## **SARMAC III**

University of Colorado in Boulder, July 9-11, 1999

List of SARMAC III participants with abstract numbers. Symposium discussants shown with abstract number (in parentheses) of first paper in the session. The abstracts follow this list. Revised June 1, 1999.

#### A

- Anderson, Michael C., (77)
- Arkes, Hal R., <u>35</u>
- Assefi, Seema, <u>19</u>

#### В

- Bahrick, Harry P., 10
- Batsedis, Vicki, 42
- Bauer, Patricia J., 88
- Baxter, Suzanne Domel, 102
- Belli, Robert F., 24
- Berger, Jonathan, 21
- Berliner, Lucy, <u>47</u>
- Berry, Jane M., <u>73</u>
- Bersten, Dorthe, <u>121</u>
- Bevard, Linda A., 5
- Bjork, Elizabeth L., 77
- Bjork, Robert A., <u>11</u>, <u>77</u>

- Blackford, Cheryl, <u>117</u>
- Blickensderfer, Elizabeth, 94
- Bluck, Susan, <u>65</u>, <u>109</u>
- Boelter, Dorina, <u>106</u>
- Bohannon, John Neil III, <u>131</u>
- Bornstein, Brian, <u>55</u>
- Bowe, Marcy, <u>120</u>
- Bowers, Clint, <u>96</u>
- Bowers, Gordon H., 124
- Boyd, Catherine, <u>44</u>
- Bradfield, Amy L., <u>6</u>

- Braun, Kathryn A., <u>67</u>
- Brennan, Susan E., <u>50</u>
- Brewer, Devon D., <u>30</u>, <u>127</u>
- Brigham, John C., <u>103</u>
- Brooks, Elizabeth, 119
- Brown, Norman, <u>23</u>,
- Brown, Trina, <u>123</u>
- Bruck, Maggie, <u>71</u>
- Buckner, Janine, 90
- Burt, Christopher B., <u>114</u>
- Byrne, Christina, 49

### $\mathbf{C}$

- Cannon-Bowers, Janis A., 94
- Cardenas, <u>60</u>
- Carroll, Marie, <u>125</u>
- Cate, Christina, <u>137</u>
- Chandler, C.C., <u>63</u>
   Chee Leong, Goh, <u>100</u>
- Chee Leong, Goh, 100 (paper withdrawn)
- Chen, Chiung-Fen, <u>118</u>
- Clark, Herbert H., <u>53</u>
- Clark, Steven E., <u>82</u>, <u>83</u>
- Colwell, Kevin, 20
- Conrad, Frederick, 23
- Conte, Jon (<u>47</u>)
- Conway, Martin A., <u>1</u>, 80, 112
- Cox, Ashley, <u>132</u>
- Craig, Scotty, <u>140</u>
- Crawford, Scott J., <u>6</u>
- Crossman, Angela M., 72

### D

- Da Costa, 81
- Dashen, Monica, 23
- Davidson, Patrick S. R., <u>2</u>
- Davies, Graham M., <u>57</u>
- Davis, Harry C., <u>102</u>
- Deffenbacher, Kenneth A., 131
- Dhaliwal, Harpreet S.,
   104
- Dixon, Roger A., 74
- Donohue, A., <u>70</u>
- Dougal, Sonya, <u>78</u>
- Dunlosky, John, <u>13</u>Dunning David, <u>46</u>
- Dunning David, 40
- Dysart, Jennifer, <u>84</u>

<u>60</u>  $\mathbf{F}$ Fiore, Stephen M., 91, Fivush, Robyn, <u>90</u>, <u>123</u> Friedman, Alinda, 129 107 Flannigan, Sean, 46 Frisch, Deborah, 4 Fisher, Ronald P., 26 Forst, T. Rene, 66 Fitzgerald, Joseph M., 116 G Galotti, Kathleen M., Ghetti, Simona, 48 Graesser, Art, 140 Gibbons, Jeffrey A., 56 Greene, Edith, 61 Gang, Dan, 21 Glisky, Elizabeth L., 2 Gross, Julien, 101 Garrett, Sharon B., 30, Goldsmith, Morris, 28 Gruneberg, M.M.,  $\underline{3}$ ,  $\underline{4}$ Goodman, Gail S., 48 Garry, Maryanne, 18 Garven, Sena, 8 Η Habermas, Tilmann, Healy, Alice F., 22 Hilligoss, Amy R., 66 Hegarty, Mary, 137 Hiscock, Cheryl K., 20 <u>113</u> Hall, Melanie, 16 Hoekstra, Steven J., Herrmann, Douglas J., Haque, Shamsul, 1 3, 4, (73), 126122 Harris, Richard Hertzog, Christopher, Holmes, Alison, 112 Jackson, 122 Holmquist, Selma, 137 Hayes, Julia, 18 Higbee, Kenneth L., 33 Hyman, Ira, 47, 49, 58, Hayne, Harlene, 17, <u>86</u> 101 Hazzard, Ann, 123 I Itoh, Yuji, 68 J Jacobs, Janis E., <u>37</u> Jentsch, Florian, 96 Johnson, Scott H., 111 James, Telisa, 120 Johns, Michael, 61 Jones, Steven K., 35 K Kawaguchi, Jun, 32, Kelley, Colleen M., Kistorian, 60 103 Kmett, Carla M., 35 Keenan, Janice M., 31 Kelly, Amy, 125 Koriat, Asher, 28 Keeney, Jennifer M., Kintsch, Walter, 52a <u>46</u>

Eisen, Mitchell L., 48,

Ellis, Rhiannon, 67

Eddy, Rebecca, 89

Kelemen, William L.,

### Kirsch, Irving, <u>39</u>

### $\mathbf{L}$

- Lally, Richard A., <u>135</u>
- Lamb, Michael E., <u>69</u>
- Lampinen, James M., 42
- Lee, Paul, <u>52</u>
- Levine, Linda J., <u>133</u>
- Lhost-Catal, Linda, 116
- Li, Karen Z.H., <u>65</u>
- Lindsay, D. Stephen,
   (69), 86
- Lindsay, R. C. L., 7, 46, 54, 84
- Loftus, Elizabeth, <u>16</u>, <u>40</u>, <u>67</u>
- Lopp, Tracy, <u>126</u>
- Lynn, Steven J., <u>38</u>, <u>39,87</u>

#### $\mathbf{M}$

- Malinoski, Peter, <u>38</u>, 87
- Malpass, Roy S., <u>8</u>, <u>85</u>
- Marmelstein, Lisa, <u>87</u>
- Masuda, Sayako, 43
- Mazzoni, Giuliana, <u>27</u>, 40, 41, <u>125</u>
- McDermott, Jessica, 123
- McQuiston, Dawn E., 85
- Meissner, Chris, <u>103</u>
- Melnyk, Laura, 71
- Memon, Amina, 40
- Mertz, Heather, <u>58</u>
- Metcalfe, Janet, 12
- Miner, Nicholas, 106
- Moreland, Richard, 93
- Morrison, Terris A.,
   104

### $\mathbf{N}$

- Narayanan, Hari, <u>137</u>
- Neighbors, Monica, 134
- Neuschatz, Jeffrey S., 42
- Norvilas, Algis, <u>128</u>
- Nunez, <u>81</u>

### $\mathbf{o}$

- O'drobinak, Cecelia A., <u>82</u>
- Okabe, Yasunari, <u>130</u>
- Olde, Brent, <u>140</u>

### P

- Paha, Christine, <u>113</u>
- Palmer, Corey, <u>120</u>
- Paulus, Paul B., <u>92</u>
- Payne, David G., <u>42</u>
- Peluso, Jennifer P., <u>64</u>
- Perfect, Tim J., <u>25</u>
- Pezdek, Kathy, <u>89</u>
- Phillips, Mark R., <u>26</u>
- Pickrell, Jacqueline E., 40
- Pipe, Margaret-Ellen, 99
- Plude, Dana J., <u>75</u>
- Pomeroy, Victoria, <u>140</u>
- Powell, Martine B., <u>70</u>
- Pritchard, Mary E., 31
- Pryke, Sean, <u>54</u>
- Pulos, Steven, <u>62</u>

### Q

- Qin, Jianjian, 48
- Qing, Zhang, <u>29</u>

- Raduansky, 79
- Rawson, Katherine, 13
- Raymark, Patrick H., <u>5</u>
- Read, J. Don, <u>86</u>
- Reisberg, Daniel, <u>106</u>
- Renken, Ann E., 14
- Rinaldi, Giovanni, 127
- Roberts, Kim P., 69
- Robison, L.J., <u>63</u>
- Rosenthal, 81
- Ross, David F., 46
- Roth, Erin, 132
- Rubin, David C., (<u>108</u>)
- Ryan, Robert S., <u>59</u>
- Rybash, John M., 111

#### $\mathbf{S}$

- Safer, Martin A., <u>134</u>
- Salas, Eduardo, <u>94</u>
- Sarfati, Deborah, <u>123</u>
- Schneider, Wolfgang,
   28
- Schooler, W. Jonathan, (58), 59, 78, 86, 91, (103), 105, 107
- Schrauf, Robert W., 108
- Schreiber, Nadja, 99
- Schwartz, Bennett L.,
   (25), 26
- Scott, Christina L., 122

- Scullin, Matthew, 98
- Shah, Priti, 136
- Shapiro, Lauren, <u>117</u>, 118, 119, 120
- Shay, William, 24
- Sheets, Virgil, 126
- Shellhammer, Destiny, 136
- Singer, Jefferson A., 135
- Sivec, Harry J., <u>38</u>, <u>87</u>
- Sivers, Heidi, <u>124</u>

- Skowronski, John J., <u>5</u>
- Son, Lisa, 12
- Soraci, Sal A., <u>139</u>
- Stafford, Frank, 24
- Stafford, Jane, <u>87</u>
- Stasser, Garold L., 95
- Sternberg, Kathleen J., 69
- Stroud, Joanne N., <u>45</u>
- Sutherland, Rachel, <u>17</u>
- Symons, Victoria, <u>132</u>

