
Boundedness properties of numerals under unconscious perception

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Abstract

Researchers in the number cognition literature assume that determining the distance between two numbers calls on common processes, regardless of context (e.g., determining that "4" is below "5" calls on the same processes as determining that "6" is above it). Some in the experimental pragmatics literature do make such distinctions. Here, we employ a number comparison task in which participants make above/below judgments with respect to a constant benchmark (5). We observed that numerals directly below the benchmark (4) prompt slowdowns compared to its equivalent directly above the benchmark, indicating that fixing the upper bound of numerals is context dependent.

Keywords: boundedness, numerical cognition, unconscious perception

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