# Spatial Representations of Number and Size

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**Abstract:** Recent research supports a common magnitude system that underlies the dimensions of number, space, and time (Walsh, 2003). In a classic study, Dehaene, Bossini, and Giraux (1993) demonstrated that adult participants were faster at making judgments about small and large numbers when responding on the left and right side of space, respectively. More recently, a similar left-to-right orientation was found for time (i.e., short duration on the left and faster duration on the right). Here we examined the spatial representation of size information. Participants completed tasks with different numbers (1  9) and different sized circles (9 sizes), making judgments with their left and right hands. In Experiment 1, participants made explicit magnitude judgments, and a similar left-to-right orientation was found for both number and size. In Experiment 2, participants made judgments unrelated to magnitude, and only number appeared to be oriented from left-to-right. Together, these findings suggest that whereas size may be mentally represented in a left-to-right orientation, this spatial organization may be weighted less strongly than that for number.