

Uncovering the behavior of scalar additive operators in Albanian

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Abstract. Particles like *even* in English, are known to be characterized by simultaneous scalar and additive presuppositions (Horn 1969; Karttunen & Peters 1979; Rooth 1995; Gast & van der Auwera 2011). Nevertheless, the additive nature of these scalar particles has been shown to vary across languages (Giannakidou 2007; Gast & van der Auwera 2011; Greenberg 2016). To be more precise, additivity is not seen as a universal property of even-like particles (Greenberg & Umbach 2021). In light of the above arguments, I draw attention to Albanian scalar additive operators, *madje* and *edhe*, to explore their behavior. I provide an analysis that shows that *madje* is chosen preferentially in a nonadditive context and that the combination *madje edhe* is preferred in an additive context.

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Standard research in semantics proposes that scalar particles like *even* are characterized by simultaneous scalar and additive presuppositions (Horn 1969; Karttunen & Peters 1979; Rooth 1995; Gast & van der Auwera (2011)). For quite some time there have been some interesting insights on the additive aspect of *even*-like particles. It has been noted that the nature of *even*-like particles differs across languages (Greenberg 2016; Giannakidou 2007). One example comes from Italian *addirittura* which is not limited to additive contexts and similar to *even*, can be used in non-additive contexts (Pistoia-Reda & McNally 2022). While some particles of this type are inherently additive, others have an exclusive nature, and still others remain unspecified. Therefore, it can be concluded that additivity is not a universal property of *even*-like particles (Greenberg & Umbach 2021). In favor of these arguments, I try to expand the cross-linguistic perspective by concentrating on *madje* in Albanian which is the standard translation of English *even*. Let's consider an example from rank orders in Albanian where additivity is excluded, meaning that only one proposition must be true:

- (1) a. Dëgjova për suksesin e Hanës. U bë assistente
 I.heard for success of Hana she.became assistant
 pedagoge, apo jo?
 professor, or no?
 'I heard about Hana's success. She became an assistant professor, right?'
- b. Ajo *madje* u bë pedagoge e asociuar!
 she MADJE became professor E associated
 'She's *even* become an associate professor!'
- b'. #Ajo u bë *edhe* pedagoge e asociuar!
 she became EDHE professor E associated
 target: 'She's *also* an associate professor!'

In so-called rank orders (Horn 1989) *even* assigns a rank or position to the target proposition in relation to a set of alternative propositions along a particular scale. The *even*-like operator then triggers a presupposition that the target proposition is unexpected or surprising, and it relates it to a set of alternative propositions that are less unexpected or surprising. Based on the infelicity of *edhe* in this context, it can be said that *edhe* carries an additive meaning, but Hana can't be an assistant professor and an associate professor at the same time. On the other side, the felicity of *madje* in a nonadditive context then shows that *madje* may not be necessarily additive. If we consider an example with a context where additivity is required, meaning that another proposition from the current

one must be true, we would see that *madje* is infelicitous with the context.

(2) Context: Lalena reads a lot of books.

a. #Lalena *madje* lexoi Sartre-n.

Lalena MADJE read Sartre
'Lalena *even* read Sartre.'

b. Lalena *madje* lexoi *edhe* Sartre-n

Lalena MADJE read EDHE Sartre
'Lalena *even* read Sartre.'

I conjecture that *madje* alone has to occur in nonadditive contexts. The infelicity of *madje* alone in this additive context can be attributed to its lack of carrying the same additive presupposition as *edhe* does in Albanian. Moreover, it seems that *madje* carries an anti-additive presupposition.

Let's consider a context licensing a scalar interpretation as well as a purely additive such as in 3:

(3) Context: The test was quite easy.

a. #*Madje* Malena e zgjidhi problemin më të vështirë.

MADJE Malena E solved the.problem most difficult
'Even Malena solved the most difficult problem'

b. *Madje edhe* Malena e zgjidhi problemin më të vështirë.