### $\mathbf{T}$

- Takahashi, Masanobu,
   15
- Tanner, Jennifer, <u>37</u>
- Taylor, Holly A., 139
- Taylor, Leslie R., 115
- Thiede, Keith W., <u>13</u>
- Thompson, William O., <u>102</u>
- Tredoux, Colin, <u>44</u>, <u>81</u>
- Tritabudi, <u>60</u>
- Tsuji, Takeo, <u>68</u>
- Tunnicliff, Jennifer L.,
   82
- Turtle, John W., 9
- Tversky, Barbara, <u>51</u>, <u>52</u>

#### $\mathbf{V}$

- Van der Wege, <u>53</u>
- Van Overschelde, James P., <u>22</u>
- Vannucci, Manila, 41
- Vaughan, Sandra, 95
- Vogl, Rodney J., <u>66</u>

### $\mathbf{W}$

- Wallendael, Lori Van, 36
- Warren, Heather, 98
- Watanabe, Hama, <u>32</u>, <u>130</u>
- Weaver, Charles A., <u>14</u>
- Wells, Gary L., (6), keynote address
- West, Tiffany, <u>88</u>
- Wiley, Jennifer, 138
- Williams,  $S.J., \underline{4}$
- Wilson, Clare, 70
- Winograd, Eugene, (58)
- Winningham, Robert G., <u>14</u>
- Witt, Christy J., <u>55</u>
- Wood, James M., 8
- Wright, Daniel B., <u>16</u>, <u>44</u>, <u>45</u>

- Yoder, Carol Y., <u>126</u>
- Yonelinas, Andrew P.,
- Yu, <u>60</u>

 $\mathbf{Z}$ 

- Zacks, Jeff, 51
- Zale, Jennifer L., <u>69</u>
- Zhan, Xu, 29

top

## **Friday, July 9, 1999**

### **AUTOBIOGRAPHICAL MEMORY**

Engineering 200, Friday Morning, 9:00-10:30 Chaired by Margaret-Ellen Pipe

### (1) Working Memory and Recollection of Personal Past

SHAMSUL HAQUE & MARTIN A. CONWAY, University of Bristol Subjects retrieved personal memories to cue words that were presented for various durations, while engaged in concurrent tasks that loaded on different working memory systems. The findings reveal that different working memory systems play distinct roles. The central executive was found to be the most significant system in interfering with the retrieval of autobiographical memories.

## (2) Contributions of the Frontal Lobes and the Medial Temporal Lobes to an Autobiographical Memory in Normal Older Adults

PATRICK S.R. DAVIDSON & ELIZABETH L. GLISKY, University of Arizona Thirty-six older adults were asked to recall an interesting autobiographical event. While there was no relationship between memory for the autobiographical event and a composite measure of frontal lobe functioning, there was a positive correlation between memory for the event and a factor score reflecting medial temporal lobe functioning. The results support the hypothesis that the medial temporal lobes play a key role in autobiographical memory.

### (3) Memory Failures: An Analysis of Real Life Events

DOUGLAS J. HERRMANN, Indiana State University & M.M. GRUNEBERG, University of Wales

This paper reports on a study of memory failures in everyday life. Participants provided narrative accounts of some of their memory failures and then gave reasons that they believed explained why these failures occurred. The accounts of memory failures and the reasons provided for them indicate that memory failures in everyday lfe are usually the result of two or more causes (such as erroneous metacognitive beliefs, social context, physical context, and emotional state) that capriciously arise in often unforeseen ways.

### (4) Three Studies of Memory Failure in Everyday Life

S.J. WILLIAMS, M.M. GRUNEBERG, University of Wales, & DOUGLAS J. HERRMANN, Indiana State University

Memory failure is examined in (a) a group of students required to keep a diary, (b) a group of business air travellers and (c) a group of supermarket shoppers. Results indicate that (a) time of day is correlated with the kind of memory failure reported and (b) in all studies, a large number

of failures are reported that could be prevented.

(5) Influence of Recorder Affect on the Content of Behavioral Diaries and the Recall of Behaviors PATRICK H. RAYMARK, Clemson University, JOHN J. SKOWRONSKI, & LINDA A. BEVARD, The Ohio State University at Newark

Students (N=48) kept diaries of instructor behaviors. Daily measures of affect were used to predict diary content. Student affect and diary content were used to predict event memory. The affective variables were predictive of diary content, and interacted with the content measures in the prediction of event memory.

<u>top</u>

## SYMPOSIUM: NEW DEVELOPMENTS IN EYEWITNESS SYSTEM-VARIABLE RESEARCH

Math 100, Friday Morning 9:00-10:30 Chair and Discussant: Gary L. Wells

(6) Does Post-Identification Feedback to Eyewitnesses Affect the Confidence-Accuracy Relation? AMY L. BRADFIELD & SCOTT J. CRAWFORD, Iowa State University Recent research has shown that confirming feedback increases participants' confidence in their false identifications compared to participants who hear no feedback or disconfirming feedback (Wells & Bradfield, 1998). We examined the effects of such feedback not only for false identifications but also for correct identifications. The results have implications for understanding the nature of the confidence-accuracy correlation.

(7) Searching Mug Shots: System and Estimator Effects

R.C.L. LINDSAY, Queen's University

I will review the impact of the following variables on mug shot sorting procedures. Estimator Variables: Sex, race, old versus recent photo, appearance change, face distinctiveness, pool size. System Variables: Calculation methods, descriptions versus similarity judgments, open ended versus forced descriptions, using recognition versus recall to obtain search items.

(8) Allegations of Wrongdoing: The Effects of Reinforcement on Children's Mundane and Fantastic Claims

SENA GARVEN, University of Nebraska-Lincoln, JAMES M. WOOD, & ROY S. MALPASS, University of Texas- El Paso

In the present study, two techniques derived from transcripts of the McMartin preschool interviews, reinforcement and conformity pressure, were investigated in interviews of 120 children. Children who received reinforcement were almost three times more likely to make false allegations against a classroom visitor and continued making allegations in a second interview even when reinforcement was discontinued. Allegations included events labeled "fantastic."

(9) The Automated Photo-Lineup System (T.A.P.S.)

JOHN W. TURTLE, Ryerson Polytechnic University

Although most of the recommendations for good eyewitness identification procedures are based on sound system-variable logic and empirical support, implementing them can be difficult for police who are familiar with traditional procedures. This presentation will demonstrate the effectiveness of a software package that easily puts most of the recommendations from system variable research into practice both for application in police cases and for further research.

### (10) A Strategy Selection Theory of the Spacing Effect

HARRY P. BAHRICK, Ohio Wesleyan University

Current explanations of the spacing effect (encoding variability or diminished processing theories) account for the effect with short, but not with long intervals. We present relevant evidence and discuss the meaning.

### (11) Metacognitive Inferences and Assumptions that Impede Effective Instruction

ROBERT A. BJORK, University of California-Los Angeles

The changes necessary to upgrade real-world education and training, which involve introducing desirable difficulties for the learner, tend not to be welcomed by students and trainees. Their resistance to such changes, it is argued here, reflects a misinterpretation of the meaning and predictive value of objective and subjective indices of current performance.

#### (12) Metacognitively-Controlled Study-Time Allocation

JANET METCALFE & LISA SON, Columbia University

Three experiments investigated metacognitively-controlled study-time allocation in a free choice situation, as a function of time pressure, test expectations, judgments of difficulty, and judgments of interest. In contrast to past literature, people had a tendency to allocate their study time to materials they judged to be easy and interesting though there was some tendency to sacrifice this preference when there was little time pressure.

(13) The Rereading Effect: Improving Metacomprehension Accuracy by Reading Text Twice JOHN DUNLOSKY, KATHERINE A. RAWSON, University of North Carolina at Greensboro, & KEITH W. THIEDE, University of Illinois at Chicago

Accurately assessing comprehension is critical for effective learning. However, students' metacomprehension accuracy typically is poor. By integrating theories of monitoring and comprehension, we discovered that reading text twice substantially boosts metacomprehension accuracy. Discussion focuses on boundary conditions for this effect, which have implications for scholarship.

### (14) Individual Differences in Metacognition

CHARLES A. WEAVER, Baylor University, WILLIAM L. KELEMEN, University of Missouri-St. Louis, PETER J. FROST, Rivier College, ROBERT G. WINNINGHAM, & ANN E. RENKEN, Baylor University

We examined individual differences on four different metacognitive tasks, each completed twice (with a one-week delay). Although individual differences in memory performance and confidence ratings were consistent across time and tasks, differences in metacognitive accuracy were not. We interpret these results as evidence against a general metacognitive ability.

top

#### MEMORY SUGGESTIBILITY

Engineering 200, Friday Morning, 10:30-12:00 Chaired by Kim Finger

#### (15) Does Collaborative Remembering Reduce False Memory?

MASANOBU TAKAHASHI, University of the Sacred Heart

Subjects were presented lists similar to those reported in Roediger and McDermott's (1995)

article. After all the subjects were asked to recall the materials, some subjects were then assigned to pairs and had to recall them collaboratively. As a result, collaborative groups recalled more accurately than individuals.

### (16) Inhibiting Recall and Recognition with Postevent Information

DANIEL B. WRIGHT, University of Bristol, ELIZABETH F. LOFTUS, University of Washington, & MELANIE HALL, University of Bristol

Our interest is in whether postevent information which does not include a previously viewed critical scene lowers the probability of remembering that event. After a delay of one week, people given the postevent omission were less likely to free recall and to recognize the critical scene. The effect sizes for "adding" were of a similar size. We relate these findings to reconstructive theories of memory and discuss whether it may be possible to "erase" memories.

