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Is Reading Mandatory? Reaching for Evidence in the Stroop Paradigm

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Abstract: Accounts of the Stroop effect postulate that participants read the words despite instructions to ignore them and focus on the print colour. Recent research, however, suggests that context and task demands can moderate the extent of reading in Stroop experiments (e.g., Melara & Algom, 2003). In the current study we employ an innovative experimental methodology to investigate the depth and frequency of reading in the Stroop task. A novel forced-reading task serves as a benchmark, where each and every word is known to be fully processed. Stroop effect was calculated from analysis of arm-reaching trajectories, for both the classic and forced-reading tasks. The effect was considerately larger in the forced-reading task, suggesting that in the classic Stroop task reading may not occur on every trial, or that words may not be fully processed.