MADJE EDHE Malena E solved the.problem most difficult
'Even Malena solved the most difficult problem'

The use of *madje* alone would still be unacceptable in this scalar additive context. In 3b the combination *madje edhe* expresses both scalarity and additivity (i.e., scalar presupposition: Malena is the least likely student to solve the most difficult problem; additive presupposition: at least one other student distinct from Malena solved the most difficult problem).

For instance, see (4) taken from the Bible where additivity is required. It is interesting to observe that *even* in this context is translated in Albanian as *madje edhe* used together. As noted also from the Gast and van der Auwera paper "*madje* 'indeed' can optionally be added to *édhe*"¹. It seems that the result of their combination is felicitous with a context where additivity is required.

1. In "Scalar additive operators in the languages of Europe", Gast & van der Auwera 2011: p.27

- (4) a. Kush është ky? *Madje edhe* era edhe deti, i binden
 who is this MADJE EDHE wind and sea, they obey
 Atij. (Luke 8:25)
 Him
- b. Who is this? He commands *even* the winds and the water,
 and they obey him.(Luke 8:25)

In Albanian, the combination of *madje* and *edhe* conveys a sense of scalarity, different from *edhe* used alone. So, in a context where additivity is required but the speaker wants to emphasize the degree of scalarity, using both *madje* and *edhe* is preferred. I also suggest that *madje* in Albanian can express unexpectedness, especially in a clause-initial position. It adds emphasis and highlights the unexpected nature of the information being conveyed.

To further investigate the native speakers' intuition towards the use of scalar additive particles in Albanian, I designed a forced-choice questionnaire which aimed to study the preferred usage of either *madje* alone or the combination *madje edhe* in additive contexts in which alternatives must be added and nonadditive contexts where additivity is excluded such as in rank orders. The questionnaire consisted of a set of short Albanian sentences, divided into 12 additive and 12 nonadditive contexts. Participants, Albanian speakers whose field of study is unrelated to linguistics, were asked to make a choice for each sentence pair. The use of *madje* alone was hypothesized to be preferred in nonadditive contexts, while the combination of *madje edhe* was expected to be favored in additive contexts. In terms of research design, the questionnaire employed independent variables represented by the two distinct linguistic forms, *madje* alone and the combination *madje edhe*. The dependent variable, on the other hand, was the forced-choice task assigned to each sentence pair for the participants.

The results support the hypothesis, suggesting that Albanian speakers prefer to use *madje* alone in nonadditive contexts and *madje edhe* in additive contexts. A significant majority of 71.62% of the participants opted for the alternative featuring the use of *madje* alone in nonadditive contexts, while an even higher proportion of 79.92% of participants favored the combination of *madje edhe* in additive contexts. In conclusion this paper explores and tries to bring into attention the behavior of scalar additive operators in Albanian, a topic that has not been extensively studied in the past and sets the scene for future research.

References

- Gast, Volker & Johan van der Auwera. 2011. Scalar additive operators in the languages of Europe. *Language* 87(1). 2–54.
- Giannakidou, Anastasia. 2007. The landscape of EVEN. *Natural Language & Linguistic Theory* 25. 39–81.
- Greenberg, Yael. 2016. A novel problem for the likelihood-based semantics of even. *Semantics and Pragmatics* 9. 1–28.
- Greenberg, Yael & Carla Umbach. 2021. *Additivity, scalarity and the interactions between them: beyond also and even*. Slides from the course “Additivity, scalarity and the interactions between them: Beyond also and even”, ESSLLI, online.
- Horn, Laurence. 1969. A presuppositional analysis of only and even. *Papers from the Fifth Regional Meeting of the Chicago Linguistic Society*. 98–107.
- Horn, Laurence. 1989. *A Natural History of Negation*. University of Chicago Press.
- Karttunen, Lauri & Stanley Peters. 1979. Conventional implicature. *Syntax & Semantics*. Vol 11, 1-56.
- Pistoia-Reda, Salvatore & Louise McNally. 2022. Rhetorically-based scalar-additivity: The view from Italian *addirittura*. *Semantics and Linguistic Theory* 1. 463.
- Rooth, Mats. 1995. A theory of focus interpretation. *Natural Language Semantics* 1(1). 75–116.