

**CURRICULUM VITAE**  
**HELENE INTRAUB**  
March, 2012

**Contact Information**

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**Education**

State University of New York at Stony Brook, B.A., Psychology (1973)  
Brandeis University, Ph.D., Psychology (1978)  
Massachusetts Institute of Technology, Postdoctoral Associate, Psychology (1977-1979)

**Professional Experience**

1995-current	<i>Full Professor</i> , Department of Psychology, University of Delaware Associate Professor 9/85 Assistant Professor 9/81
April 2003	<i>Visiting Professor</i> , Vanderbilt University, (Sabbatical)
1998-1999	<i>Program Director</i> , Human Cognition and Perception Program National Science Foundation (NSF)
Jan-July 1995	<i>Visiting Professor</i> , Department of Cognitive Science, Johns Hopkins University (Sabbatical)
1987-1988.	<i>NSF Visiting Professor</i> , Department of Psychology, Columbia University, New York
June-Aug 1981	<i>Visiting Scientist</i> , Medical Research Council Applied Psychology Unit, Cambridge, England
1979-1981	<i>Assistant Professor</i> , Department of Psychology, Bucknell University, Lewisburg, Pennsylvania.
1977-1979	<i>Postdoctoral Associate and Sponsor in Undergraduate Research Opportunities Program</i> , Department of Psychology, Massachusetts Institute of Technology, Cambridge, MA.

## Grants

- NIMH Grant, MH54688-01A1, "Anticipatory Processes in Spatial Cognition," 7/11/03 - 5/31/07 (\$739,000).
- NIMH Subcontract (Intraub, Director) in "Post-Attentive Vision" (PI: Jeremy Wolfe, Brigham and Women's Hospital), 5/03- 5/08. (\$150,000)
- NIMH Grant, MH54688-01A1, "Perceiving and Remembering Scenes," 2/1/97-1/31/02 (\$220,000).
- National Science Foundation Grant, BNS 9011015, "The role of general scene structure in perceiving and remembering pictures, 9/1/90 - 8/31/92 (\$65,000).
- National Science Foundation Grant, BNS 8519417, "Scene Comprehension: The perceptual integration of objects and scenes", 2/86-7/89 (\$120,000).
- National Science Foundation VPW Grant, "Application of computer graphics technology to research on visual scene perception", Visiting Professorship at Columbia University, 9/87-5/88 (\$45,000).
- National Science Foundation Grant, BNS 8217390, "Visual scene processing," 9/83-2/85 (\$35,000).
- Advanced Research Projects Agency Contract MDA 903-76-C-0441 to M.I.T. (PIs, M.C, Potter & J. Kroll). "Picture-word interaction: Implications for speeded on-line processing and delayed memory retrieval", Section C: Postdoctoral Associate; 9/77-9/79.

## Publications

- Mullally, S.L., Intraub, H. & Maguire, E.A. (2012) Attenuated boundary extension produces a paradoxical memory advantage in amnesic patients, *Current Biology*, 22, 261-268. doi: 10.1016/j.cub.2011.03.031
- Intraub, H. (2012), Rethinking visual scene perception. *Wiley Interdisciplinary Reviews: Cognitive Science*, 3: 117–127. doi: 10.1002/wcs.149
- Gagnier, K.M., Intraub, H., Oliva, A., & Wolfe, J.M. (2011). Why does Vantage Point Affect Boundary Extension? *Visual Cognition*, 19, 234 – 257, First published on: 30 November 2010 (iFirst)
- Intraub (2010). Rethinking Scene Perception: A Multisource Model. In B. Ross (Ed), *Psychology of Learning and Motivation*, vol. 52 (pp. 231-264), Burlington:Academic Press.
- Dickinson, C. A., & Intraub, H. (2009). Spatial Asymmetries in Viewing and Remembering Scenes: Consequences of an Attentional Bias? *Attention, Perception & Psychophysics*, 71, 1251-1262.

