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Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Meaning is niche construction: semiotic artifacts and cognitive externalism

Permalink

<https://escholarship.org/uc/item/70t85138>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 48(0)

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Publication Date

2026

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Peer reviewed

Recognizing instruments from brief visual displays

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Observers categorize core event roles (agents, patients) from brief visual scenes, but less is known about the spontaneous encoding of more peripheral event roles such as instruments. Semantic analyses and psycholinguistic research suggest that instrument events are categorized into those that conceptually require an instrument (...*stirring with a ladle*) and those that allow one (...*drinking with a straw*), but whether this distinction affects rapid role extraction from visual scenes is currently unclear. Across two experiments, we examine whether instrument event roles can be extracted from brief visual displays (73ms). We manipulated the event category (require/allow), instrument typicality (typical/atypical), and prompt consistency (consistent/inconsistent). Participants watched instrument events followed by a mask and were tested for event apprehension (“*Did you see stirring?*”; Exp.1) and role extraction (“*Did you see a spoon?*”; Exp.2). Results from this study contribute to an understanding of how conceptually complex event information is extracted from visual input.