

An experimental investigation on Italian *addirittura* in sentence-initial position

Introduction - *Even*-like particles are known to induce both a scalar and an additive presupposition [1,2,3,4]. However, the additivity of *even* has also been challenged [5], and *even*-like particles across languages have been observed to vary in additivity [6]. Italian displays a few scalar-additive focus operators whose interpretation is (more or less) close to *even*. Particularly, *addirittura* – henceforth, ADD – appears to be preferred over other scalar-additive focus operators such as *persino/perfino* – henceforth, PER – in the contexts where the additivity of *even* fails [7]. Accordingly, it has been labelled as ‘additive compatible’ [8].

In a previous experimental study, we found evidence supporting the non-additivity of ADD where the focused element is a subconstituent of the preadjacent, in contrast to PER (unpublished work). Through the current study, our aim is to extend the experimental investigation of ADD and to examine its behavior when used as a clause-level modifier in sentence-initial position (what is called ‘wide focus’ in [9]).

Methods - To this aim, we designed three tasks (a forced-choice task - FCT, a yes/no task - YNT, and a rating task - RT), all exploiting the same set of materials, i.e., 20 sentences beginning with ADD, each preceded by two minimally different contexts – one prompting additivity (a ‘plural context’, 1a) and one not prompting it (a ‘singular context’, 1b).

We also selected 40 filler sentences paired with a compatible and an incompatible context, that we used also to evaluate the reliability of each individual participant.

- (1) (a) **Plural context: Ci sono state diverse sorprese** durante l’ultima gara del circuito.
(*There were several surprises during the last race of the circuit*)
(b) **Singular context: C’è stata una sorpresa** durante l’ultima gara del circuito.
(*There was a surprise during the last race of the circuit*)
Sentence: Addirittura, il pilota primo in classifica è uscito di strada alla prima curva.
(*ADD, the driver leading the standings went off the track at the first corner*)

We designed the FCT to assess which context better suited the sentences with ADD, the YNT to assess whether the non-preferred context-sentence pairs could still be judged as acceptable, and the RT (on a 7-point scale) to determine if it is possible to measure a degree of acceptability between the two tested conditions. In the FCT, participants had to select which of the two contexts better preceded the sentence with ADD. For the YNT and the RT, two lists were created, each containing 20 sentences with ADD preceded by either singular or plural contexts in a counterbalanced order. For each item, participants had to indicate if the sentence with ADD was a suitable continuation for the preceding context (YNT) or to rate its acceptability, given the context (RT). Control items were present in all tasks. The three tasks were implemented on Qualtrics and distributed online through Prolific. Participants’ selection was based on the following parameters: Location = Italy; First language = Italian; Primary Language = Italian; Nationality = Italy; Dyslexia = no; Language-related disorders = none. Each participant could take part in only one of the three tasks.

Participants - FCT: 19 participants took part in the study (mean age = 37.5 years, sd = 11.5 years) – whose performance in control items was at ceiling. **YNT:** 25 participants took part in the study (mean age = 36.8 years, sd = 8.81 years) – whose performance in control items was, again, at ceiling. **RT:** 20 participants took part in the study (mean age = 34.2 years, sd = 8.33 years). One participant was excluded from the analyses as their ratings in control items did not follow the expected pattern.

Results - FCT (Figure 1, left): To assess whether participants' choices differed from chance, separate binomial tests were run for each participant. Significance threshold was 15/20 (0.75%) expected responses ($p = .041$). Overall, 15 of the 19 participants demonstrated significantly above-chance performance, indicating a robust preference for the plural context. Subsequent group-level analysis with GLMM confirmed that the expected response was chosen at a significantly above chance rate ($\beta = 3.04$, $SE = 0.67$, $z = 4.53$, $p < .001$). **YNT**: Participants judged the sentences with ADD to be coherent both following a plural (overall choices: 246 coherent/4 not-coherent) and a singular context (overall choices: 247 coherent/4 not-coherent). **RT** (Figure 1, right): Cumulative link mixed models showed that singular contexts received significantly lower ratings than plural ones ($\chi^2(1) = 5.64$, $p = .018$).

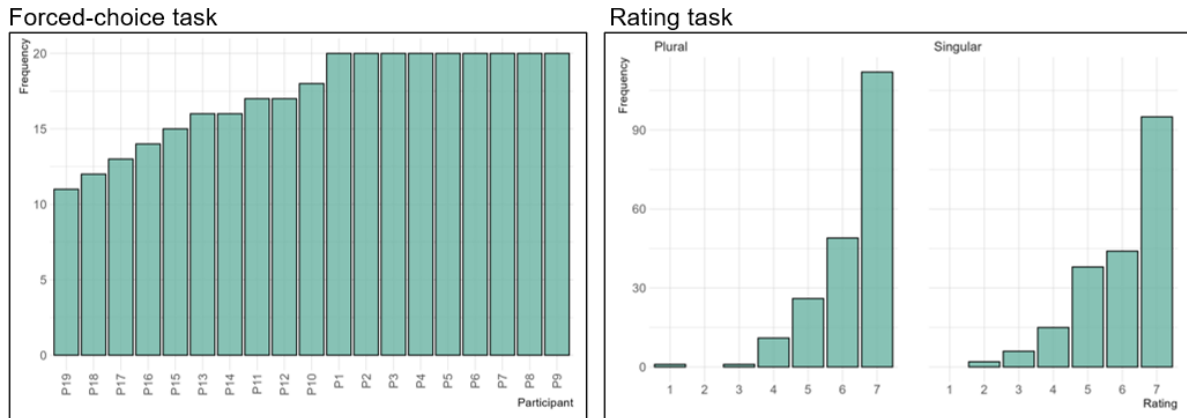


Figure 1 - Left: Participant-level results in the FCT (y-axis: frequency of selection of the 'plural context'). Right: distribution of ratings in plural and singular contexts in the RT

Discussion & conclusions - With this set of studies, we inspected the behaviour of Italian *addirittura* in sentence-initial position. Overall, we found the additive reading of ADD to be preferred over the non-additive one – FCT and RT. However, we observed that this preference coexists with an interpretation of ADD as possibly non-additive, as well – YNT. Taken together, our findings support a view of ADD as merely 'additive compatible' when employed not only as a local, but also as a clause-level modifier.

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