

BIOGRAPHICAL SKETCH

NAME Rieser, John J.		POSITION TITLE Professor	
eRA COMMONS USER NAME			
EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i>)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Harvard University	BA	1971	Social Relations
University of Minnesota	PhD	1978	Developmental Psychology

A. Positions and Honors**Positions and Employment**

- 1971-1973 Secondary School Science and Mathematics Teacher, Sashe Riverschool, Tonota, Botswana
- 1973-1977 Research Assistant (1973) and NIMH Predoctoral Trainee, Institute of Child Development, University of Minnesota
- 1978-1983 Assistant Professor, Psychology and Human Development, Peabody College, Vanderbilt University
- 1983-1990 Associate Professor, Psychology and Human Development, Vanderbilt University; Director of Developmental Psychology Training Area
- 1986 (Fall) Director Associe, Laboratoire de Psychobiologie de la Enfant, C.N.R.S./E.P.H.E., Paris, France
- 1983-1994 Head of Developmental Psychology, Department of Psychology & Human Development, Peabody College, Vanderbilt University
- 1990-pres Professor, Psychology and Human Development, Peabody College, Vanderbilt University
- 1995-2000 Chair, Department of Psychology & Human Development, Peabody College, Vanderbilt University
- 2001-pres Head of Cognitive Studies, Psychology & Human Development, Peabody College, Vanderbilt University

Other Experience and Professional Memberships**Honors**

- 1986 Visiting Scientist, CNRS/EPHE, Laboratoire de Psychobiologie de la Enfant, Paris, Fellow, Division 7 of the American Psychological Association
- 1990- 1992 Associate Editor, *Developmental Psychology*.
- 1993- 1996 Advisory Panel Member, Human Cognition and Perception, NSF.
- 1993, 2001 Visiting Scientist, Cognitive Sciences, University of Minnesota.
- 1996 Visiting Scientist, CNRS, Center for Research in Cognitive Neuroscience, Marseille.
- 2001- 2004 Member, NAS Committee on Spatial Thinking.

B. Selected peer-reviewed publications (in chronological order)

- Rieser, J. J., Hill, E. W., Bradfield, A., Talor, C., Rosen, S., & Deniston, T. (1985). *The spatial orientation of low vision adults: Final report*. Washington DC: National Institute of Handicapped Research.
- Bransford, J., Sherwood, R., Vye, N., & Rieser, J. J. (1986). Teaching thinking and problem solving: Research foundations. *American Psychologist*, *41*, 1078-1089.
- Rieser, J. J., Guth, D. A., & Hill, E. W. (1986). Sensitivity to perspective structure while walking without vision. *Perception*, *15*, 173-188.
- Rieser, J. J., Guth, D. A., & Weatherford, D. A. (1987). The sensitivity to spatial structure of retarded and nonretarded adults. *American Journal of Mental Deficiency*, *4*, 379-391.

