seen (sensitivity–seen) and used (sensitivity–used). Participants also completed the spelling section of the Wide Range Achievement Test–3. Spelling scores were not significantly correlated with self-report measures of text messaging frequency, but there was a significant positive correlation between sensitivity–seen from the TAT and spelling scores. The results do not support the hypothesis that increased knowledge of text abbreviations is related to lower spelling ability.

Explicit Memory II
Independence Ballroom, Saturday Morning, 8:00–9:55

Chaired by Natalie Sebanz, Radboud University Nijmegen

8:00–8:15 (148)
Your Words in My Memory: How Coaction Affects Recall. NATALIE SEBANZ & TERRY ESKENAZI, *Radboud University Nijmegen*, ADAM DOERRFELD, *Rutgers University, Newark*, & GÜNTHER KNOBLICH, *Radboud University Nijmegen*—Individuals acting together have a tendency to take into account each others' tasks, even when this is not required. The present study investigated whether such "task sharing" leads to improved memory for information relevant to another person. Participants performed a categorization task alone and together. In a subsequent surprise recall test, they reported as many items as possible from the previous task. Our results demonstrate that participants recalled more of the items that were relevant to the other's task, compared with items of the same category encountered during individual task performance, or items of a control category irrelevant to both actors. Further experiments show that this effect of joint task performance on encoding occurs even when participants receive financial incentives to focus on encoding the items relevant to their own task performance. It is concluded that acting together may improve memory performance by affecting depth of processing.

8:20–8:35 (149)
Reconstructing Past Events by Averaging Retrieved Memories Across Individuals. MARK STEYVERS, BRENT MILLER, PERNILLE HEMMER, & MICHAEL LEE, *University of California, Irvine*—When individuals independently recollect events or retrieve facts from memory, how can we average these retrieved memories to best reconstruct the actual set of events or facts? In this research, we report the performance of individuals in a series of general knowledge tasks, where the goal is to reconstruct from memory the order of historic events (e.g., the order of the U.S. presidents), or the magnitude along some physical dimension (e.g., the order of the largest U.S. cities). We also report performance of individuals in serial recall tasks in which the goal is to reconstruct the original order of episodic events. We aggregate the retrieved orders with several rank-order models, including a Thurstonian model and a Mallows model, as well as several probabilistic versions of serial recall models. We demonstrate a *wisdom of crowds* effect, whereby the memories aggregated across individuals come surprisingly close to the true answer.

8:40–8:55 (150)
Adaptive Memory: Ancestral Priorities and the Power of Survival Processing. JAMES S. NAIRNE, *Purdue University*, & JOSEFA N. S. PANDEIRADA, *University of Aveiro*—Evolutionary psychologists often argue that we continue to carry around stone-age brains, along with a toolkit of cognitive adaptations designed originally to solve hunter-gatherer problems. This perspective makes the interesting prediction that optimal cognitive performance may sometimes be induced by ancestrally based problems, those present in ancestral environments, rather than by adaptive problems faced more commonly in modern environments. This prediction was examined in three experiments using the survival processing paradigm, in which retention is tested after participants process information in terms of its relevance to fitness-based scenarios. In all three experiments, participants remembered information better after processing its relevance in ancestral environments (grasslands) as opposed to modern urban environments (cities), despite the fact that all scenarios described similar fitness-relevant problems. These data suggest that our memory systems may be tuned to ancestral priorities.

9:00–9:15 (151)
Retrieval-Induced Forgetting and Executive Control. M. TERESA BAJO, PATRICIA ROMAN, & MARIA F. SORIANO, *University of Granada*, & CARLOS J. GÓMEZ-ARIZA, *University of Jaen*—Retrieving information from long-term memory can lead people to forget previously irrelevant related information. Some have proposed that this retrieval-induced forgetting (RIF) effect is mediated by inhibitory executive control mechanisms recruited to overcome interference. In this study, we assessed whether inhibition in RIF depends on executive processes. The effect RIF obtained in a standard retrieval-practice condition was compared with that obtained from two different conditions in which participants had to perform two concurrent updating tasks demanding executive attention. Whereas the usual RIF effect was observed when retrieval practice was performed singly, no evidence of forgetting was found in the dual-task conditions. The results strongly suggest that inhibition involved in RIF is the result of executive control processes.

9:20–9:35 (152)
Exploring the Sequential Lineup Advantage Using WITNESS. SCOTT D. GRONLUND & CHARLES A. GOODSELL, *University of Oklahoma*, & CURT A. CARLSON, *Texas A&M University, Commerce*—The sequential lineup has been advocated as an improvement over simultaneous lineup procedures; however, no formal explanation exists for why it is sometimes better. We used the computational model WITNESS (Clark, 2003) to explore theoretical explanations of the sequential lineup advantage. An exploration of WITNESS's parameter space revealed that the model could produce a sequential advantage by pairing conservative sequential choosing with more liberal simultaneous choosing. The model was fit to 10 published experiments that directly compared sequential with simultaneous lineup formats. WITNESS poorly approximated the 5 experiments that exhibited a large sequential advantage. Both decision-based and memory-based modifications were proposed as to how the model could better handle sequential lineups. The next step will be to undertake empirical research to test among these proposed explanations for the sequential lineup advantage.

9:40–9:55 (153)
Impact of Learning History on Collaborative and Individual Recall. ADAM CONGLETON & SUPARNA RAJARAM, *Stony Brook University* (read by Suparna Rajaram)—Collaboration during retrieval lowers group recall in comparison with the group's potential. This counterintuitive phenomenon of collaborative inhibition has important implications for the common educational practice of group study. Previous findings show that repeated study reduces collaborative inhibition and increases organization (Pereira-Pasarin & Rajaram, 2007) and repeated recall in the context of collaboration can improve later individual memory (Blumen & Rajaram, 2008). In light of the testing effect literature that shows contrasting consequences of these two learning histories on individual memory, their relative impact on collaboration and on the collaboration cascade on later individual memory was tested. The repeated study advantage that occurs in individual recall at short delay was replicated. Repeated testing prior to collaboration abolished collaborative inhibition and enabled positive collaboration cascade on later individual memory. Findings are evaluated in terms of how learning history and collaboration together impact the organization, gains, losses, and recovery of studied information.

Spatial Cognition
Back Bay Ballroom C, Saturday Morning, 8:00–9:55

Chaired by Timothy L. Hubbard, Texas Christian University

8:00–8:15 (154)
Displacement of Location in Illusory Motion. TIMOTHY L. HUBBARD, *Texas Christian University*, & SUSAN E. RUPPEL, *University of South Carolina, Upstate*—We examined whether displacement in the remembered location of a target typically found with actual motion is found with illusory line motion. In Experiments 1 and 2, a cue appeared