- Michod, K. & Intraub, H. (2009). Boundary extension. *Scholarpedia*, 4(2):3324.
- Intraub, H. & Dickinson, C. A. (2008). False memory 1/20th of a second later: What the early onset of boundary extension reveals about perception. *Psychological Science*, 19, 1007-1014.
- Intraub, H., Daniels, K. K., Horowitz, T.S., & Wolfe, J.M. (2008). Looking at scenes while searching for numbers: Dividing attention multiplies space, *Perception & Psychophysics*, 70, 1337-1349.
- Dickinson, C. A., & Intraub, H. (2008). Transsaccadic representation of layout: What is the time course of boundary extension? *Journal of Experimental Psychology: Human Perception and Performance*. 34, 543-555.
- Park, S., Intraub, H., Yi, D-J., Widders, D., & Chun, M. M. (2007). Beyond the Edges of a View: Boundary Extension in Human Scene-Selective Visual Cortex, *Neuron*, 54, 335-342.
- Intraub (2007). Scene perception: The world through a window. In Peterson, M. A., Gillam, B., Sedgwick, H. A. (Eds), *In the Mind's Eye: Julian Hochberg on the Perception of Pictures, Films, and the World* (pp.454-466). NY: Oxford University Press
- Quinn, P. C., & Intraub, H. (2007). Perceiving "outside the box" occurs early in development: Evidence for boundary extension in 3- to 7-month-old infants. *Child Development*, 78, 324-334.
- Intraub, H., Hoffman, J.E., Wetherhold, C. J., Stoehs S. (2006). More than meets the eye: The effect of planned fixations on scene representation. *Perception and Psychophysics*, 5, 759-769.
- Daniels, K.K. & Intraub, H. (2006). The shape of a view: Are rectilinear views necessary to elicit boundary extension? *Visual Cognition*, 14, 129-149.
- Intraub, H. (2004). Anticipatory spatial representation in a deaf and blind observer, *Cognition*. 94, 19-37.
- Gottesman, C.V. & Intraub, H. (2003). Constraints on spatial extrapolation in the mental representation of scenes: View-boundaries versus object-boundaries, *Visual Cognition*, 10, 875 - 893.
- Gottesman, C.V. & Intraub, H. (2002). Surface construal and the mental representation of scenes. *Journal of Experimental Psychology: Human Perception and Performance*, 28, 1-11.

- Intraub, H. (2002). Visual scene perception. In Nadel, L. (Ed.) *Encyclopedia of Cognitive Science*, 4, pp. 524 - 527. London: Nature Publishing Group.
- Intraub, H. (2002). Anticipatory spatial representation of natural scenes: momentum without movement? *Visual Cognition*, 9, 93-119. (Special Issue: Representational momentum: New findings, new directions).
- Intraub, H. (2001). Internalized constraints in the representation of spatial layout. *Behavioral and Brain Sciences*, 24:4, 677-678.
- Intraub, H. (1999). Understanding and remembering briefly glimpsed pictures: Implications for visual scanning and memory. In *Fleeting Memories: Cognition of Brief Visual Stimuli*, Veronika Coltheart (Ed.), MIT Press/Massachusetts (pgs.47-70)
- Gottesman, C.V. & Intraub, H (1999). Wide-angle memory of close-up scenes: A demonstration of boundary extension. *Behavioral Research Methods, Instruments and Computers*, 31, 86-93.
- Intraub, H., Gottesman, C.V., & Bills, A.J. (1998). Effects of perceiving and imagining scenes on memory for pictures. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 24, 186-201.
- Previc, F. H., & Intraub, H. (1997). Vertical biases in scene memory, *Neuropsychologia*, 35,1513-1517.
- Intraub, H. (1997). The representation of Visual Scenes. *Trends in the Cognitive Sciences*, 1, 217-221.
- Bishop, P. J., and Intraub, H. (1996). Visual dissociation of digitized photographs. *Behavior Research Methods, Instruments, & Computers*, 28, 365-371.
- Intraub, H., Gottesman, C.V., Willey, E. V., & Zuk, I.J. (1996). Boundary extension for briefly glimpsed pictures: Do common perceptual processes result in unexpected memory distortions? *Journal of Memory and Language*, 35, 118-134. (Special Edition, entitled, "Memory Illusions")
- Intraub, H, & Berkowits, D. (1996). Beyond the edges of a picture. *American Journal of Psychology*, 109, 581-598.
- Intraub H., & Bodamer, J.L. (1993). Boundary extension: Fundamental aspect of pictorial representation or encoding artifact? *Journal of Experimental Psychology: Learning, Memory and Cognition*, 19, 1387-1397.
- Intraub, H., Bender, R.S., & Mangels, J.A. (1992). Looking at pictures but remembering scenes. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 18, 180-191.