- (17) The Effect of Postevent Information on Eyewitness Reports by Adults and Children RACHEL SUTHERLAND & HARLENE HAYNE, University of Otago Adults and children were exposed to neutral, leading, and misleading information about an event after that event occurred. The timing of the postevent information and the test ranged from 24 hours to 6 weeks. The age of the participant and the nature of the test procedure influenced the magnitude of the misinformation effect.
- (18) Imagination Inflation Occurs for Childhood Events but Not Adolescent Events MARYANNE GARRY & JULIA HAYES, Victoria University of Wellington In two experiments, we reworked the original imagination inflation procedure so that the hypothetical events had a far simpler structure. We also investigated whether imagination inflation would be found for events from childhood and more recent events from five years ago. Results showed imagination inflation effects for childhood events, but not for events from five years ago. Theoretical and practical implications are discussed.
- (19) Absolute Memory Distortions: The Effect of Alcohol Placebos on Memory
  SEEMA ASSEFI, Victoria University of Wellington
  Before subjects participated in a typical three-stage eyewitness experiment, we served them
  plain tonic water, but told half of them that they were drinking vodka and tonic cocktails.
  Overall, we observed a misinformation effect, but subjects who believed they were intoxicated
  during the event were more suggestible than controls.

top

### APPLIED RESEARCH

Math 100, Friday Morning, 10:30-12:00 Chaired by Kenneth L. Higbee

- (20) Interviewing Techniques and the Psycholinguistic Assessment of Statement Credibility
  CHERYL K. HISCOCK & KEVIN COLWELL, Sam Houston State University
  This study proposes a comprehensive system of investigative interviewing and credibility
  assessment to evaluate statements from an adult forensic population. Offenders from Texas
  prisons witnessed a staged theft, and provided either honest or dishonest testimony. Patterns of
  detail and linguistic characteristics were successful at discriminating honest reporting from
  fabrication.
- (21) Issues of Memory and Context in a Neural Network Model of Music Cognition JONATHAN BERGER, Stanford University, & DAN GANG, Hebrew University

Language cognition is believed to integrate multiple diverse schematic memory types (phonological, visual-analogic, etc.). By modeling cognition of musical meter and functional-tonal harmonic rhythm (i.e. the rate of change of triadic events) we consider a similar phenomenon in which the schematic types are considerably simplified. Metric schemas are of but two types (duple and triple), harmonic musical events that contain syntactic and semantic (functional) meaning.

(22) Character and Line Spacing Effects on Reading Time and Text Comprehension
JAMES P. VAN OVERSCHELDE & ALICE F. HEALY, University of Colorado
Participants read prose passages varying in line spacing and character spacing. They read
passages more slowly with single than with triple line spacing and with two spaces between
each character than with none. These results support unitization theory and suggest that the
reading window extends below the line of text.

# (23) Estimating the Frequency of Events from Unnatural Categories FREDERICK CONRAD, Bureau of Labor Statistics, NORMAN BROWN, University of Alberta, & MONICA DASHEN, Bureau of Labor Statistics

Applied classification tasks sometimes involve categories people don't naturally use. How would someone answer this survey question: "Last month, how many times did you purchase fats, oils, peanut butter, salad dressing or dairy substitutes?" We report three experiments of people's use of such unnatural categories- in particular superordinates and properties.

## (24) Using Event History Calendar Survey Methods to Optimize the Reports of Autobiographical Events

ROBERT F. BELLI, WILLIAM SHAY, & FRANK STAFFORD, University of Michigan Theoretically, event history calendars (EHCs) should outperform standardized question-list (Q-list) surveys in optimizing the quality of autobiographical recall. In contrast to Q-lists, EHCs permit flexible parallel and sequential probing. An experiment found better quality reports of residence and job changes, and reduced in

terviewer and respondent burden, in the EHC condition.

top

### SYMPOSIUM: METACOGNITION AND EYEWITNESS MEMORY

Engineering 245, Friday Morning, 10:30-12:00 Chair and Discussant: Bennett L. Schwartz

## (25) Eyewitness Metacognition: Investigating the Role of Expertise

T.J. PERFECT, University of Bristol

Several studies demonstrate eyewitness feeling of knowing judgments to be at chance, whilst confidence-accuracy relations are improved by feedback about relative expertise, but not by practice. It is argued that this is because metacognitive judgments rely on expertise-based heuristics that normally lack utility in eyewitness memory.

#### (26) Metacognitive Control in Eyewitness Memory

MARK R. PHILLIPS, RONALD P. FISHER, & BENNETT L. SCHWARTZ, Florida International University

Students observed a simulated crime and then answered questions about the principal characters and actions. Interviewers' instructions to adopt either lenient or stringent output criteria had different effects on (a) the accuracy of witnesses' recollections (b) post-recollection confidence judgments, and (c) the correlation between confidence and accuracy.

## (27) When Events Become Autobiographical: The Role of Metacognitive Judgments GIULIANA MAZZONI, University of Florence

It is possible for people to erroneously believe that they experienced events that never occurred. In this paper, we maintain that the decision by which we consider an event to be autobiographical is based on metacognitive judgments. Such Judgments are similar to other metacognitive judgments about the content of memory.

(28) Metamemory Processes Mediate the Credibility of Children's Memory Reports
ASHER KORIAT, MORRIS GOLDSMITH, University of Haifa, & WOLFGANG
SCHNEIDER, University of Wuerzburg

Children can enhance the accuracy of their testimony substantially when they are allowed to decide for themselves which pieces of information to volunteer and which to withhold, and are given incentives for accurate reporting. The effectiveness of this screening process, however, appears to improve with age.

top

#### APPLIED RESEARCH

Engineering 200, Friday Afternoon, 1:30-3:00 Chaired by Martin A. Safer

- (29) Thinking Strategies Teaching and Metacognitive Training in Subject Matter Domains ZHANG QINGLIN & XU ZHAN, Southwest China Normal University

  The results of three Experiments on thinking-strategies teaching and metacognitive training in subject matter domains (word algebra problems, plane geometry, and physics) showed that the students' academic performance was significantly improved after thinking-strategies training and even more significantly improved after specific metacognitive training.
- (30) Free Listed Items are Effective Cues for Eliciting Additional Items in Semantic Domains DEVON D. BREWER & SHARON B. GARRETT, University of Washington We experimentally evaluated semantic and alphabetic cueing procedures for enhancing recall in free listing tasks. The semantic procedure (in which free listed items served as cues) increased the number of items elicited by 49-91% on average and elicited moderately more additional items than the alphabetic procedure.
- (31) Does Jury Deliberation Really Improve Juror Memory and Memory Monitoring?

  MARY E. PRITCHARD & JANICE M. KEENAN, University of Denver

  Mock jurors viewed a videotaped trial and took a memory test and made memory assessments before and after deliberation. Deliberation improved. for detailed information, but not for information central to the verdict. In addition, it had no impact on memory monitoring. Implications for the court system will be discussed.
- (32) Influence of Using External Memory Aids on Memory for Schedules
  JUN KAWAGUCHI & HAMA WATANABE, Nagoya University
  We examined the influence of using external memory aids on memory for schedules. Subjects were asked to make a note of planned actions and were later required to recall them. It is suggested that the way the notes were made affected memory for planned actions.
- (33) What do Students Think is Worthwhile in a Memory Skills Course?
  KENNETH L. HIGBEE, Brigham Young University
  Students in five university memory-skills classes reported what aspects of the course they felt

were most worthwhile and least worthwhile. Students in one class also rated how worthwhile 14 aspects were on 7-point scales. Implications of the findings for teaching memory skills are discussed.

top

#### SYMPOSIUM: EVERYDAY DECISION MAKING IN ADOLESCENCE AND BEYOND

Math 100, Friday Afternoon, 1:30-3:00 Chaired by Kathleen Galotti

#### (34) Making Important Real-Life Decisions

KATHLEEN M. GALOTTI, Carleton College

Three sets of studies of real-life decision making will be discussed: high school students choosing a college, college students choosing a major, and pregnant women from a variety of backgrounds choosing a birth attendant, prenatal testing options, and pain medications for delivery. The "fit" of laboratory-based models of decision making will be assessed, and suggestions for helping people face important, difficult decisions will be offered.

### (35) Use of Decision Aids in the Choice-of-College Decision

CARLA M. KMETT, HAL R. ARKES, & STEVEN K. JONES, Ohio University High school seniors used no decision aid, generated a pro-con list for each college, or used a computerized aid while choosing which college to attend. Among students with less firm bases for their college choice, use of either aid resulted in significantly higher choice satisfaction assessed after one college term.

## (36) Choosing a Capstone Course in the Psychology Major: Process, Outcome, and Decision Satisfaction

LORI VAN WALLENDAEL, University of North Carolina-Charlotte
The information seeking behavior and decision processes of undergraduate students were
examined before, during, and after an important curricular decision. Students' satisfaction with
their choice was related to the amount of information gathered in making the decision. For most
students, the goal of timely graduation took priority over other goals.

(37) How are Judgment Biases and Decision Making Related to Delinquent Behaviors?

JANIS E. JACOBS & JENNIFER TANNER, Pennsylvania State University

An investigation of the relations between early adolescents' estimation biases, use of various decision skills, and self-reported delinquency revealed that overestimation of others' involvement in delinquent activities was related to more involvement in delinquent behavior. In addition, estimation biases were related to less rational decision skills, lower self-concepts of decision making, and other judgment biases.

top

## SYMPOSIUM: COMPARISON OF CLINICAL AND NON-CLINICAL PROCEDURES IN CREATING NEW BELIEFS AND MEMORIES

Engineering 245, Friday Afternoon, 1:30-3:00 Chaired by Giuliana Mazzoni

(38) The Effects of Hypnosis and Age-Regression on the Retrieval of Early Memories HARRY J. SIVEC, Ohio University and WCA Healthcare System, STEVEN J. LYNN, State

University of New York at Binghamton, & PETER MALINOSKI, Ohio University The effects of hypnosis and age regression procedures on age of early childhood recollections were examined. Hypnotized individuals were more likely than nonhypnotized persons to report recollections that occurred prior to age 2. However, hypnotized, age regressed participants did not recall earlier memories than task motivated participants instructed to remain alert in the present.

