

Eye-tracking the Experiencer Thematic role

Experiencer role designates the participant of an event that experiences the mental state denoted by the verb (Arad, 1998). Following Proto-Roles (Dowty, 1991) approach, Experiencer fits into Proto-Agent category but it is less prototypical than Agent. There is hardly any psycholinguistic evidence that Experiencer has specific processing correlates (Rissman & Majid, 2019). To determine whether Experiencer role has distinctive processing correlates, we analysed argument structures with it: (1) psych verbs: [Agent-Experiencer] verbs, such as *frighten*; [Experiencer-Theme] verbs, such as *love* (Pesetsky, 1996). (2) Perceptual verbs, such as *observe*, with [Experiencer, Theme] structure (Levin, 1993). We expected Experiencer’s distance from proto-typicality to involve higher processing cost than argument structures without it [Agent-Theme]. Our aim was to determine whether Experiencer role reveals specific processing correlates. **Experiment.** Eye-tracking reading task. 48 Spanish native speakers. Twenty verbs per condition, repeated twice, controlled by length and frequency, were selected to create forty experimental sentences (normativized for naturality) with four different versions each, as a result of crossing: Verb Type (Psych vs. Non-psych) and Argument Structure (Experiencer-Theme vs. Agent-Theme/Experiencer) variables (see table 1). **Results.** Participants made larger fixation times on [Experiencer-Theme] than on [Agent-Theme/Experiencer] (Argument Structure effect). The interaction revealed larger reading times and fixation times on [Agent-Experiencer] than on [Agent-Theme] sentences (see table 2). **Discussion.** Structures involving Experiencer entail higher processing costs compared to those without it. Experiencer has specific processing correlates modulated by the other participant of the argument structure. We argue that these results provide psycholinguistic evidence for the Experiencer having specific processing correlates.

Table 1. Examples of experimental sentences per conditions.

Argument Structure	Verb Type	Sentences (Regions: subject/verb/object/post-object/last word)
[EXP-THEME]	Psych	La cantante / desea / al poeta / durante el recital de / poesía.
[EXP-THEME]	Non-Psych	La cantante / contempla / al poeta / durante el recital de / poesía.
[AGT-EXP]	Psych	La cantante / enamora / al poeta / durante el recital de / poesía.
[AGT-THEME]	Non-Psych	La cantante / abandona / al poeta / durante el recital de / poesía.

Table 2. Results.

	Regions	Subject Region	Verb Region	Object Region	Post-Object Region
Eye-tracking measures	Gaze Duration	X	Main effect of verb type (p = 0.0322)	Main effect of argument structure (p = 0.056)	X
	Regression Path Duration	X	Main effect of verb type (p = 0.045)	Main effect of verb type (p = 0.0186)	X
	Re-reading Duration	X	Interaction (p=0.0088)	X	X
	Total Duration	X	Interaction (p = 0.00448)	Main effect of verb type (p = 0.0428) Main effect of argument structure (p = 0.0349)	Main effect of argument structure (p = 0.0246)
Reading Times		Interaction (p = 0.00404)			

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