- Intraub, H., and Hoffman, J.E. (1992). Remembering scenes that were never seen: Reading and visual memory. *American Journal of Psychology*, *105*, 101-114.
- Intraub, H. (1992). Contextual factors in scene perception. In Chekaluk, E. & Llewellyn, K.R. (Eds.), *The Role of Eye Movements in Perceptual Processes*. Elsevier Science Publishers B.V.: Holland. (Pgs. 45-72).
- Intraub, H., and Richardson, M. (1989). Wide-angle memories of close-up scenes. *Journal of Experimental Psychology: Learning, Memory and Cognition*, *15*, 179-187.
- Intraub, H. (1989). Illusory Conjunctions of forms, objects and scenes during rapid serial visual search. *Journal of Experimental Psychology: Learning, Memory and Cognition*, *15*, 98-109.
- Intraub, H. (1986). Visual dissociation of objects and forms: Integration errors in a very short-term store. In *The Eighth Annual Conference of The Cognitive Science Society* (pgs. 676-683), Erlbaum: NJ.
- Intraub, H. (1985). Visual dissociation: An illusory conjunction of pictures and forms. *Journal of Experimental Psychology: Human Perception and Performance*, *11*, 431-442.
- Intraub, H., & Nicklos, S. (1985). Levels of processing and picture memory: The physical superiority effect. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *11*, 284-298.
- Intraub, H. (1985). Conceptual masking of briefly glimpsed photographs. In R. Groner, G.W. McConkie, & C. Menz (Eds.), *Eye Movements and Psychological Processes*. North Holland Publishing Co.
- Intraub, H. (1984). Conceptual masking: The effects of subsequent visual events on memory for pictures. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *10*, 115-125.
- Intraub, H. (1981). Identification and processing of briefly glimpsed visual scenes. In D.F. Fisher, R.A. Monty, & J.W. Senders (Eds.), *Eye Movements: Cognition and Visual Perception*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Intraub, H. (1981). Rapid conceptual identification of sequentially presented pictures. *Journal of Experimental Psychology: Human Perception and Performance*, *7*, 604-610. (Special edition entitled, "Reading and Related Processes").
- Intraub, H. (1980). Presentation rate and the representation of briefly glimpsed pictures in memory. *Journal of Experimental Psychology: Human Learning and Memory*, *6*, 1-12.
- Intraub, H. (1979). The role of implicit naming in pictorial encoding. *Journal of Experimental Psychology: Human Learning and Memory*, *5*, 78-87.

