

Douglas L. Morse

1708 21st Avenue South, Suite 185

Nashville, TN 37212

615-340-3400

morse@pobox.com

SUMMARY

I am a Ph.D. student in Cognitive Psychology with the Department of Psychology and Human Development, Peabody College, Vanderbilt University. My research is concerned with the visual and spatial organization of human conceptual knowledge. For example, Laura Novick and I have published research on the ways in which people learn from and use diagrams to assemble objects, and our work has revealed particular visual-spatial properties of diagrams that are important for successful inference-making. Dan Schwartz and I have conducted research revealing the importance of visual and spatial contrasts as a way of supporting conceptual differentiation, a useful pre-cursor to teaching more complex concepts. John Rieser and I have investigated ways of improving the perception of self-motion in virtual reality environments, a technology promising for supporting and improving the ways in which people externally represent concepts and then reason with them. Finally, my own research with Jim Pellegrino and Jeff Nyquist is presently looking at the ways in which people use the visual and spatial features of diagrams to extract the macrostructure of a text, even before they read it, as a way of facilitating comprehension and reasoning.

EDUCATION

Masters Degree in Cognitive Psychology ■ 2003

Vanderbilt University, Nashville, TN

Thesis: "Getting People to Feel Like They Are Moving: Antecedents and Organization of Linear Vection"

Masters Degree in Computer Science ■ 1997

Vanderbilt University, Nashville, TN

B.S. Dual Degree in European Economics and Computer Science ■ 1995

Vanderbilt University, Nashville, TN

RESEARCH AND TEACHING EXPERIENCE (REVERSE CHRONOLOGICAL)

Research Assistant in Perception, John Rieser Lab, Vanderbilt University (Nashville, TN) - under Professor John Rieser for a research project on the perceptual organization of linear vection and visual-vestibular interaction during the perception of self motion. Responsibilities included theoretical development; design and implementation of several experiments; supervision of undergraduate assistants and data collection; data analysis; experimental write-up and dissemination (papers, presentations, etc.). ■ 2001-2003

Teaching Assistant in Statistics, Departments of Psychology and Human Development, Vanderbilt University (Nashville, TN) - under Professor Steve Schilling for an intermediate graduate-level course covering the basic foundation of modern applied statistics -- the general linear model -- and its two threads, regression and ANOVA, via the use of matrix algebra. Responsibilities included occasional teaching, tutoring graduate students as-needed, and routine grading of homework assignments and providing sufficiently-detailed feedback regarding student conceptual and procedural errors. ■ 1998-1999

Research Assistant in Cognition and Instructional Design, Learning Technology Center, Vanderbilt University (Nashville, TN) - under Professor Xiaodong Lin on various research projects regarding the cognitive and sociocultural underpinnings of effective instruction. Responsibilities included theoretical development; quasi-experimental design and implementation; data collection and analysis. ■ 1996-1998

Research Assistant in Biomedical Informatics, Vanderbilt University (Nashville, TN) - Researched, designed, and implemented a software layer for handling all physician's medical orders throughout the entire Vanderbilt medical center. ■ 1995 - 1996

PROFESSIONAL EXPERIENCE (REVERSE CHRONOLOGICAL)

President, Information Systems Architects (Nashville, TN) - Executive-level management and technology consultant. Accomplishments include acting chief information officer (CIO) for a 350-employee corporation serving over 5000 mental health patients (15 month contract) and chief project manager for an enterprise-wide information system for a 14,000-employee corporation with over 9,000 beds for long-term medical care (9 month contract). ■ 1993 - Present

Manager of Software Systems, Turnbow & Associates, Inc. (Brentwood, TN) - Managed consulting services to a client base of over 80 firms, managed software design and development for multiple projects. ■ 1992 - 1993

Executive Vice President, Salespro International, Inc. (Brentwood, TN) - Lead all internal corporate affairs, including product development, legal, accounting, customer service, engineering, and office systems functions. The company's flagship product -- a complex software system for salesforce automation -- was nationally available and a market leader for its time. ■ 1989 - 1992

PEER-REVIEWED PAPERS AND PRESENTATIONS (CHRONOLOGICAL)

Novick, L. R., & Morse, D. L. (2000). Folding a fish, making a mushroom: The role of diagrams in executing assembly procedures. *Memory and Cognition*, 28(7), 1242-1256.

Morse, D. L., & Goldman, S. R. (2001). A solution to word problem problems. *Applied Cognitive Psychology*, 15(4), 465-470.

Morse, D. L., & Rieser, J. R. (May, 2003). Linearvection shows a retinal frame of reference. Poster presented at the third annual meeting of the Vision Sciences Society, Sarasota, Florida.

Morse, D. L., & Rieser, J. R. (November, 2003). Causes of linear vection's body-centered frame of reference. Poster presented at the forty-fourth annual meeting of the Psychonomics Society, Vancouver, British Columbia.

Morse, D. L., & Rieser, J. R. (in prep). Linear vection's organization: Up-down is easier to induce than forward-backward. To be submitted to *Journal of Experimental Psychology: Perception or Perception & Psychophysics*.

AWARDS, APPOINTMENTS, AND SERVICE

Peabody College Honor Scholarship for Doctoral Students (multi-year funding; only 3 awards of this type per year, college-wide) ■ 1997

Graduate Student Council – Cognitive Science Program Representative (elected) ■ 2000-2001, 2003-2004

Reviewer, paper and poster submissions to the 24th and 25th Annual Meetings of the Cognitive Science Society ■ 2002-2003

MEMBERSHIPS

Association of Computing Machinery (ACM) ■ 1995 - Present
Institute of Electrical and Electronic Engineers (IEEE) ■ 1995 - Present
American Educational Research Association ■ 1997 - 1999
American Psychological Association ■ 1999 - Present
American Psychological Society ■ 1999 - Present
Cognitive Science Society ■ 1999 - Present