Categorical perception reflects non-basic color categories

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Abstract: Categories can affect our perception of the world, rendering between-category differences more salient than within-category ones — a phenomenon known as categorical perception (CP). Previous research has shown that basic color categories across a variety of languages yield CP in speakers of those languages. Here, we provide evidence that CP generalizes to color categories beyond the basic level. Specifically, we show CP in English speakers for categories corresponding to the non-basic, non-color-specific terms ”warm” and ”cool,” a distinction claimed to represent the earliest stage of color lexicon evolution. Notably, we found CP for the warm-cool distinction in the right visual field, but not the left — the same behavioral signature previously observed for basic color categories. Our findings suggest that category distinctions beyond the basic-level repertoire of one’s native language can be sufficiently salient to affect perceptual discrimination, and hence merit greater categorical status in the mind than previously recognized.