`. Now consider the interaction with *also* as in (13):

(13) a. Alex is tall; he is (also) taller than $[\text{Bill}]_F$.
b. Alex is short; he is (#also) taller than $[\text{Bill}]_F$.

Recall that *also* requires both $q$ and $p$ to argue for the same goal. In (13), *also* is licensed in (13-a) where the prejacent of (2-a) is conjoined with 'Alex is tall' that argues for `tallness` of Alex, but *also* is not licensed in (13-b), where the prejacent is conjoined with 'Alex is short' that argues for the `shortness` of Alex. The felicity contrast lends further support to our point.

Crucially, we can now show that this reasoning can also correctly predict that the scale in (2-b), where the subject Alex is focused, is that of `shortness`. In (14), *but* is licensed only when the other conjunct argues for `tallness` of Bill (14-a) and *also* is licensed only when the salient antecedent argues for the `shortness` of Bill (15-b), indicating that the prejacent of (2-b) (i.e., '$[\text{Alex}]_F$ is taller than Bill') can only argue for `shortness` without other contextual information.

(14) a. Bill is tall, (but) $[\text{Alex}]_F$ is taller than him.
b. Bill is short, (#but) $[\text{Alex}]_F$ is taller than him.

(15) a. Bill is tall; $[\text{Alex}]_F$ is (#also) taller than him.
b. Bill is short; $[\text{Alex}]_F$ is (also) taller than him.

## 4 Extending to cases involving negation

Now we extend the degree-based account to comparative cases involving negation, and show how the choice of the salient scale via information structure offers an alternative, straightforward mechanism to account for the evaluative inference in such cases. Consider (16) from Bi 2022.

(16) a. Alex is not **even** taller than $[\text{Bill}]_F$. ⇝ implying **both are SHORT**
b. $[\text{Alex}]_F$ is not **even** taller than Bill. ⇝ implying **both are TALL**

Intuitively, (16-a) implies that Alex and Bill are both *short*, instead of *tall* (cf.(2-a)) while (16-b) implies that they are both *tall*, instead of *short* (cf. (2-b)). This flip is apparently due to the interaction between the downward entailing (DE) operator *not* and the particle *even*. There are two well-known relevant lines of analysis of *even* that commonly assume *even*'s scale to be based on likelihood, i.e., the scope theory (e.g., Karttunen and Peters 1979; Wilkinson 1996; Guerzoni 2004; Nakanish 2012) and the lexical ambiguity theory (e.g., Rooth 1985; Rullmann 1997; Giannakidou 2007). Roughly, the scope theory argues that there is just one *even* (i.e., (3)) but it can somehow scope out of the DE operator at the logical form. In contrast, the lexical ambiguity theory argues that there exist two *even*s: the positive polarity item *even* ($even_{ppi}$) and the negative polarity item *even* ($even_{npi}$) licensed in the scope of DE operators. $Even_{ppi}$ and $even_{npi}$ trigger a reversed presupposition: $even_{ppi}$ presupposes that the prejacent $p$ is the *least likely* alternative in $C$, while $even_{npi}$ presupposes that $p$ is the *most likely* alternative in $C$.

To account for the flipped evaluative inference in (16), an attempt assuming a likelihood-based semantics of *even* needs to decide between the two theories. For instance, Bi's (2022) account assumes the likelihood-based semantics. To explain the flip in (16), Bi assumes the lexical ambiguity theory and adopts $even_{npi}$ for such cases (see Bi 2022 for details). In principle, Bi's

account can also adopt the scope theory and assumes entry (3) for *even*, but if so, *even* has to be assumed to scope out of *not* for (16-a) and (16-b) in order to obtain our intuitive readings.

We are totally neutral regarding the two theories and have no intention to step into the debate. Instead, we intend to show how the degree-based account, along with determining the salient scale via information structure, presents a simple alternative explanation for this flip. First, reconsider (16-a). Akin to what we did above, let's assume that (16-a), without any other contextual clue, has something to do with the height of the non-focused item, i.e., Alex here. Given that `tallness` and `shortness` are associated with the same height scale, the most salient, contextually supplied gradable property $G$ should be either `tallness` or `shortness`. Now consider the interaction between the prejacent of (16-a) (i.e., 'Alex is not taller than $[\text{Bill}]_F$') with the connective *but* (17): The connective *but* is licensed in (17-a) where the first conjunct argues for the `tallness` of Alex, but unlicensed in (17-b) where the first conjunct argues for the `shortness` of Alex. We take this felicity contrast to indicate that the prejacent of (16-a), out of the blue, only leads to the scale of `shortness`. Analogously, this reasoning independently leads to the scale of `tallness` for (16-b), as indicated by the felicity contrast (17-c) vs. (17-d).

(17) a. Alex is tall, but he is not taller than $[\text{Bill}]_F$.
b. Alex is short, (#but) he is not taller than $[\text{Bill}]_F$
c. Bill is tall, (#but) $[\text{Alex}]_F$ is not taller than him.
d. Bill is short, but $[\text{Alex}]_F$ is not taller than him.