## Professional Activities

### Professional Organizations

American Psychological Society, Memory (**Fellow**, appointed 2005)  
Psychonomic Society, Member  
Visual Sciences Society, Member  
Eastern Psychological Association, Member

### Advisory and Governing Boards

Governing Board, Psychonomics Society (Elected, October, 2008, Term: 1/1/2009 – 2015)

2008-2011 Chair, Audit Committee; 2009 HR Committee  
2012 Chair-Elect of the Governing Board & Chair, Strategic Planning Committee

Advisory Council, *International Association for the Study of Attention and Performance*  
Term: June 2003 – current

### Editorial Boards

*Attention, Perception and Psychophysics* (previously *Perception & Psychophysics*)  
2003 – 2009

*Encyclopedia of Perception*, Advisory Board, Sage Publications, Bruce Goldstein (Ed.),  
Term: 2006-2009

*Journal of Experiment Psychology: Human Perception and Performance*  
2002 – current  
1990-1993

*Journal of Experimental Psychology: Learning, Memory, and Cognition*  
1984-1989  
2011-current

*Memory and Cognition*; 1997- 2001

*Psychological Bulletin*; 2005 - 2008

### Search Committees for Journal Editor

Search Committee for Editor of *Memory and Cognition*, 2008  
Search Committee for Editor of *Perception and Psychophysics*, 2007

### Conference Review

Vision Science Society, Review Board, December 2008

### **Ad-Hoc Reviewer (Journals):**

American Journal of Psychology, Applied Cognitive Psychology, Cognition, Cognitive Psychology, Emotion, Journal of Experimental Psychology: General, Journal of Experimental Psychology: Human Perception and Performance, Journal of Experimental Psychology: Learning, Memory and Cognition, Journal of Memory and Language, Memory and Cognition, Psychological Science, Psychological Bulletin, Psychonomic Bulletin and Review, Trends in the Cognitive Sciences

### **Study Panels:**

NIH Perception and Cognition Panel, Member. 9/1/2007 – 6/30/2011

NIH Perception and Cognition Panel, Ad Hoc 10/26/06-10/27/06

NSF Science of Learning Centers Competition, Advisory Panel, April 18-19, 2005

NSF Science of Learning Centers, Site Visit Panel, April 17-20, 2008

NIMH Psychobiology and Behavior Research Review Committee 5/31/90 - 6/1/90

NSF Panel, Research Experiences for Undergraduates (REU), Biological, Behavioral, and Social Sciences, 1/7/91 - 1/9/91

Program Director, Human Cognition & Perception, National Science Foundation 8/1998-7/1999

HCP Study Panels, Director (Fall 1998, Spring 1999)

IGERT Panel, Co-Director (Spring 1999)

Committee for the Development of Cognitive Science Initiative

### **Ad-hoc Reviewer (Grants)**

National Science Foundation

National Institute of Mental Health

Air Force Office of Scientific Research

### **Invited Presentations**

#### ***Addresses***

Thirteenth Annual Fred Attneave Memorial Lecture

“Anticipatory Representation of Natural Scenes: Integrating Past and Future in Vision, Touch and Imagination,” Sponsored by the Department of Psychology and the Institute for Cognitive and Decision Sciences, University of Oregon, April 30, 2001.

Plenary Address, “Anticipatory Spatial Representation of Natural Scenes: Momentum without Movement?” The First International Workshop on Representational Momentum, Max-Planck-Institute for Biological Cybernetics, Tübingen, Germany, September 1-3, 2000.

### *Symposia & Workshop Presentations*

Symposium presentation, "A Multi-Source Model of Visual Scene Perception". In "Visual Knowledge: Emergence of a New Discipline that Synthesizes Vision and Memory Theory," 50<sup>th</sup> Meeting of the Psychonomic Society, Boston, MA, November, 21, 2009

Scene Understanding Symposium: SUNS 07, MIT, February 1-2, 2007.  
"Boundary extension: Layout projection in perception or memory?"

Symposium Organizer and Speaker in "Perspectives on Spatial Representation: What can be Learned from Special Populations," 42nd Annual Meeting of the Psychonomic Society, Orlando, Florida, November 2001. Paper presented: "Anticipatory Spatial Representation in a Deaf and Blind Observer."

Symposium Presentation, Eastern Psychological Association, "Remembering things that weren't there", Washington, DC, April, 1997.

American Association for Artificial Intelligence (AAAI) Spring Symposium on Cognitive and Computational Models of Spatial Representation. "The Spatial Representation of Natural Scenes." Stanford University, March 25-27, 1996.

