Colour-Motion Asynchrony

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Marker correspondence, not processing latency, determines temporal binding of visual attributes

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An apparent delay motion direction changes relative to synchronous colour changes has been ascribed to time differences in cortical processing that lead to asynchronous awareness of the events (Moutoussis & Zeki, 1997). Inconsistent with this account, we found that the apparent motion delay occurs only for rapid alternations, and is not accompanied by a difference in reaction time. We also found that perceptual asynchrony depends on the temporal structure of the stimuli, rather than the attribute type. These findings led us to a new theory of time perception that the perception of the relative time of events is based on the relationship of representations of salient temporal pattern that we term time markers.

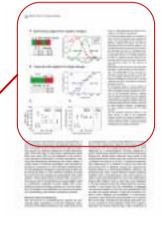


Stimulus Demo

Demonstrations of the stimuli used in the experiments are provided as AVI movies, and an interactive vision-shell program (with source code).







Experiment Program

Source code of the program used for experiments (requiring VSG card to run)

Raw Data

Raw data of all the experiments are provided as Excel files.