(39) The Effect of Prehypnotic Warnings on Hypnotic Pseudomemory Production
IRVING KIRSCH, University of Connecticut, & STEVEN JAY LYNN, State University of
New York at Binghamton

This paper presents three studies which examine the effects of prehypnotic warnings on hypnotic pseudomemory production. Data from the first two studies indicate that warnings mitigate the effects of hypnotic procedures on pseudomemory production, but do not eliminate them entirely. Data from the third study is currently being analyzed.

(40) Multiple Examples Can Change Beliefs About the Past
JACQUELINE E. PICKRELL, GIULIANA MAZZONI, AMINA MEMON, & ELIZABETH
LOFTUS, University of Washington

In this research, we ask if exposing participants to multiple examples of childhood events increases confidence that the participants themselves had experienced the event in childhood. Participants, pretested on their confidence, read multiple examples of the events. Relative to controls, confidence levels of the multiple examples group increased significantly between pretest and posttest.

(41) The Effect of Simple Exposure on Beliefs and Memories of the First Days of Life
GUILIANA MAZZONI & MANILA VANNUCCI, University of Florence
We examined the effects of simple exposure to information about a target event on beliefs and
memories for that event. After reading passages, participants increased the belief that the target
event occurred during their first days of life. False memories were found when a stronger
suggestive procedure was added. An initial warning decreased both false memories and beliefs.

top

**MEMORY** 

Engineering 200, Friday Afternoon, 3:00-4:30 Chaired by Kathryn A. Braun

(42) Improving Memory with Expanded Test Type Rehearsal: Remembering Names and Faces JEFFREY S. NEUSCHATZ, Binghamton University, JAMES M. LAMPINEN, University of Arkansas, VICKI BATSEDIS, Binghamton University, & DAVID G. PAYNE, Binghamton University

Expanded rehearsal is a mnemonic technique in which the interval between successive rehearsals increases. In two experiments subjects attempted to remember names and faces under expanded, spaced, or massed rehearsal schedules. In both experiments, expanded rehearsal led to the best recall performance which appeared to be due to the increasing retrieval difficulty during rehearsal. Theoretical and applied implications are discussed.

## (43) Context Reinstatement in Face Recognition Memory

SAYAKO MASUDA, Tokyo, Japan

Why is mental context reinstatement not always effective on face recognition? Smith (1988) proposed that sufficiently encoding targets increases the effects of context reinstatement. In this experiment, target groups who encoded more poorly showed mental context reinstatement

effects. These results suggest that context reinstatement improves person identification when the target face is not encoded well.

(44)

## Support for the Contact Hypothesis of the Own Race Bias: Studies in South Africa and England

DANIEL B. WRIGHT, University of Bristol, CATHERINE BOYD, University of Bristol, & COLIN TREDOUX, University of Cape Town

The own race bias, where people are more accurate on face memory within their race, has been demonstrated in several studies and yet there is still no accepted explanation. The demographic differences between South Africa (76% black, 13% white) and England (90% white, 6% black) provide an opportunity to explore this bias in two racially distinct societies. An own race bias was observed and there was an interaction between country and the race of face. Further studies in these two countries are currently in preparation.

### (45) Looking for a Cause of the Own Age Bias

JOANNE N. STROUD & DANIEL B. WRIGHT, University of Bristol

Previous research has reported that young adults are better at eyewitness face recognition than older adults. We explore how the relative ages of the witness and the culprit influence eyewitness accuracy. In the first experiment, young (18-25 years old) and older (35-55 years old) adults each saw four crime videos. Subjects were more accurate identifying the culprit when viewing culprit present lineups composed of people their own age. In the second experiment, young and old participants viewed both culprit present and culprit absent lineups. In the third experiment, we address the problem of lack of variability in the stimuli using an old/new recognition procedure. In the fourth experiment, we investigate eye movements of older and younger subjects when viewing older and younger culprits.

(46) Are Misidentifications of Familiar but Innocent Persons Caused by Automatic Processing?

JENNIFER M. KEENEY, SEAN FLANNIGAN, & DAVID F. ROSS, University of Tennessee at Chattanooga, DAVID DUNNING, Cornell University, ROD C.L. LINDSAY, Queens University

In this experiment the automatic decision process typically associated with accurate lineup identifications was also found to be associated with the misidentification of an innocent but familiar bystander from a lineup. The results aid the understanding of cognitive processing and lineup identification, and the concept of Unconscious Transference and mistaken identification.

top

#### SYMPOSIUM: TRAUMA AND MEMORY CHARACTERISTICS

Math 100, Friday Afternoon, 3:00-4:30 Chaired by Lucy Berliner; Discussant: Jon Conte

## (47) Children's memory for Traumatic and Positive Events: Relationship to Psychological Symptoms

LUCY BERLINER, University of Washington, & IRA HYMAN, Western Washington University

Memories for trauma in adults varies and is associated with the types of symptoms experienced. Comparable data on children's memories for trauma are scarce. We examined the nature and quality of children's memory for a variety of traumatic events and for positive personal experiences. Relationships between memories and psychological symptoms were examined. We hypothesized that children whose memories are more vivid and more often recalled will have significantly more posttraumatic stress symptoms; children whose memories are hazier and less often recalled will have fewer symptoms overall; and the quality of memory for positive events

will be correlated with quality of memory for trauma.

#### (48) An Examination of Abuse Disclosures in Maltreated Children

MITCHELL L. EISEN, California State University, Los Angeles, GAIL S. GOODMAN, SIMONA GHETTI, & JIANJIAN QIN, University of California, Davis
This study was designed to assess normative patterns in abuse disclosure and consistency of reporting across interviews was unrelated to Substantiation of the allegations. Interestingly, the more disturbed children provided more detail in their sexual abuse reports and were more consistent when reporting physical abuse. These findings will be discussed in the larger context of understanding the qualitative characteristics of abuse reports.

### (49) Differences between Trauma Memories and Memories of Other Experiences

IRA E. HYMAN & CHRISTINA BYRNE, Western Washington University We asked college students about several traumatic events that they may have experienced. For those with traumatic experiences, we asked them about their most traumatic experience. For those without traumatic experiences, we asked them to consider another negative life experience. Differences between memories of traumatic experiences and other memories are considered in terms of various theories of memory for arousing events.

<u>top</u>

## SYMPOSIUM: COMMUNICATING WITH WORD, PICTURE, AND BODY: IMPLICATIONS FOR DESIGN

Engineering 245, Friday Afternoon, 3:00-4:30 Chaired by Barbara Tversky

#### (50) Toward Solving the Vocabulary Problem

SUSAN E. BRENNAN, State University of New York at Stony Brook When faced with language-using computers, how do people choose their words? And how do they puzzle out interpretations of labels, commands, messages, and icons? Possible mappings of symbols to meanings are boundless. Solutions to this "vocabulary problem" arise from studies of how people construct meanings in dialogs with human and computer partners.

### (51) Graphical Communication: Interpreting and Producing Bar and Line Graphs

JEFF ZACKS & BARBARA TVERSKY, Stanford University
Patterns of graph usage reveal associations between observers' information processing
abilities, cognitive naturalness, and graphic conventions. In three experiments examining
comprehension and production, people associated bars with discrete comparisons and lines
with trends. This correspondence may reflect the influence of the communicative situation in
addition to information-processing and cognitive naturalness.

### (52) Graphical Communication: Depictions and Descriptions of Routes

BARBARA TVERSKY & PAUL LEE, Stanford University

Pictures and words are usually viewed as complementary external representations; however, for the case of routes, they are alternative. Examination of route descriptions and depictions reveals similar syntax and semantics. This opens the possibility of automatic translation, which was evaluated.

### (52a) Summary Street: A Computer Based Writing Tool

WALTER KINTSCH

Latent Semantic Analysis is used to provide feedback to students writing a summary of articles

or textbook chapters they have studied. The feedback is focused on the content of the summary: it tells the student which sections of the text have been adequately covered and what is missing; it identifies redundant material as well as sections that are covered in too much detail; it makes suggestions for reorganization of the summary. The system has been tested in several field trials and has been shown to be an effective tool for revising summaries.

### (53) Techniques for Indicating: Pointing and Placing

MIJA VAN DER WEGE & HERBERT H. CLARK, Stanford University
People have two basic techniques for indicating objects in communication. One is to direct
other people's attention to those objects, as when I point at a car while saying "That car is
mine." The second technique is to position the objects for others, as when I place a bottle of
shampoo on a checkout counter for the clerk to ring up. I argue that placing, generally ignored,
is essential to face-to-face conversation and other types of communication.

top

#### KEYNOTE ADDRESS, GARY WELLS

"SYSTEM-VARIABLES IN EYEWITNESS RESEARCH: A SUCCESS STORY" FRIDAY AFTERNOON 5:00-6:00, MATH 100

## **Saturday**, **July 10**, **1999**

#### EYEWITNESS MEMORY

Engineering 200, Saturday Morning, 9:00-10:30 Chaired by Steven E. Clark

(54) Independent Identification of Face, Voice, and Body: Is it More Diagnostic of Guilt? SEAN PRYKE & R.C.L. LINDSAY, Queen's University

Studies combining voice and body with facial identification present these sources of information together, reasoning that they act as contextual cues. After a staged crime, witnesses attempted to identify the criminal's face, voice, and body independently. Independent identification via two or more sources is highly diagnostic of guilt.

## (55) Voice Identification as a Function of Source Language CHRISTY J. WITT & BRIAN BORNSTEIN

Two experiments assessed native English-speakers' ability to recognize a target voice speaking either English with a French accent or French. Listeners performed better with English versions of the target voice than the French version and listeners with previous French experience outperformed listeners with no French experience with target present and absent voice lineups.

(56) Statistically Improving Identification for Words and Characters in TV News Stories JEFFREY A. GIBBONS, Carthage College

Gibbons (1998) statistically combined pleasantness ratings and recognition judgments and improved the identification of words. This study extended this method to faces shown in a TV newscast by statistically combining recognition judgments and attractiveness ratings. For both words and faces, the method increased the number of correct rejections.

