

of intentional versus incidental memory. The findings of several recent experiments, using stringent conditions, revealed the effects of intent to remember on recognition memory performance. Pictorial stimuli, such as human faces, were presented at brief stimulus durations, with no inter-stimulus interval, to prevent rehearsal. The findings suggest that allocating attentional resources within 500 msec enhances memory.

8:20–8:35 (294)

Memory for Actions: When Is Enactment Not Superior to Observation? MELANIE C. STEFFENS, JANETTE C. SCHULT, & RUL VON STÜLPNAGEL, *Friedrich Schiller University of Jena* (sponsored by Klaus Rothermund)—Verb–object phrases are remembered better if they have been enacted during study than if one has observed another person enact the phrases. This well-established enactment effect has typically been investigated using lists of unrelated actions, and it has been found that enactment provokes excellent item-specific processing at the expense of processing relations between items. Thus, if recall were to depend on this relational processing that is hindered by enactment, observation could lead to a more effective encoding than does enactment. Indeed, a recent study focusing on the recall of sequences of related actions showed no recall advantage of enactment over observing another person perform (Steffens, 2007, *PB&R*). We present a series of experiments that directly compared action sequences and unrelated actions with regard to free recall, recognition, and organization after enactment and observation. Findings confirm that the well-established enactment effect for unrelated actions does not generalize to action sequences.

8:40–8:55 (295)

Adaptive Memory: Is Memory “Tuned” for Hunting and Gathering? JAMES S. NAIRNE, *Purdue University*, JOSEFA N. S. PANDEIRADA, *University of Aveiro*, & KARIE J. GREGORY & JOSHUA E. VANARS-DALL, *Purdue University*—Recent studies suggest that our memory systems are tuned to remember information that is processed in terms of its fitness value. When people are asked to rate the relevance of words to a survival scenario, surprise retention levels exceed those obtained by a veritable “who’s who” of known encoding techniques. The present experiments explored scenarios that mimic the division of labor thought to characterize early hunter–gatherer societies. Researchers have suggested that “foraging-related cognitive specializations” might manifest themselves when males and females perform gender-specific tasks: gathering for females and hunting for males. Males and females were asked to rate the relevance of random words to prototypical hunting and gathering scenarios. Surprise retention tests revealed superior memory for the rated words, as compared with words rated under matched non-fitness-relevant control scenarios (gathering food on a scavenger hunt or as part of a hunting contest), but no sex differences were found in memory performance.

9:00–9:15 (296)

Reduced Metaconsciousness of Intrusions As an Explanation for Recovered Memory Reports. ELKE GERAERTS, *University of St Andrews*, RICHARD J. McNALLY, *Harvard University*, HARALD MERCKEL-BACH, *Maastricht University*, ANNE-LAURA VAN HARMELEN, *Leiden University*, LINSEY RAYMAEKERS, *Maastricht University*, & JONATHAN J. SCHOOLER, *University of California, Santa Barbara*—People with spontaneously recovered memories of childhood sexual abuse (CSA) are especially susceptible to underestimating their prior remembering of their abuse. In the present study, we examined whether this may be explained by a reduced “metaconsciousness” of their intrusions related to those events: That is, do these individuals fail to notice that memories of abuse do come to mind, thereby producing the illusion that they have repressed the abuse events for many years? We used an adapted thought-suppression paradigm, probing subjects to evaluate whether they had thought about the unwanted thoughts without having noticed. The results showed that there are important differences in how people with recovered memory experiences notice their negative autobiographical thoughts: People with spontaneously recovered memories seem able to ignore the majority of their negative intrusions, realizing that they have them only when explicitly probed. These data provide an explanation for why individuals with spontaneously recovered memories of CSA report they have not thought about their abuse for years.

9:20–9:35 (297)

Behavioral Approach to Familiarity in Schizophrenia. CLARA D. MARTIN, *ISC, L2C2, CNRS*, GUY TIBERGHIE, *ISC, CNRS, Université de Lyon*, JEAN-YVES BAUDOIN, *Université de Bourgogne*, NICOLAS FRANCK & FABRICE GUILLAUME, *ISC, CNRS, Université de Lyon*, & CAROLINE HURON, *INSERM* (read by Caroline Huron)—Studies using the remember–know procedure in patients with schizophrenia showed an impairment in conscious recollection as measured by remember responses, but not in familiarity as measured by know responses. However, none of these studies used the experimental variables that are known to influence know responses specifically in normal subjects. Twenty-six patients and 24 controls were presented with 64 unfamiliar faces, half of them being presented in small and the other half in large. During the remember/know/guess task, 32 previously studied faces were presented in the same size at study and test, and 32 previously studied faces were different in size across study and test. Patients reported fewer remember responses but as many know responses as did controls. However, changes of size between study and test had an impact on know responses in controls, but not in patients. The mechanisms that underlie know responses might be different between patients and controls.

9:40–9:55 (298)

Online Measures of Involuntary and Voluntary Autobiographical Memories. DAVID C. RUBIN, *Duke University*, ADRIEL BOALS, *University of North Texas*, & DORTHE BERNTSEN, *University of Aarhus*—For 1 week, 89 undergraduates recorded involuntary memories as they occurred on a personal data assistant, rating each on 21 scales. For each, they recalled and rated a voluntary memory from the same life period. Involuntary memories had less narrative coherence, setting, and life-story relevance, consistent with associative searches not guided by narrative organization. Involuntary memories had greater emotional reaction and mood change, consistent with less warning time for emotion regulation. Both involuntary and voluntary memories that were related to very stressful events were rated more highly on emotional intensity, emotional reaction, mood change, life-story relevance, and rehearsal. The effects of the stressfulness of the event did not interact with involuntary versus voluntary recall. Moreover, the proportion of involuntary and voluntary memories related to stressful events correlated to a similar degree with measures of PTSD symptoms and neuroticism. One memory system with two retrieval routes accounts for the results.

Visual Memory

Grand Ballroom, Sunday Morning, 10:00–12:00

Chaired by Andrew Hollingworth, *University of Iowa*

10:00–10:15 (299)

Strategic Control of Visual Short-Term Memory for Objects in Scenes. ASHLEIGH M. RICHARD & ANDREW HOLLINGWORTH, *University of Iowa* (read by Andrew Hollingworth)—During scene viewing, visual short-term memory (VSTM) is used to retain information from recently attended and fixated objects. In the present study, we examined whether people can strategically control the content of VSTM during scene viewing, prioritizing task-relevant objects for retention as the eyes are directed to subsequent objects. Participants viewed a set of real-world objects presented serially within a 3-D rendered scene. One object in the sequence was cued by a tone as one to be remembered. At the end of the sequence, memory for the visual form of one object was tested. The participants exhibited tight control over the content of VSTM, successfully protecting task-relevant objects from subsequent perceptual interference. Such strategic maintenance of objects in VSTM is likely to play an important role in real-world visual behavior, especially when object information must be maintained across shifts of attention and the eyes to other objects (such as when comparing two spatially separated objects).

10:20–10:35 (300)

Effect of Emotional Expression on VSTM for Faces: A Matter of Time. KIM M. CURBY, *Temple University*, & STEPHEN D. SMITH, *University of Winnipeg*—Visual short-term memory (VSTM) is strikingly limited. The present research examines whether VSTM capacity is