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Distracting the Hands: The effect of visuospatial interference upon iconic gesture production and speech

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Abstract: Iconic gestures are hand movements that represent shapes, objects and functions of a referent. When gesture is restricted, imagery decreases and speech dysfluencies (which are most pronounced when communicating spatial information) increase. Since gesture restriction adversely affects both imagery and the communication of spatial information, many theorists have argued that visuospatial working memory (VSWM) underlies iconic gesture production. Although studies have suggested that there is a strong relationship between iconic gesture production and VSWM, a study has yet to be conducted which tests the effects of visuospatial manipulation upon subsequent iconic gesture production. The purpose of this study was to examine the relationship between VSWM and iconic gesture production by manipulating the degree of visuospatial distraction without imposing restriction upon the hands. Preliminary findings suggest that the presence of a visuospatial distractor affects narrative production and that more distracting visual stimuli are associated with lower iconic gesture rates.