(57) Attribution of Blame in a Road Accident as a Function of Driver and Vehicle Characteristics GRAHAM M. DAVIES, Leicester University

Ratings of aggressiveness were demonstrated to vary as a function of age and gender of driver and color and model of car driven. These characteristics were varied systematically within an accident scenario which led to significant differences in estimates of vehicle speed and position on the road but not attributions of blame.

top

## SYMPOSIUM: INDIVIDUAL DIFFERENCES IN SUGGESTIBILITY AND MEMORY DISTORTION

Math 100, Saturday Morning, 9:00-10:30

Chaired by Mitchell L. Eisen; Discussants: Eugene Winograd and Jonathan W. Schooler

- Individual Differences Related to Event Plausibility Judgments following False Feedback IRA E. HYMAN, JR. & HEATHER MERTZ, Western Washington University Using an extension of the Barnum Effect, we presented participants with false personality feedback and suggested that, based on their personality profile, one set of childhood events was likely to have occurred while a second set was unlikely. We consider whether the individual differences that are related to accepting false personality feedback and false plausibility information are also predictive of individuals who make other forms of memory errors.
- (59) Whom do Words Hurt?: Individual Differences in Susceptibility to Verbal Overshadowing ROBERT S. RYAN, Union College, & JONATHAN W. SCHOOLER, University of Pittsburgh The role of perceptual and verbal ability in mediating verbal overshadowing of faces was examined. Perceptual ability was assessed using both domain specific (face recognition) and non-specific (e.g., embedded figures) measures. Verbal ability was determined by GPA. Impaired face recognition following verbalization was greatest when verbal ability was low, and perceptual ability (either domain specific or general) was high.
- (60) Individual Differences in College Students Resistance to Misleading Information MITCHELL L. EISEN, CARDENAS, KISTORIAN, YU, & TRITABUDI, California State University, San Bernardino This study was designed to examine relations between resistance to misleading information,

This study was designed to examine relations between resistance to misleading information, acquiescence and attentional capacity. We also examined the relationship between suggestibility and semantic intrusions on the Deese/Roediger-McDermott task (DRM). As predicted, errors of commission on misleading questions were positively related to acquiescence. However, resistance to misleading information was not related to attention or semantic intrusions on the DRM task.

top

### REASONING AND DECISION MAKING

Engineering 245, Saturday Morning, 9:00-10:30 Chaired by Stephen M. Fiore

(61) The Fusion of Liability and Damages in Jury Decision Making EDITH GREENE & MICHAEL JOHNS, University of Colorado

Civil jurors are expected to make decisions about a defendant's liability by considering only the defendant's actions and not the consequences of those actions. We examine that assumption and assess the possibility that evidence relevant to the plaintiff's injuries inappropriately influences decisions about the defendant's liability.

### (62) Reasoning with Experimental and Epidemiological Evidence

STEVEN PULOS, University of Northern Colorado

Reasoning differences in the evaluation of experimental and epidemiological evidence was examined. Significantly less information was used in the evaluation of experimental evidence, than with epidemiological evidence. The reasoning employed did not differ between the two conditions, but was generally inadequate due to affirmative biases and failures to employ proportional reasoning.

### (63) Contrasting Illnesses Promotes the Process of Making a Diagnosis

L.J. ROBISON & C.C. CHANDLER, Washington State University

Students learned about heart attacks and panic attacks either in succession or by contrasting the symptoms. Contrasting symptoms created better diagnosticians who: (1) recognized which questions would be informative, (2) diagnosed a case more accurately and confidently, and (3) were better able to justify their diagnoses. Labeling the important symptoms during sequential learning may ameliorate (1) and (2), but not (3).

top

**MEMORY** 

Engineering 200, Saturday Morning, 10:30-12:00 Chaired by Daniel Wright

## (64) Affective Valence, Emotional Processing, and Individual Differences: The Role of Affect in Memory for Pictures

JENNIFER P. PELUSO, Mercer University

Incidental memory was examined for pictures that systematically varied in emotional valence and that were encoded in either emotional or non-emotional orienting conditions. Results revealed that an emotional orientation in the processing of pictures can have a different influence on memory than the emotional content of the pictures themselves.

## (65) Predicting Memory Completeness and Accuracy: The Role of Emotion and Exposure in Repeated Recall

SUSAN BLUCK & KAREN Z.H. LI, Max Planck Institute for Human Development Participants repeatedly remembered an autobiographical event. While anger during the event predicted amount initially recalled, exposure to the event predicted final amount recalled. The measured variables were unrelated to accuracy. Self-reports concerning amount recalled were related to actual amount recalled but judgments concerning accuracy were not related to actual accuracy.

### (66) Remembering Lies: The Effects of Motivation and Rehearsal

RODNEY J. VOGL, Kansas State University, T. RENE FORST, Southern Methodist University, AMY R. HILLIGOSS, Kansas State University

Participants were tested on their diary of events in which they lied. The truth was remembered better than the lie. Instances where individuals were motivated to lie were remembered better than instances where they were not motivated to lie. The "motivated" lies were also rehearsed more than the "unmotivated" lies.

### (67) Altering Consumer Autobiographies through Advertising

KATHRYN A. BRAUN, Harvard University, RHIANNON ELLIS, & ELIZABETH F. LOFTUS, University of Washington

We investigate whether the use of autobiographical referencing in advertising can cause consumers to become more confident that certain events had personally happened to them as

children. This could occur if the advertising effectively causes consumers to imagine the advertising-based experience in their mind.

#### (68) Memory Conjunction Error for Radio Advertisements

YUJI ITOH & TAKEO TSUJI, Keio University

Recognition memory for pairs of elements from radio advertisements was investigated under three attention conditions. Different from previous studies, false positive rates for pairs of old elements from different advertisements was not higher than those for other negative pairs. Conditions where memories for inter-element relations are acquired are discussed.

top

## SYMPOSIUM: NOVEL INTERVIEWING TECHNIQUES: EFFECTS ON CHILDREN'S EYEWITNESS REPORTS

Math 100, Saturday Morning, 10:30-12:00 Chaired by: Kim P. Roberts; Discussant: D. Stephen Lindsay

## (69) The Effectiveness of Open-ended and Direct Rapport-Building Styles on Children's Reports of a Staged Event

KIM P. ROBERTS, KATHLEEN J. STERNBERG, MICHAEL E. LAMB, & JENNIFER ZALE, National Institute of Child Health and Human Development Children aged 3- to 9-years were interviewed a week or a month after interacting with an adult. Children who had been asked open-ended rapport-building Questions subsequently reported more accurate details about the target event than children for whom rapport was established using direct, focused questions.

#### (70) Computer-Assisted Interviews of Children

MARTINE B. POWELL, Deakin University, CLARE WILSON, University of Sydney, & A. DONOHUE, Deakin University

Data demonstrating the usefulness of interactive computer programs in the investigative interviewing of children is presented. First, computer programs incorporating animation and audio can elicit an accurate and detailed free-narrative of an event from a child. Second, computers can demonstrate children's understanding of concepts that are relevant to the investigative interview.

### (71) Interviewing Young Children Using Imagery

LAURA MELNYK & MAGGIE BRUCK, McGill University

An effective interviewing technique increases accurate recall without increasing inaccurate reporting. Thus, the short- and long-term benefits and risks of using three techniques (guided imagery, answering questions, and seeing hand-drawn pictures) in repeated suggestive interviews with young children were compared. The possible mechanisms underlying these effects will be discussed.

### (72) Suggestibility and Cross-Examination: A Longitudinal Perspective

ANGELA M. CROSSMAN, Cornell University

Young children (aged three to six years) were repeatedly and suggestively interviewed about a staged event about which they later testified in a mock trial, undergoing realistic direct and cross-examination. Two years later, these children were re- interviewed and demonstrated minimal recall of the event, the Suggestions, and their testimony.

## SYMPOSIUM: AGING AND METACOGNITION: EMPIRICAL ADVANCES AND PRACTICAL IMPLICATIONS

Engineering 245, Saturday Morning, 10:30-12:00 Chaired by Christopher Hertzog; Discussant: Douglas J. Herrmann

## (73) Metamemory and Memory Self-Efficacy: Will the Best Predictor Please Stand Up? JANE M. BERRY, University of Richmond

Effects of metamemory and memory self-efficacy (MSE) on age differences in memory functioning were examined. 420 adults (18-89 years old) completed computerized memory tasks and questionnaires. Mediational analyses of age, metamemory, MSE, task effort, and memory performance on four tasks will be reported and evaluated via self-efficacy theory (Bandura, 1997).

## (74) Metacognition in Collaborative Situations: Age and Experience Effects ROGER A. DIXON, University of Victoria

Recent studies of younger and older adults performing episodic memory tasks in collaborative situations have produced a promising array of results pertaining to effects of age and interactive expertise. We now investigate characteristics of metacognitive performance (e.g. memory ratings, predictions, and beliefs) by adults varying in age and interactive experience.

#### (75) Attention and Metamemory

DANA I. PLUDE, University of Maryland

In four experiments we examined whether the monitoring of learning interferes with the ongoing acquisition process. Recall performance was assessed in single-task (memory-only) and in dual-task conditions (memory + monitoring of learning). Results confirm that the monitoring of learning does interfere with recall under some conditions, especially for older adults.

### (76) Aging, Metacognitive Monitoring, and Associative Learning

CHRISTOPHER HERTZOG, Georgia Institute of Technology

Our research addresses age differences in metacognition during learning. Evidence suggests that on-line monitoring skills are preserved, even in the face of age-related declines in learning and memory. However, there may be differences in the effective utilization of monitoring to optimize learning. Implications for memory training programs are discussed.

top

### SYMPOSIUM: INHIBITORY PROCESS IN HUMAN MEMORY

Math 100, Saturday Afternoon, 12:00-1:30

Chaired by Michael C. Anderson and Martin A. Conway; Discussant: Michael C. Anderson

### (77) Indirect Influences of "Inhibited" Information

ELIZABETH L. BJORK & ROBERT A. BJORK, University of California Los Angeles In a variant of the false-fame paradigm, prior to-be-forgotten exposures had a larger, not smaller, impact on subsequent judgments than did corresponding to-be-remembered exposures. These findings suggest that retrieval inhibition can play a role in the interaction of recollection and priming; they also imply that instructions to forget in legal and social settings can have unintended consequences.

