

Is Event Apprehension Language-Specific? A Comparison of Spanish and German

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This study compares gaze movement patterns of native speakers of German and Spanish, while they describe causative events, depicted in photo-realistic stimuli (e.g., agent drawing a house on a piece of paper). The cross-linguistic comparison involves the way in which the *agent* of these actions, i.e. the subject of the sentences, can be described: Spanish allows the omission of explicit reference to the subject of a non-passive clause in certain cases, whereas in German subjects of sentences always have to be overtly realized (at least in active voice). Studies on sentence production, using eye tracking, have concluded that usually every referent is fixated shortly before being named, even in contexts in which referents are “given” (van der Meulen et al., 2001). Here, we examine what the cross-linguistic difference between Spanish and German implies for visual processing of event scenes, when information has to be extracted rapidly and presentation duration is varied so as to give four conditions (100-300-500-700ms). All subjects were instructed to describe the events, or, to at least mention the elements of the scenes that they recognized, i.e. the action, agent and/or object depicted.

Our analyses focus on the placement of the *first* fixation on either the *agent* or the *action* in the scenes, allowing us to shed more light on how the demands of language production interact with, and perhaps bias, information uptake and scene apprehension in the given task. In other words, we investigate the extent to which the placement of first fixations is influenced by linguistic structure (see also Bock et al, 2004). So far, studies that look at event apprehension or the interrelation between visual and linguistic processing taking into account cross-linguistic differences are scarce.

Results show differences in gaze behaviour between the four presentation duration conditions, and an interaction between presentation duration and language. With respect to the language production data, Spanish speakers have less overt reference to agents in their event descriptions. This linguistic difference between Spanish and German correlates with the eye tracking data, specifically, the placement of first fixations. Findings indicate differences in attention allocation to the two elements of the scene (agent and action), during early stages of event apprehension and message planning. In our discussion, we will shed light on the interrelation between visual and linguistic processing from a cross-linguistic perspective.

References

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