For illustration, let's apply entry (7) to (16-a). Assuming for (16-a) that (i) the non-focused item $x$ is Alex, (ii) the contextually supplied gradable property $G$ is `shortness`, and (iii) Chris is the only relevant alternative to the focused Bill, we obtain interpretation (18) via entry (7):

(18) $\|(16\text{-a})\|^{g,c} = . : \forall q \in C[q \neq p \rightarrow \forall w_1, w_2[w_1 R w \wedge w_2 R w \wedge w_1 \in p \wedge w_2 \in [q \wedge \neg p] \rightarrow$
a. $[\max(\lambda d_1.\text{shortness}(d_1)(\text{Alex})(w_1)) > \max(\lambda d_2.\text{shortness}(d_2)(\text{Alex})(w_2)) \wedge$ **C. Ps.**
b. $\max(\lambda d_2.\text{shortness}(d_2)(\text{Alex})(w_2)) > \text{Stand}_{\text{shortness}}]]]$ **Eval. Ps.**
c. Alex is NOT taller than Bill. **Assertion**

where $p$ = Alex is NOT taller than **Bill**, $q$ = Alex is NOT taller than **Chris**.

The comparative presupposition says that Alex ranks higher on the `shortness` scale in accessible $w_1$ worlds, worlds where $p$ (Alex does not exceed Bill in height) holds, than in accessible $w_2$ worlds, worlds where $[q \wedge \neg p]$ (Alex does not exceed Chris but does exceed Bill in height) holds. This is trivially satisfied. Crucially, the evaluative presupposition says that Alex is above the standard on the `shortness` scale in accessible $w_2$ worlds; given that in $w_2$ worlds Alex exceeds Bill in height, Bill is inferred to be above the standard on the `shortness` scale in $w_2$ worlds as well. Recall that the focused item, i.e., Bill here, remains unaltered across accessible $w_1$ vs. $w_2$ worlds w.r.t. $G$ (i.e., `shortness`); therefore, Bill is above the standard on the `shortness` scale in $w_1$ worlds, too. Now the prejacent asserts that Alex does not exceed Bill in height, Alex is also inferred to be above the standard on the `shortness` scale, thus the inference that they are both short.

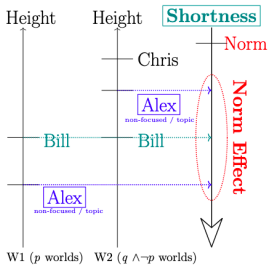

Figure 3: Interpretation of (16-a) via (7)

## 5 Concluding remarks

Recently, various linguistic constructions are argued to necessarily address a contextually salient degree question or involve a salient scale, e.g., incremental particles (Greenberg 2010; Grubic and Wierzba 2021), hyperbole (Nouwen 2024), cumulative readings (Zhang 2023), multi-head

comparatives (Zhang 2024). What factors play a role in the choice of this degree QUD or salient scale is under debate. If we are on the right track, information structure is a plausible one.

**Acknowledgements.** I am very grateful to the anonymous reviewers of Amsterdam Colloquium 2024 for the valuable feedback! Special thanks to Yael Greenberg for the long discussion and many helpful suggestions! Part of the idea further developed here was presented at the 35th European Summer School in Logic, Language and Information (ESSLLI 35); thanks to the reviewers there! The research reported in this work was funded by ISF Grant 682/22 to Yael Greenberg. Any error is, of course, mine.

## References

Bi, Ruyue Agnes (2022). "Evaluativity in 'even'-comparatives via presupposition accommodation". In: *Proceedings of Sinn und Bedeutung*. Ed. by Daniel Gutzmann and Sophie Repp. Vol. 26, pp. 112–129. DOI: https://doi.org/10.18148/sub/2022.v26i0.991.

Chierchia, Gennaro (2013). *Logic in Grammar: Polarity, Free choice, and Intervention*. Oxford University Press. DOI: https://doi.org/10.1093/acprof:oso/9780199697977.001.0001.

Giannakidou, Anastasia (2007). "The landscape of EVEN". In: *Natural Language & Linguistic Theory* 25.1, pp. 39–81. DOI: https://doi.org/10.1007/s11049-006-9006-5.

Greenberg, Yael (2010). "Additivity in the domain of eventualities (or: Oliver Twist's 'more')". In: *Proceedings of Sinn und Bedeutung*. Ed. by Martin Prinzhorn, Viola Schmitt, and Sarah Zobel. Vol. 14, pp. 151–167. URL: https://ojs.ub.uni-konstanz.de/sub/index.php/sub/article/view/465.

— (2015). "*E*ven, comparative likelihood and gradability". In: *Proceedings of the Amsterdam Colloquium*. Ed. by Thomas Brochhagen, Floris Roelofsen, and Nadine Theiler. Vol. 20, pp. 147–156. URL: https://semanticsarchive.net/Archive/mVkOTk2N/AC2015-proceedings.pdf.