(78) Does Verbal Overshadowing Result from the Verbal Inhibition of Non-Verbal Processes?

JONATHAN W. SCHOOLER & SONYA DOUGAL, University of Pittsburgh

Schooler and Engstler-Schooler (1990) found that verbally recalling a non-verbal stimulus can impair subsequent recognition. Originally such "verbal overshadowing" effects were attributed to interference resulting from a new verbally biased representation. However recent findings have argued against this claim. A promising alternative is that retrieval processes may temporarily inhibit nonverbal retrieval processes.

## (79) Memory Retrieval, the Fan Effect, and Suppression RADUANSKY

When memory retrieval requires the selection of a specific memory trace and there are related but irrelevant traces, interference is experienced. This interference is traditionally known as the fan effect. Evidence is presented to suggest that the processes underlying the fan effect involve the inhibition of related by irrelevant traces.

### (80) Disrupting and Preventing Directed Forgetting

MARTIN A. CONWAY, University of Bristol

A series of list directed forgetting (DF) experiments found that the DF effect of inhibition in recall of the to-be-forgotten (TBF) list can be disrupted if there is a secondary task during second list learning. If there is a concurrent memory load during second list learning or the items on the second list are closely related to the items on the first list then inhibition is prevented. These findings are conceptualized in terms of how efficiently the second list is able to act as a competitor in memory to the first list and so trigger inhibition.

top

#### EYEWITNESS MEMORY

Engineering 200, Saturday Afternoon, 1:30-3:30 Chaired by Brian Bornstein

### (81) Reconstructing Faces with an Eigenface Composite System

COLIN TREDOUX, ROSENTHAL, DA COSTA, & NUNEZ, University of Cape Town Visual face recall systems such as Identikit, Photofit, and FRAMES are widely used by law enforcement agencies, but do not produce good likenesses. We describe a newly developed eigenface based composite system. Results from 60 reconstructions and 3 experiments are presented, which show that the system is capable of reconstructing accurate and recognisable likenesses.

(82) Selecting Foils for Identification Lineups: Matching Suspects or Descriptions?

JENNIFER L. TUNNICLIFF, STEVEN E. CLARK, CECELIA A. O'DROBINAK, University of California, Riverside

Researchers have recommended that foils for identification lineups be selected based on their match to the description of the perpetrator, rather than their match to the suspect. Contrary to this recommendation, two experiments showed no differences between suspect-matched and description-matched lineups, except for an advantage in rejecting suspect-matched perpetrator-absent lineups.

### (83) WITNESS: A Computer Simulation Model of Eyewitness Identification

STEVEN E. CLARK, University of California, Riverside

A computer simulation model called WITNESS is presented. WITNESS makes identification decisions by matching each lineup alternative to a vector memory representation. Three decision models were tested by fitting the model to data. A single-criterion absolute matching

model failed, but two relative-match models successfully fit the results of both experiments.

## (84) Delay Effects on Identification Performance from Simultaneous and Sequential Lineups JENNIFER DYSART & R.C.L. LINDSAY, Queen's University

Sequential and simultaneous lineups generate comparable correct identification rates under good witnessing conditions. Under poor conditions, simulaneous lineups may maintain higher correct identification rates. Witnesses using relative judgments may select criminals because they match their memory of the criminals. This hypothesis was tested using a 3 week delay between crime and lineup.

## (85) Influence of Lineup Instructions, Criterion Levels, and Structural Bias on Mock Witnesses Viewing a Sequential Lineup

DAWN E. MCQUISTON & ROY S. MALPASS, University of Texas at El Paso This study evaluated the mock witness paradigm as a technique for assessing sequential lineups. Mock witnesses viewed one of four lineups and were given one of four variations of lineup instructions. Introduction of structural bias caused increased identification of the target, and increased identification of an innocent suspect. Instructional variations had no significant effects.

top

### SYMPOSIUM: ADULTS' RECOLLECTIONS OF CHILDHOOD

Math 100, Saturday Afternoon, 1:30-3:30 Chaired by D. Stephen Lindsay

### (86) Explorations of Distant Memories

D. STEPHEN LINDSAY, University of Victoria, J. DON READ, University of Lethbridge IRA E. HYMAN, JR., Western Washington University, & JONATHAN W. SCHOOLER, University of Pittsburgh

Report questionnaire studies of relationships between memory, emotion, and predicted ability to remember more about childhood events; diary studies, in which adults re-read their old diaries and reported on "no-memory experiences" and "recovered-memory experiences;" and experiments on the effects of efforts to recollect childhood events on reports of prior amnesia.

#### (87) The Plasticity of Early Autobiographical Memories

STEVEN J. LYNN, Binghamton University, PETER MALINOSKI, Ohio University, JANE STAFFORD, LISA MARMELSTEIN, Binghamton University, & HARRY SIVEC, WCA Healthcare System

Describe studies of adults' recollection of early life events that cross the threshold of infantile amnesia and of early memory reports of abuse by students role playing dissociative identity disorder, major depression, and relatively well-adjusted college students.

### (88) Adults' Recollections of Childhood and Beyond

PATRICIA J. BAUER & TIFFANY A. WEST, Institute of Child Development Implicitly or explicitly, memories from early versus later in life are assumed to differ. In 2 studies we directly compared hearing and Deaf adults' early (before age 7) and later memories. There were few differences by hearing status or life period. In contrast, subjective ratings from the two life periods differed.

(89) The Suggestibility of Memory for Childhood Events by Young and Older Adults KATHY PEZDEK & REBECCA EDDY, Claremont Graduate University

Younger and older adults indicated which of a list of childhood events they had experienced, then imagined experiencing half of the events. Later, they again indicated which events they had experienced. Imagining events increased reports of experiencing them. Age groups did not differ on control events, but younger adults were more affected by the imagery task.

#### (90) Gendered Recollections of Childhood

ROBYN FIVUSH & JANINE BUCKNER, Emory University

Reminiscing is a gendered activity; women report earlier and more detailed childhood memories than men. We examined mothers and fathers recollecting their childhoods with their preschool sons and daughters. Gender patterns were analyzed in terms of developing autobiographical life narratives and self-understanding. Implications for how and what adults recall of childhood are discussed.

top

### SYMPOSIUM: COGNITION AND THE SMALL GROUP: INTER- AND INTRA-INDIVIDUAL COGNITIVE PROCESSES IN GROUP PROBLEM SOLVING AND DECISION MAKING

Engineering 245, Saturday Afternoon 1:30-3:30 Chaired by Stephen M. Fiore

(91)

### Problem Space and Group Problem Solving

STEPHEN M. FIORE, University of Central Florida, & JONATHAN SCHOOLER, University of Pittsburgh

In this paper we explore how problem space, a concept that has its roots in, and is adapted from, information processing theories of problem solving, may be responsible for producing process loss in groups. Toward that end, differing characteristics of the method of analysis, problem types, and the problem solving process are investigated.

### (92) Cognitive and Social Factors in Idea Generation

PAUL B. PAULUS, University of Texas at Arlington

Much research indicates that group sharing of ideas or "brainstorming" tends to be less productive than solitary idea production. A variety of studies indicate that this productivity loss may be due to social factors (e.g., concern for evaluation, social loafing, social interference). Recently, we have employed procedures to minimize these factors and in my talk I discuss a model that incorporates both cognitive and social mechanisms to explain how production gains may be possible.

### (93) Transactive Memory and Work Group Performance

RICHARD MORELAND, University of Pittsburgh

Many work groups develop transactive memory systems, which reflect a shared awareness among workers about who knows what. In a series of laboratory experiments, Dr. Linda Argote and I have found that training group members together helps transactive memory systems to grow, which can in turn produce substantial improvements in group performance.

#### (94) Training Team Shared Knowledge: Team Norms

ELIZABETH BLICKENSDERFER, JANIS A. CANNON-BOWERS, & EDUARDO SALAS, Naval Air Warfare Center

Teams who possess shared mental models regarding the team, their task, and team norms, have an advantage over teams without such shared knowledge. In this talk we discuss recent research where we apply shared mental model theory in order to foster the development of team norms.

In addition, formal and informal training mechanisms that have been introduced to team training.

### (95) Information Sharing in Teams of Executives

SANDRA VAUGHAN & GAROLD L. STASSER, Miami University

Middle- and top-level executives completed a committee hiring simulation. Individual information searches and collective information pooling patterns of 30 committees were analyzed. These results are contrasted with patterns observed in numerous studies of decision-making process in ad hoc teams of college students.

### (96) Metacognitive Training for Real-World Tasks

FLORIAN JENTSCH & CLINT BOWERS, University of Central Florida

Metacognition has become an important area of research. Yet, transitioning metacognitive concepts to training has been surprisingly difficult with relatively few studies showing positive benefits of such training on performance. In this paper we investigate the difficulties facing this research and present results of a study in which pilots were taught metacognitive strategies that improved their decision making and team coordination.

top

#### CHILDREN'S MEMORY

Engineering 200, Saturday Afternoon 3:30-5:30 Chaired by Robyn Fivush

## (97) Interviewing Techniques with Child Witnesses: A Study of the Impact of the Interviewing Technique "Inviting Speculation"

NADJA SCHREIBER, Wilhelms-Universitaet Muenster

In the McMartin preschool case, interviewers often invited children to speculate about events at their school. Our experiment examined this interviewing technique. Kindergarteners were asked to speculate on a clown show they had seen. We found that speculation increased the number of memory intrusions two to three weeks later.

### (98) Individual Difference Measures and Children's Suggestibility

MATTHEW SCULLIN & HEATHER WARREN, Cornell University

This research describes the validation of a suggestibility scale for children by comparing children's scores on the scale with their earlier performance in an experiment in which they were given repeated, somewhat leading interviews about two events, one experienced by the children and the other not.