Symposium on Teaching Introductory Psychology, Eastern Psychological Association, "Using Pictures to Make the Point," Philadelphia, PA, March 1996.

Cambridge Basic Research (CBR) Scene Perception Workshop, "Looking at pictures, but remembering scenes," and "Temporal Migration of Pictures during RSVP: A Demonstration". Cambridge, MA, June 1995.

Object Perception and Memory (OPAM), Pre-Psychonomics Workshop "Differences in the mental representation of objects and scenes." St. Louis, MO, November, 1994

New York Consortium, Cognitive Colloquium Series (CAVIL) "Visual dissociation: Illusory conjunctions of objects and scenes," Barnard College, New York, NY, November, 1987.

Symposium on Eye Movements and Psychological Processes, "Conceptual masking of briefly glimpsed photographs" at the 23rd International Congress of Psychology, Mexico, September 1984.

Seventh Annual Interdisciplinary Conference "Identifying and remembering successively presented pictures," Jackson Hole, Wyoming, January 1981.

Conference on Eye Movements: Cognition and Visual Perception. Sponsored by the Behavioral Research Directorate, U.S. Army Human Engineering Laboratory, Aberdeen Proving Ground, M.D., "Identification and processing of briefly glimpsed visual scenes." St. Petersburg, Florida, February 12, 1980.



## *Colloquia*

University of Arizona, Tucson, April 24, 2009  
School of Education, University of Delaware, December 9, 2004  
Massachusetts Institute of Technology, October 3, 2003  
Vanderbilt University, April 3, 2003  
Johns Hopkins University, March, 2003  
Cognitive and Brain Institute, University of California at Berkeley, February 14, 2003  
State University of New York at Stony Brook, October 9, 2002  
Pennsylvania State University, April, 2002  
Ohio State, Columbus Ohio, March, 2001  
Rutgers University, Newark, NJ, March 2000  
N.S.F. Division of Social, Behavioral, & Economic Research, March, 1998  
Johns Hopkins University, Cognitive Science, March, 1995  
University of Delaware, Dept of Educational Studies, December, 1994  
Rowan College, October, 1993  
University of California at Berkeley, November, 1991  
West Chester College, March, 1990  
Rutgers University, Camden, NJ October, 1988  
State University of New York at Stony Brook, December, 1987  
Columbia University, New York, October, 1987.  
University of Washington, Seattle, November, 1987.  
Rutgers University, New Brunswick, NJ, February, 1987.  
New York University, February, 1987.  
Princeton University, February, 1987.  
Mount Holyoak College, Amherst, MA, October, 1986.  
Johns Hopkins University, October, 1985.  
Brandeis University, October, 1984.  
University of Delaware, Dept of Educational Studies, October, 1981  
MRC Applied Psychology Unit, Cambridge, England, July, 1981.  
University of Durham, Durham, England, July, 1981.  
Pennsylvania State University, November 13, 1980.  
Massachusetts Institute of Technology, March 21, 1978.

## *Exhibits*

“Wide-Angle Memory for Close-up Scenes,” A demonstration of boundary extension (Intraub & Richardson, 1989) in "Human Memory," Exploratorium Science Museum Exhibit, San Francisco, May 1998-1999, supported by NSF and Bank of America.

“Wide-Angle Memory for Close-up Scenes,” A demonstration of boundary extension and associated materials for educators. Selected for "Human Memory" in the international science museum tour (2000-2006)

[http://www.exploratorium.edu/exhibit\\_services/travel/memory1.html](http://www.exploratorium.edu/exhibit_services/travel/memory1.html)

## Conference Presentations

Intraub, H. & Delaney, S. (2010, Nov). A multisource approach to scene representation: evidence from haptic exploration. Paper presented at the 51<sup>st</sup> Annual Meeting of the Psychonomic Society, St. Louis, MO.

