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Proceedings of the Annual Meeting of the Cognitive Science Society

Title

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Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 38(0)

Authors

Rabkina, Irina

Forbus, Ken

Publication Date

2016

Peer reviewed

An Analogical Model of Pretense

Irina Rabkina

Northwestern University

Ken Forbus

Northwestern University

Abstract: Pretense has been implicated as playing a role in the development of many cognitive and social skills. Despite the importance and ubiquity of this phenomena, few computational models of pretense exist. We propose a model of pretense via analogical abduction. We suggest that pretense occurs via structural alignment. Where a mismatch occurs (i.e. something in the pretend scenario is not the same as its aligned match in an equivalent real-world scenario), a re-representation must take place in order for pretense to continue. For example, a seashell may be re-represented as a cup (as in Fein, 1975) or an empty cup may be re-represented as full (as in Onishi et al., 2007). We show that this model can explain results from two empirical studies, including failures in pretense.