### (99) Children's Event Recall Following Very Long Delays

MARGARET-ELLEN PIPE, University of Otago

Fifty four children who had been exposed to a novel event through participation, a story, or observation were re-interviewed 4 years later. Changes in children's recall as a function of the nature of the experience and of the method of memory assessment (verbal recall and behavioral re-enactment) will be described.

#### (100) Paper withdrawn

Improving Children's Source Monitoring Performance through Rehearsal and Context Reinstatement

GOH CHEE LEONG, University of Otago

In a series of three experiments, we examined two procedures for helping 7- to 8-year-old

children monitor between two information sources (visual and verbal), namely, verbal rehearsal and context reinstatement prior to source monitoring.

### (101) The Effect of Drawing on Children's Verbal Reports after Long Delays

JULIEN GROSS & HARLENE HAYNE, University of Otago

In clinical and legal contexts, obtaining complete and accurate accounts of children's past experiences is paramount. Our research shows that drawing faciliates children's reports without decreasing accuracy after delays as long as 1 year. Children asked to draw and tell report twice as much information as children asked to tell.

### (102) Factors That Impact the Accuracy of Children's Dietary Recalls

SUZANNE DOMEL BAXTER, WILLIAM O. THOMPSON, & HARRY C. DAVIS, Medical College of Georgia

Five studies using observations to validate children's school lunch recalls are presented: 1) a Delphi Study to develop retrieval response categories, 2) category use and recall accuracy, and impact on accuracy of 3) time between eating and reporting, 4) prompting protocols, and 5) salience of entrée and liking for foods.

top

#### SYMPOSIUM: VERBAL OVERSHADOWING: WHEN REHEARSAL IMPAIRS MEMORY

Math 100, Saturday Afternoon, 3:30-5:30 Chair and Discussant: Jonathan W. Schooler

### (103) Self-Generated Misinformation: The Influence of Retrieval Processes in Verbal Overshadowing

CHRISTIAN A. MEISSNER, JOHN C. BRIGHAM, COLLEEN M. KELLEY

A meta analysis of the verbal overshadowing effect in facial identification was conducted (21 studies, N = +1400). In addition, two experiments investigated the influence of retrieval processes on verbal overshadowing. Results indicated that manipulations to participants' response criterion while describing a target face influenced not only the quality of the description, but also the accuracy of the subsequent identification. This "self-generated misinformation" effect was found to persist despite post-description delay and source monitoring instructions.

(104) Verbal Overshadowing: When Dividing Attention Improves Recognition Memory
TERRIS A. MORRISON, HARPREET S. DHALIWAL, & ANDREW P. YONELINAS
The effects of dividing attention onrecognition memory were examined using the verbal
overshadowing paradigm. Verbalization decreased recognition accuracy for colors. However
dividing attention at test eliminated the verbalization effect. The results show that dividing
attention can improve recognition memory when the secondary task interrupts the retrieval of
interfering information.

### (105) Verbal Overshadowing and the Modality Mismatch Assumption

JONATHAN W. SCHOOLER, University of Pittsburgh

The "modality mismatch" assumption, asserts that verbal overshadowing results from a mismatch between the nonverbal perceptual information associated with the original memory and the verbal information associated with the act of retrieval. This talk demonstrates how this assumption successfully characterizes verbal overshadowing with respect to 1) the domains in which it is observed-2) the processes that encourage vs. discourage it and 3) the types of expertise that foster and prevent it.

- (106) Verbal Overshadowing of Face Memory: When DOESN'T it Occur?
  NICHOLAS MINER, DORINA BOELTER, DANIEL REISBERG, Reed College
  Several studies have shown that verbal overshadowing, disrupting memory for faces, is not observed in all circumstances. But what variables govern when this effect is observed? We examine the role of the timing of procedural steps, and also the effects of instructions that might undo overshadowing after it has occurred.
- (107) How Did You Get Here From There: Verbal overshadowing of Macro-Spatial Memory STEPHEN M. FIORE, University of Central Florida & JONATHAN W. SCHOOLER, University of Pittsburgh

This research investigated the reactive effects of verbal report on macro-spatial memory. Subjects studied a map and then either verbalized their memory for the route on the map or engaged in an unrelated verbal activity. Results showed that verbalization hindered performance on a measure of configural knowledge but had little influence on a measure of route knowledge. The discussion focuses on the implications for research on macro-spatial memory.

top

#### SYMPOSIUM: CURRENT RESEARCH ON THE REMINISCENCE BUMP

Engineering 245, Saturday Afternoon, 3:30-5:30 Chaired by Martin A. Conway & David C. Rubin; Discussant: David C. Rubin

- (108) The Distribution of Memories Across the Lifespan Refracted through Language and the Experience of Immigration: Cueing and Narrative Methods

  ROBERT W. SCHRAUF & DAVID C. RUBIN, Duke University

  In the first experiment, twelve individuals provided autobiographical memories to word cues in Spanish on one day and in English on another day. Considering only the external language of memory report, we found that distributions of memories cued in either language
- (109) A Theoretical Perspective on the Reminiscence Bump SUSAN BLUCK, Max Planck Institute for Human Development
- (110) n/a
- (111) Differential Contributions of the Cerebral Hemispheres to Autobiographical Recall: Evidence from Split-Brain Patients

JOHN M. RYBASH, Hamilton College, & SCOTT H. JOHNSON, Dartmouth Medical School We examined the lifespan distribution of autobiographical recall for a small number of splitbrain patients via a lateralized version of the cue word methodology. Results are discussed within the context of the hypothesis that left hemisphere, because it possesses a unique set of inferential and interpretive functions, is responsible for generating the salient features of the lifespan distribution of adults' autobiographical recall.

## (112) The Self and The Reminiscence Bump: New Evidence

MARTIN A. CONWAY & ALISON HOLMES, University of Bristol

A group of older adults (60+ years) recalled as many memories as they could in 5-minute periods from each decade of the their lives. We found that peak recall of memories related to events featuring the childhood themes of trust, autonomy, initiative, industry, occurred in first decade of life, peak recall of identity-related events was in the second decade, intimacy-related memories dated to the third decade, and generativity-related memories peaked in the fourth

decade. Results suggest that memories of events related to the themes of identity and intimacy are overall, more accessible than memories related to other themes and this may be because events related to these are crucial in the formation of a stable self.

top

Presidential Address and SARMAC Business Meeting - All Members Welcome SATURDAY EVENING 5:45 7:30 Cookout at Kittredge Pond Bar Opens at 6:45

## **Sunday, July 11, 1999**

#### AUTOBIOGRAPHICAL MEMORY

Engineering 200, Sunday Morning, 9:00-10:30 Chaired by David C. Rubin

(113) The Development of the Ability to Create Causally Coherent Life Stories in Adolescence TILMANN HABERMAS, Max Planck Institute for Human Development, & CHRISTINE PAHA, Free University Berlin

An exploratory study of brief life narratives provided by three adolescent age-groups indicates that the ability to create global causal coherence in life stories develops across adolescence. Adolescence is a yet uncharted area for understanding the development of autobiographical memory.

(114) Shifts in Autobiographical Recall: Retrieval Strategy and Content Changes CHRISTOPHER B. BURT, University of Canterbury

The autobiographical memory of 14 diarists was examined in 1986 in a series of interviews relating to 874 events which had occurred on average 3.6 years earlier. Twelve of the diarists were located in 1997 and their memory for the events re-examined. This paper reports the changes in retrieval strategy and memory content that were found.

(115) Long-Term Retention of Knowledge and Recollective Experience Aspects of a First Experience Memory

LESLIE R. TAYLOR, Hanover College

This study assessed long-term retention of factual knowledge about a first experience and the level of recollective experience associated with recall of the event. Central facts were remembered better than peripheral facts, but there was little decline in either over the retention interval (15 years). The level of recollective experience was moderate, but like facts, showed little decrement over time. The results indicate that memory of a significant experience can be extensive, accurate, and stable over a long period.

(116) Autobiographical Memory Retention over Twenty Years in Two Older Adults
LINDA LHOST-CATAL, University of Detroit Mercy, & JOSEPH M. FITZGERALD,
Wayne State University

A cued-recall methodology was used to assess retention of autobiographical memories over a 20 year span in two older adults. One subject had kept an extensive event log. Cues that described the activity of the memory were most effective and produced orderly retention data. Remember-know judgments also provided similar orderly retention data.

## SYMPOSIUM: EYEWITNESS TESTIMONY BY CHILDREN, ADOLESCENTS, AND YOUNG ADULTS

Math 100, Sunday Morning, 9:00-10:30 Chaired by Lauren Shapiro

## (117) Implanting False Memories: The Effect of Age, Temperament, and Type of Question in Children's Eyewitness Testimony

CHERYL BLACKFORD & LAUREN SHAPIRO, Emporia State University
This study examined implantation of false memories by introducing erroneous post-event
information shortly after encoding. Results focused on developmental and temperamental
differences in 60 elementary school aged children's delayed memory for a filmed bike theft.

## (118) Misleading Questions: Developmental and Temperamental Differences in the Retrieval of Children's Delayed Event Memory

CHIUNG-FEN CHEN & LAUREN SHAPIRO, Emporia State University This study examined 60 preschool and elementary school aged children's immediate and delayed recall for a filmed bike theft. The results focused on the effect of using misleading questions during a 7 week delayed interview on suggestibility, as well as on developmental and temperamental differences in recall.

#### (119) How Do Gender Stereotypes Affect Children's Testimony?

ELIZABETH BROOKS & LAUREN SHAPIRO, Emporia State University
This study examined the role of gender and gender stereotypes in 104 elementary school
children's immediate and delayed recall for a filmed bike theft. The behavior and
characteristics of the male or female adolescent thief were either gender consistent or
inconsistent. Results focused on gender differences for stereotyped vs. astereotyped children
and the effects of same-sex bias on recall.

