

## Experiencers in the visual world paradigm: How attention reveals thematic role processing

(Bea Gómez-Vidal, UPV/EHU)

In psychological predicates (1), participants undergoing a mental state are said to bear the experiencer role (Arad, 1998; Belletti & Rizzi, 1988; Brunetti, 2009).

(1) Mary fears dogs.

While some theoretical (list-based) accounts claim that the experiencer role exists as a distinct category, other accounts propose that the categorization of event participants such as *Mary* is split between two proto-roles, proto-agents and proto-themes, based on the entailments it shares with the proto-category (Dowty, 1991). Since little evidence has been found to support the robust existence of experiencers in processing (Rissman & Majid, 2019), I conducted an eye-tracking experiment using the visual world paradigm to explore the processing of (assumed) experiencer subjects in Spanish.

I created 80 SV(O) Spanish psychological predicates modulating verb type (intransitive, transitive). The sentential subject in both conditions was estimated to fit proto-agent entailments, and thus expected to display an agent-like pattern of subject reactivation, regardless of transitivity. Trials were split into two lists, with 40 experimental and 48 filler trials each. Forty native speakers listened to sentences while visual displays containing four drawings showed on the screen. In experimental trials, the subject was strongly related to the visual target (e.g., sailor – ship). Gaze fixations to the target were monitored using an EyeLink 1000 Plus eye tracker. Fixation patterns, which in this case reflect the attentional resources that participants devote towards a participant, were analyzed after verb offset, since this is the time period in which thematic role assignment can occur in processing.

Results showed that there was no difference in the activation pattern of the sentential subject after verb offset between conditions. Additionally, both conditions displayed an agent-like pattern of reactivation after the verb (i.e. a high proportion of looks to the target drawing peaking after verb offset). These results reveal that the processing of some "experiencer" subjects in Spanish resembles that of agents, and is in accordance with proto-role accounts of language processing.

### References:

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