- Rieser, J. J. (1987). Mental models and direct perceptions: Two views of spatial learning without vision. In E. Foulke (Ed.), *Proceedings of the University of Louisville's Conference on Space*. Louisville: University of Louisville.
- Rider, E. A., & Rieser, J. J. (1988). Pointing at objects in other rooms: Young children's sensitivity to perspective structure after walking with and without vision. *Child Development*, *59*, 480-494.
- Rieser, J. J. (1989). Access to knowledge of spatial structure from novel points of observation. *Journal of Experimental Psychology: Human Learning, Memory, and Cognition*, *15*, 1157-1165.
- Rieser, J. J., & Kramer, S. J. (1989). The calibration of space perception as a basis for navigation. In *AAAI Spring Symposium Series: Working Notes on Robot Navigation*. Menlo Park CA.
- Guth, D. A., Hill, E. W., & Rieser, J. J. (1989). Tests of blind pedestrians' use of traffic sounds for street-crossing alignment. *Journal of Visual Impairment and Blindness*, *83*, 461-468.
- Rieser, J. J. (1990). Development of perceptual motor control while walking without vision: The calibration of perception and action. In H. Bloch & B. Bertenthal (Eds.), *Sensory motor organization and development in infancy and early childhood*. The Netherlands: Kluwer.
- Long, R. G., Rieser, J. J., & Hill, E. W. (1990). Mobility in individuals with moderate visual impairments. *Journal of Visual Impairment and Blindness*, *84*, 111-118.
- Rieser, J. J., Ashmead, D. A., Talor, C., & Youngquist, G. (1991). Visual perception and the guidance of locomotion without vision to previously seen targets. *Perception*, *19*, 675-689.
- Rieser, J. J., & Rider, E. A. (1991). The effects of route and environmental complexity on young children's spatial orientation when walking without vision. *Developmental Psychology*, *27*, 97-107.
- Parke, R. D., Ornstein, P. A., Rieser, J. J., & Zahn-Waxler, C. J. (1992). Editors' introduction to the APA Centennial Series. *Developmental Psychology*, *28*, 3-5.
- Rieser, J. J., Hill, E. W., Talor, C. R., Bradfield, A., & Rosen, S. (1992). Visual experience, visual field size, and the development of nonvisual sensitivity to the spatial structure of outdoor neighborhoods explored by walking. *Journal of Experimental Psychology: General*, *121*, 210-222.
- Rieser, J. J. (1992). Human spatial representation and the calibration of walking without vision. In *Proceedings of the Third International Congress of Neuroethology*, 241-244.
- Littlefield, J., & Rieser, J. J. (1993). Semantic features of similarity and children's strategies for identification of relevant information in mathematical story problems. *Cognition and Instruction*, *11*, 133-188
- Hill, E. W., & Rieser, J. J. (1993). How do persons with visual impairments explore novel spaces?: A study of strategies used by exceptionally good and exceptionally poor performers. *Journal of Visual Impairment and Blindness*, *87*, 295-301.
- Parke, R., Ornstein, P., Rieser, J. J., & Zahn-Waxler, C. (1994). The past as prologue. In R. Parke, P. Ornstein, J. J. Rieser, & C. Zahn-Waxler (Eds.), *A century of developmental psychology* (pp. 1-72). Englewood NJ: Erlbaum.
- Parke, R., Ornstein, P., Rieser, J. J., & Zahn-Waxler, C. (1994). *A century of developmental psychology*. Englewood NJ: Erlbaum.
- Rieser, J. J., & Ashmead, D. A. (1994). Visual perception and cognition in infancy. *Contemporary Psychology*, *37*, 744-746.
- Rieser, J. J., & Garing, A. E. (1994). Spatial orientation and perceptual-motor coordination. In R. V. Ramachandran (Ed.), *Encyclopedia of Human Behavior* (pp. 287-295). San Diego: Academic.
- Rieser, J. J. (1994). Ego-centered and environment-centered perceptions of self-movement: A commentary on A. Wertheim's article "Motion perception during self-movement." *Behavioral Sciences*, *17*, 328-329.
- Rieser, J. J., Garing, A. E., & Young, M. F. (1994). Imagery, action, and young children's spatial orientation: It's not being there that counts, it's what one has in mind. *Child Development*, *65*, 1262-1278.
- Rieser, J. J., Pick, H. L., Jr., Ashmead, D. A., & Garing, A. E. (1995). The calibration of human locomotion and models of perceptual-motor organization. *Journal of Experimental Psychology: Human Perception and Performance*, *21*, 480-497.
- Guth, D. A., & Rieser, J. J. (1997). Perception and the control of locomotion by blind and visually impaired pedestrians. In B. Blasch, W. Wiener, and R. Welch (Eds.), *Handbook of Orientation and Mobility*, New York: American Foundation for the Blind, pp. 9-39.
- Rieser, J. J. (1999). Dynamic spatial orientation and the coupling of representation and action.. In R. Golledge (Ed.), *Cognitive mapping and spatial behavior*. Baltimore, MD: The Johns Hopkins Press, Pp.

- Rieser, J. J., Lappin, Joseph S., & Jones, P. (1999). Perceiving and acting without vision. *Perception, 28*, 409-4.
- Pick, H. L., Jr., Rieser, J. J., Wagner, D., and Garing, A. E. (1999). The recalibration of rotational locomotion. *Journal of Experimental Psychology: Human Perception and Performance, 25*, 1179-1188.
- Rieser, J. J. (2000). Concepts about the causes of development: Travel, visual experience, and the development of dynamic spatial orientation. *Infancy, 1*, 231-239.
- Hu, H. H., Gooch, A. A., Thompson, W. B., Smits, B. E., Rieser, J. J., & Shirley, P. (2001). Visual cues for imminent object contact in realistic virtual environments. *SIGGRAPH*, pp. 1-10.
- Rieser, John J., and Pick, Herbert L., Jr. The perception and representation of human locomotion. (2002). In W. Prinz and B. Hommel (Eds.). *Attention and performance XIX: Common mechanisms in perception and action*.
- Rieser, J. J. (2003). Perceptual learning. In J. Guthrie (Ed). *Encyclopedia of education*. New York: McMillan.

C. Research Support

Ongoing Research Support

NSF IIS-0121038 – Rieser (PI)

10/01/01 – 09/30/06

National Science Foundation

Perceptual Aspects of Locomotion Interfaces

This research investigates methods that allow more accurate walking in a locomotion interface and explores how best to accurately convey a sense of spaces being walked through.

Role: PI

Completed Research Support