# (120) Eyewitness Testimony and Criminal Identification by Adolescents and Young Adults COREY PALMER, TELISA JAMES, MARCY BOWE, & LAUREN SHAPIRO, Emporia State University

This study compared 96 adolescents' and adults' ability to provide accurate testimony and criminal identification for gender stereotyped vs. astereotyped adolescent thieves. After watching a filmed bike theft, participants completed 3 questionnaires that assessed memory, temperament, and gender stereotypes. Criminal identification was made using 6 sequentially presented photographs.

top

#### MEMORY FOR TRAUMA

Engineering 245, Sunday Morning, 9:00-10:30 Chaired by Lucy Berliner

## (121) Trauma Memories Stay Vivid: Evidence from a Diary Study of Involuntary Memories DORTHE BERSTEN, University of Aarhus

Two groups of traumatized subjects participated in a diary study of involuntary (spontaneous) memories. The groups were recruited to differ only on age of the trauma (< 1 year vs. > 5 years). No group differences were found on frequency, vividness and mood impact of the involuntary, traumatic memories suggesting that trauma memories are highly durable.

## (122) Using Autobiographical Memory to Study the Long-Term Impact of Violent Movies Seen in Childhood and Adolescence

RICHARD JACKSON HARRIS, STEVEN J. HOEKSTRA, & CHRISTINA L. SCOTT, Kansas State University

A series of autobiographical memory studies was conducted with young adults to better understand the social experience and effects of seeing violent moview in childhood. Participants recalled such an experience and were assessed for several personality variables. Results showed strong durable memories and some consistent behavioral and affective effects.

### (123) Children's Recollections of Traumatic and Non-Traumatic Events

TRINA BROWN, DEBORAH SARFATI, JESSICA MCDERMOTT, ROBYN FIVUSH, & ANN HAZZARD, Emory University

Children growing up in a violent inner city environment were asked to recall both highly stressful and more positive events. Intriguingly, children's reports of positive experiences were more elaborated and descriptive than their their reports of stressful experiences. Implications of these findings for children's long-term memory for, and coping with negative life events are discussed.

#### (124) In Search of an Analogue of Traumatic Dissociation

HEIDI SIVERS & GORDON H. BOWERS, Stanford University

Unusual clinical effects of trauma on memory are often attributed to victims dissociating during trauma. We sought a practical laboratory analogue for investigating this phenomenon. Hypnotized volunteers experienced events in a normal or suggested dissociated state. Their later recall in each state indeed revealed a kind of mental state dependent memory.

top

**MEMORY** 

Engineering 200, Sunday Morning, 10:30-12:30 Chaired by Jacqueline E. Pickrell

## (125) Phenomenonological Characteristics and Implicit Beliefs about Reality Monitoring Decisions

MARIE CARROLL, AMY KELLY, University of Canberra, & GIULIANA MAZZONI, University of Florence

Memory and metamemory judgments about real and imagined events which occurred with different frequencies were investigated to determine whether the commonly found "bias towards the real" was due to an implicit belief that "if I remember it, it must have been real", or whether it was due to phenomenological qualities of the memory.

## (126) The Influence of Stress on the Detection and Remembering of Consistent and Inconsistent Information

CAROL Y. YODER, TRACY LOPP, DOUGLAS HERRMANN, & VIRGIL SHEETS, Indiana State University

We explored how stress influences ability to detect and remember contradictory information. A 3 (Stress Level) X 2 (Story Content/Order) X 2 (Task Difficulty X Subjects) mixed design was used where participants read two stories, one of which was internally consistent and the other included several contradictions. Results indicated that increases in stress resulted in a corresponding decrease in recall of consistent information and in stable lowered recall for inconsistent material.

### (127) Patterns in the Recall of Sexual and Drug Addiction Partners

DEVON D. BREWER, SHARON B. GARRETT, University of Washington, GIOVANNI RINALDI, Instituto di Analisi dei sistemi ed Informatica del Consiglio Nazionale delle Ricerche

People forget a substantial proportion of their sexual and drug injection partners in recall interviews. We report on the associative and serial order patterns in the recall of sexual and injection partners to describe how partners are organized in memory. We also describe supplemental interviewing techniques to enhance recall of partners developed from these results.

### (128) Memory as a Logical Process

ALGIS NORVILAS, Saint Xavier University

A phenomenological analysis of protocols describing recall for dates of birth reveals that subjects engage in logical type thinking during the memory process. Apparently, subjects relate particular birth date information to meaningful objects (referents) in connection with some rule procedure. The memory-frame that results serves as kind of a key to unlock the contents of memory.

## (129) Cognitive Coherence and Cognitive Entropy: Principles Governing the Effects of Seed Facts on Representations of Geographical Knowledge

ALINDA FRIEDMAN & NORMAN BROWN, University of Alberta, Edmonton We investigated how representations of global geography are updated when people learn new location information. Participants made latitude estimates of Old and New World cities, then learned latitude information about particular cities, then they made a second set of estimates. Second estimates were governed by two principles--cognitive coherence and cognitive entropy.

### (130) How do we Remember our Future Plans?: Memory of Schedule

HAMA WATANABE, Nagoya University, YASUNARI OKABE, Nihon University, JUN KAWAGUCHI, Nagoya University

In this study, we examined memory of future schedules. The results of two experiments indicated that future plans in the morning and evening were recalled more that plans in the daytime. These findings suggest that people make use of 'temporal information' of a day to remember the future schedule.

top

#### SYMPOSIUM: APPLIED RESEARCH ON MEMORY AND EMOTIONS

Math 100, Sunday Morning, 10:30-12:30 Chaired by Martin A. Safer

## (131) Negative Emotionality and Everyday Memory: Disentangling the Effects of Defensive and Orientation Response Sets

KENNETH A. DEFFENBACHER, University of Nebraska at Omaha Researchers of emotion and memory often seem to believe that the underlying pattern of physiological response to emotionally negative stimuli is a unidimensional one. In actuality, either of two qualitatively different response patterns is elicited. Task and observer characteristics determine whether a defensive or orienting response set will be dominant.

#### (132) The Effects of Source on Flashbulb Memory

JOHN NEIL BOHANNON III, Butler University, VICTORIA SYMONS, University of California, Davis, BRIN ROTH, Georgetown University Law School, & ASHLEY COX, Butler University

Subjects' flashbulb memories were assessed for three events: 1. Challenger disaster (N = 1492), 2. the Iraq attack (N = 180), and 3. Princess Diana's death (N = 486) at delays of one day to five years. Subjects hearing about the events from a person remembered their discoveries whereas subjects whose source was the media remembered the facts.

#### (133) Bias in Memory for Emotions: The Role of Current Appraisals

LINDA J. LEVINE, University of California, Irvine

This research assessed sources of bias in people's memories for past emotional responses. Participants recalled their emotions and appraisals following the acquittal of Mr. O.J. Simpson after 1 week, 2 months, and 1 year. The results indicated that memories for past emotions were partially reconstructed or inferred based on current appraisals of events.

- (134) Individual Differences in the Recall of Pre-therapy Distress: Replication and Extension MARTIN A. SAFER & MONICA NEIGHBORS, Catholic University of America After terminating psychotherapy, most clients tend to recall more pre-therapy distress than what they had actually reported prior to therapy. Individual difference on measures of positive, negative, and self-deceptive characteristics correlated with the extent of exaggerated recall of distress. Memory distortions may both reflect and create individual differences.
- (135) The Relationship of Stress to Depression and Autobiographical Memory Recall JEFFERSON A. SINGER & RICHARD A. LALLY, Connecticut College Participants reported trait levels of stress and depression. Two weeks later, participants received a stress versus neutral mood induction. The latency of memory recall for specific versus summary memories and the number of specific memories were examined. It was hypothesized that stressed individuals would recall fewer specific positive memories.

top

## SYMPOSIUM: INDIVIDUAL DIFFERENCES IN MULTIMEDIA PROCESSING: MECHANICAL DRAWINGS, ANIMATIONS, GRAPHS, MAPS, AND WEB PAGES

Engineering 245, Sunday Morning, 10:30-12:30 Chaired by Art Graesser & Priti Shah

(136) The Role of Domain Knowledge and Graph Reading Skills in Graph Comprehension PRITI SHAH & DESTINY SHELLHAMMER, University of Memphis

This study examines the role of domain knowledge and graph skills on viewers' interpretations of bar and line graphs. Low domain-knowledge and low graph comprehension skill leads to more superficial interpretations that are highly influenced by graph format. High domain-knowledge and high graph skill viewers make more inferences, regardless of format.

## (137) Individual Differences in Understanding Machines from Diagrams, Text and Hypermedia Presentations

MARY HEGARTY, University of California, Santa Barbara, HARI NARAYANAN, Auburn University, CHRISTINA CATE, University of California, Santa Barbara, & SELMA HOLMQUIST, Auburn University

This paper will present research on how people understand mechanical devices from text, diagrams, animations and hypermedia presentations. We will examine how different information displays (static vs. animated diagrams; guided vs. free navigation) affect understanding of mechanical systems and how these display factors interact with spatial ability and prior knowledge.

## (138) How Readers Learn Best From Multiple Sources: Evidence From Eye Movements and Comprehension Tests

JENNIFER WILEY, Washington State University

The focus of this study is whether benefits of learning from a multiple source web environment are dependent on a two-window browser. Eye movement and comprehension test data support that a two-window format promotes beneficial comparisons across texts. However, students benefited most from the side-by-side presentation after instruction, and preferred the single window presentation.

## (139) Seeing the Map Through the Landmarks: Integrating Information from Maps HOLLY TAYLOR & SAL A. SORACI, Tufts University

How is information from a map integrated to achieve a global representation? Our research examined spatial integration based on two learning conditions, one providing global and local information and the other only local. Results indicated that generating global information from local led to a more integrated representation. Findings will be discussed in context with issues of spatial cognition and memory.

### (140) Comprehension of Illustrated Texts about Everyday Devices

ART GRAESSER, SCOTTY CRAIG, VICTORIA POMEROY, & BRENT OLDE, University of Memphis

College students comprehended illustrated texts about everyday devices (e.g., toaster, dishwasher), and subsequently provided think aloud or question asking protocols while reading a breakdown scenario. They later were tested on device comprehension and completed a battery of 20 measures of individual differences. We investigated predictors of deep comprehension.