

## On responsibility perception in femicide news reports: critical analysis bridging cognitive theories and computational tools

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The same event can be reported in many different ways, according to the person who describes it and the linguistic choices that they make. This is true also when we think of events that have a strong social impact. In our work, we propose a new way of investigating how linguistic expressions can influence the perception of socially-relevant phenomena. Expanding on previous contributions in the field of psycholinguistics, cognitive linguistics and critical discourse analysis, we demonstrate how semantic frames and syntactic constructions can be particularly useful to investigate the perspectivization of texts, by conducting a large-scale survey to collect human judgements on Italian news articles about numerous cases of femicide.

Based on the analysis of Italian news reports, Pinelli & Zanchi (2021) claim that different syntactic constructions can influence the perception of responsibility in cases of gender-based violence (GBV); for instance, they demonstrate how the use of passive constructions contribute to the backgrounding of the agent (in the case of femicide, the murderer), representing him as less responsible for the violence. Meluzzi et al. (2021) aim to explore the correlation between argument structure constructions and responsibility perception in cases of femicide by carrying out a survey in which participants are asked to judge artificially constructed sentences; the results are in line with the outcomes of Pinelli & Zanchi (2021), confirming that the choice of linguistic expressions can have an impact on the perception of responsibility of the participants and even promote victim-blaming.

In our work, we attempt to delve deeper into perspectivization and the perception of responsibility by proposing a method that builds on Fillmore (2006) frame semantics theory: in addition to the analysis of syntactic constructions, we observed the presence and relevance of semantic frames. Through the use of a semantic parser (Xia et al., 2021), we extracted the frequencies of semantic frames and syntactic constructions in the articles contained in the RAI Femicides Corpus (Belluati, 2021). We then selected a set of frames and constructions that we deemed relevant for studying the perspectivization of event descriptions, and we automatically selected from the articles 400 sentences containing those frames and constructions. The sentences were presented to 240 participants, who were asked to answer questions about the agentivity and responsibility of the participants in the events.

In our presentation we will present the setup, the practical implementation process and the results of the questionnaire, which have indeed demonstrated that different linguistic choices do have an influence on how the readers perceive the responsibility ascribed to the agent and the patient in Italian reports of GBV.

Finally, we will present computational experiments that we have performed on the data that were obtained during the research: we used recent techniques from Natural Language Processing (NLP) to train models to predict responsibility perception scores from raw text, and to rewrite text, suggesting alternative ways of describing the same femicide event but with more or less emphasis placed on the murderer.

### References

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