





Max Wertheimer Minerva Center for Cognitive Processes and Human Performance Head of Center: Prof'. Asher Koriat ראש המרכז : פרופ׳ אשר קוריאט

אנו שמחים לארח את

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## Horizontal spatial representations of number and time

It has been shown that numeric stimuli (e.g., 1 & 9) have spatial characteristics, and that responses to such stimuli are biased by the mental representation of their magnitude. Reaction times for smaller numbers compared to larger numbers are faster when making left-side responses than when making right-side responses and vice versa for larger numbers. These findings support the existence of a spatial component in the cognitive representation of magnitude. Similarly, recent findings show that time information (e.g., "early" & "late") also has spatial characteristics, with responses to stimuli being biased by the mental representation of their onset timing, implying the existence of a spatial representation of time. According to Walsh's (2003) hypothesis, any spatially and action-coded magnitude will yield a relationship between the magnitude and space. In my presentation, evidence for the existence of a "mental number line" and a "mental time line" in action planning are discussed.

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בחדר ההרצאות במעמק"ה, הבניין הרב תכליתי, אוניברסיטת חיפה.

נשמח לראותכם בין אורחינו

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