— (2016). "A novel problem for the likelihood-based semantics of *even*". In: *Semantics and Pragmatics* 9, pp. 1–28. DOI: https://doi.org/10.3765/sp.9.2.

— (2018). "A revised, gradability-based semantics for *even*". In: *Natural Language Semantics* 26.1, pp. 51–83. DOI: https://doi.org/10.1007/s11050-017-9140-0.

Grubic, Mira and Marta Wierzba (2021). "The German additive particle noch: Testing the role of topic situations". In: *Glossa: a journal of general linguistics* 6.1. DOI: https://doi.org/10.5334/gjgl.1275.

Guerzoni, Elena (2004). "*Even*-NPIs in Yes/No questions". In: *Natural Language Semantics* 12.4, pp. 319–343. DOI: https://doi.org/10.1007/s11050-004-8739-0.

Guo, Rui (2022). "Bi zi ju zhong hái he dōu de yuyi zuoyong. (Chinese) [The semantic analysis of adverbs 'hái' and 'dōu' in Chinese comparative constructions]". In: *Jornal of Shanxi Univeristy (Philosophy & Social Scicences)* 45.5, pp. 62–74. DOI: 10.13451/j.cnki.shanxi.univ(phil.soc.).2022.05.007.

Ippolito, Michela (2007). "On the meaning of some focus-sensitive particles". In: *Natural Language Semantics* 15, pp. 1–34. DOI: https://doi.org/10.1007/s11050-007-9004-0.

Karttunen, Lauri and Stanley Peters (1979). "Conventional lmplicature". In: *Syntax and Semantics 11: Presupposition*. Ed. by Choon-Kyu Oh and David A. Dinneen. New York: Academic Press, pp. 1–56.

Kay, Paul (1990). "Even". In: *Linguistics and Philosophy* 13.1, pp. 59–111. DOI: https://doi.org/10.1007/BF00630517.

Miashkur, Elena and Yael Greenberg (2019). "Two types of scalar additives in Russian and other languages". In: *Syntax and Semantics Conference in Paris (CSSP) 2019*. URL: http://www.cssp.cnrs.fr/cssp2019/abstracts/CSSP_2019_paper_29.pdf.

Nakanish, Kimiko (2012). "The scope of *even* and quantifier raising". In: *Natural Language Semantics* 20, pp. 115–136. DOI: https://doi.org/10.1007/s11050-011-9077-7.

Nouwen, Rick (2024). "Meiosis and hyperbole as scalar phenomena". To appear in *Proceedings of Sinn und Bedeutung 28*, edited by Liefke et al. URL: https://ricknouwen.org/d/mhs.pdf.

Rett, Jessica (2014). *The semantics of evaluativity*. Oxford University Press. DOI: https://doi.org/10.1093/acprof:oso/9780199602476.001.0001.

Rooth, Mats (1985). "Association with focus". PhD thesis. University of Massachusetts, Amherst. URL: https://hdl.handle.net/1813/28568.

Rullmann, Hotze (1997). "*Even*, polarity, and scope". In: *Papers in Experimental and Theoretical Linguistics*. Ed. by Martha Gibson, Grace Wiebe, and Gary Libben. Vol. 4. 40-64. Edmonton, Alberta: University of Alberta. URL: https://semanticsarchive.net/Archive/WZhOWY5N/rullmann1997.pdf.

Wagner, Michael (2013). "Additivity and the syntax of *even*". Colloquium talk given at University of Chicago in December 2015. URL: https://prosodylab.org/~chael/papers/wagner15chicago.pdf.

Wilkinson, Karina (1996). "The scope of *even*". In: *Natural Language Semantics* 4.3, pp. 193–215. DOI: https://doi.org/10.1007/BF00372819.

Winterstein, Grégoire (2012). "What *but*-sentences argue for: An argumentative analysis of *but*". In: *Lingua* 122.15, pp. 1864–1885. DOI: https://doi.org/10.1016/j.lingua.2012.09.014.

— (2018). "A Bayesian approach to Argumentation within Language". Manuscript. Université du Québec à Montréal. URL: https://semanticsarchive.net/Archive/mFkZGM0N/Argumentation.pdf.

Zhang, Linmin (2022). "The presupposition of *even*". In: *Semantics and Linguistic Theory*. Ed. by John R. Starr, Juhyae Kim, and Burak Öney, pp. 249–269. DOI: https://doi.org/10.3765/salt.v1i0.5355.

— (2023). "Cumulative Reading, QUD, and Maximal Informativeness". In: *Logic and Engineering of Natural Language Semantics. LENLS 2022.* Ed. by Daisuke Bekki, Koji Mineshima, and Elin McCready. Lecture Notes in Computer Science. Springer, Cham, pp. 1–17. DOI: https://doi.org/10.1007/978-3-031-43977-3_1.

— (2024). "The semantics and pragmatics of multi-head comparatives". Manuscript. NYU Shanghai. URL: https://ling.auf.net/lingbuzz/007777.