An Analogical Model of Pretense

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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.