

# **Categorical perception of spatial relations across languages: The case of support**

**Kelsey Moty**

University of California, Berkeley

**Kevin Holmes**

University of California, Berkeley

**Terry Regier**

University of California, Berkeley

**Abstract:** Cross-language differences in spatial language are not always reflected in nonlinguistic spatial representations. For example, the distinction between support and non-support relations among objects is obligatorily marked by basic spatial terms in English ("on" vs. "above"), but not in Korean – yet spatial memory is sensitive to this distinction for speakers of both languages. Here, we provide preliminary evidence that this pattern extends to the relation between spatial language and spatial perception, not just memory. In a visual search task, English speakers showed categorical perception (CP) for the support/non-support distinction. Initial data suggest that Korean speakers likewise show CP for this distinction. These results imply that certain spatial properties are sufficiently salient to affect perceptual discrimination, even when not captured by the basic spatial terms of one's native language. We discuss the implications of these findings for accounts of the role of language in perception.