

Addenda to the 2013 Program of the Psychonomic Society

Withdrawn Spoken Papers

Title: Long-range and local synchronization of neural activity predict the precision of representations in working memory

Abstract Number: 12

Your Presentation Time: 8:40-8:55

Session Information: Working Memory I, Friday Morning

Title: The Relevance of Goal-Irrelevance for False Memories in the Misinformation Paradigm

Abstract Number: 116

Your Presentation Time: 4:10-4:25

Session Information: False Memory and Eyewitness Identification, Friday Afternoon

Withdrawn Posters

Thursday Evening

Abstract Number: 1102

Saturday Noon

Abstract Number: 5048

Changes to the Program

Thursday Evening

Change the author's affiliation on poster # 1187

Gorka Navarrete, Universidad Diego Portales

Saturday Noon

Poster # 5140, "The Effect of Semantic Overlap and Logical Relatedness on Argument Evaluation" should be under a sub-title of Discourse Processing and not Bilingualism.

Best Article Award Winners

Two of our Journal Best Article Award Winners will present their work as posters. Times to be announced.

Alexander Pastukhov for *Attention, Perception & Psychophysics*

Structure-from-motion: shape-selectivity distinguishes perceptual adaptation and sensory memory.

ALEXANDER PASTUKHOV, ANNA LISSNER, JANA FÜLLEKRUG, JOCHEN BRAUN, *Center for behavioral brain sciences, Magdeburg, Germany*- Structure-from-motion (SFM) is a multi-stable display that induces a vivid perception of a 3D volume rotating in depth, which reverses spontaneously from time to time.

When an SFM display is interrupted briefly (~0.5 s), the current perception is destabilized by perceptual adaptation. When the interruption is longer (>1 s), the current perception is stabilized by sensory

memory. We have examined the neural representations that fatigue and that persist by characterizing their respective selectivities for 3D shape. We used a variety of SFM shapes, including rotationally

symmetric and asymmetric shapes, as well as shapes defined by solid volume and by surface only. We

find that sensory memory is shape-selective: 3D rotation is more stable when the same shape (rather

than a different shape) is presented successively. In contrast, we find no shape-selectivity for perceptual

adaptation. Strength of negative aftereffect dependent only on the total volume occupied by a given

SFM object. We conclude that the visual representations of SFM that are subject to neural fatigue are not identical to the representations that maintain a sensory memory.

Jane Jacob for *Psychonomic Bulletin and Review*

Tracking the First Two Seconds: Three Stages of Visual Information Processing? JANE JACOB, BRUNO G. BREITMEYER, and MELISSA TREVIÑO, University of Houston – We compared visual priming and comparison tasks to assess information processing of a stimulus during the first 2 seconds after its onset. In both tasks, a 13-ms prime was followed at varying SOAs by a 40-ms probe. In the priming task, observers identified the probe as rapidly and accurately as possible; in the comparison task, observers determined as rapidly and accurately as possible whether or not the probe and prime were identical. Priming effects attained a maximum at an SOA of 133 ms and then declined monotonically to zero by 700 ms, indicating reliance on relatively brief visuosensory (iconic) memory. In contrast, the comparison effects yielded a multiphasic function, showing a maximum at 0 ms followed by a minimum at 133 ms, followed in turn by a maximum at 240 ms and another minimum at 720 ms, and third maximum at 1,200 ms before declining thereafter. The results indicate three stages of prime processing that we take to correspond to iconic visible persistence, iconic informational persistence, and visual working memory.