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# **Proceedings of the Annual Meeting of the Cognitive Science Society**

### **Title**

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### **Permalink**

<https://escholarship.org/uc/item/3hx404g6>

### **Journal**

Proceedings of the Annual Meeting of the Cognitive Science Society, 45(45)

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### **Publication Date**

2023

Peer reviewed

# Does the environment shape gender marking in mimed stories?

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## Abstract

We rated video recordings of participants playing a charades-like semiotic game, where they took turns miming stories and picking the sequence of pictures that best suited what was mimed. The stories had one (male or female) or two characters (male and female). Although there was no pressure to disambiguate between the characters, most of the participants did so by producing iconic or indexical gender markers. Our analysis shows that when the gender of the characters in a story (the referent environment) matched the gender of the participants (the physical environment), the participants were more likely to use indexes rather than icons ( $p < 0.05$ ,  $\beta = 1.4247$ ). These results complement research on the role of the environment in the emergence of language-like structures and their systematicity in silent gesture tasks (e.g. Nölle et al. 2018).