

# **Biased Attention to Spatial Dimensions Predicts Children's Spatial Word Acquisition**

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**Abstract:** Children's spatial language abilities relate to their spatial skills. We propose that this relation arises from attention to spatial dimensions influencing both spatial word and spatial skill acquisition. This study tests whether attending to spatial dimensions in a word learning task predicts spatial vocabulary. Three to 5-year-olds completed a novel word assessment testing categorization of angles, shapes, and a test of spatial vocabulary. In the novel word assessment, children were presented with an exemplar angle with a novel label and asked to select another angle sharing the label. Foils matched the exemplar in degree, orientation, color, or size. Significant age differences occurred in children's bias to select foils based on angle degree (but no age differences occurred in exemplar choices based on shape). Children showing an angle bias had significantly higher spatial vocabulary than those who did not. These findings show that attending to relevant spatial dimensions predicts spatial vocabulary.