Czigler, I., Stefanics, G., Sulykos, I. & Intraub H. (2010, May). Boundary Extension as Reflected by Event-related Potentials Poster presented at APS Annual Convention, Boston.

Michod K.O., & Intraub, H. (2009, May). Don't look! Fixating occluded objects distorts scene memory. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.

Dickinson, C., & Intraub, H. (2008, May). Spatial biases in scanning and remembering scenes. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.

Michod K.O., Dickinson, C.A., & Intraub, H. (2008, May). Multiple fixations do not lead to better spatial memory. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.

Dickinson, C. A., & Intraub, H. (2007, May). Boundary extension in the transsaccadic representation of layout. Poster presented at the annual meeting of the Vision Sciences Society, Sarasota, FL.

Michod K.O., & Intraub, H. (2007, May). Conceptual Masking: Is it really all about the concept or does layout matter? Poster presented at the annual meeting of the Vision Sciences Society, Sarasota, FL.

Dickinson, C.A. & Intraub, H. Exploring Spatial and Temporal Aspects of Boundary Extension. Paper presented at the 47th annual meeting of the Psychonomic Society, Houston, TX. November, 2006.

Intraub, H. & Dickinson, C.A. Boundary extension at a glance and across an eye movement. Paper presented at the 47th annual meeting of the Psychonomic Society, Houston, TX. November, 2006.

Dickinson, C. A., Bensonoff, D., & Intraub, H. Representing Layout: What is the time course of Boundary Extension? Poster presented at the Annual Meeting of the Vision Sciences Society, Sarasota, FL, May, 2006.

Intraub, H., Daniels, K.K., Horowitz, T.S., & Wolfe, J.M. Looking at scenes while searching for numbers: Dividing attention multiplies space. Paper presented at the Annual Meeting of the Vision Sciences Society, Sarasota, FL, May, 2006.

Park, S.J., Intraub, H., Widders, D., Do-Joon, Y., & Chun, M. M. Boundary Extension: Filling-out scene layout information in human parahippocampal cortex. Paper presented at the Annual Meeting of the Vision Sciences Society, Sarasota, FL, May, 2006.

Daniels, K.K. & Intraub, H. The Shape of a View: Are Rectilinear Views Necessary to Elicit BE? Poster presented at the Object Perception, Attention & Memory (OPAM) Meeting. Psychonomics Pre-Conference Workshop, Nov, 2005.

Intraub, H. & Daniels, K.K. Tunnel Vision during Visual Scanning: Do Smaller Views yield Smaller Representations? Paper presented at the Annual Meeting of the Psychonomic Society, Toronto, Canada, Nov, 2005.

Daniels, K.K. & Intraub, H. Boundary extension: A special case of rectilinear borders? Poster presented at the Annual Meeting of the Psychonomic Society, Minneapolis, MN, Nov, 2004.

DiCola, C. & Intraub, H. Reconstructing Scenes: View Reconstructing Scenes: View-boundaries vs. boundaries vs. Object Object-boundaries boundaries. Visual Science Society Meeting, Sarasota FL, May 2004.

Intraub, H., Hoffman, J.E., Wetherhold, C.J., & Stoehs, S. To BE or not to BE: Does the Plan to Fixate a New To BE or not to BE: Does the Plan to Fixate a New Region affect Scene Memory? Visual Science Society Meeting, Sarasota FL, May 2004.

Intraub, H., Akers, M., Fiorito M., Simoshina, V. Representation of occluded objects in natural scenes: Are all forms of occlusion equal? Visual Science Society Meeting, Sarasota FL, May 2003.

Intraub, H., Akers, M. & Fiorito, M. Representing Objects in Scenes: Are all Occluding Edges Equal? Forty-second Annual Meeting of the Psychonomic Society, Kansas City, MO, November, 2002

Intraub, H., Hoffman, J.E., Wetherhold, C.J., & Stoehs, S. Does Direction of a Planned Eye Movement Affect Boundary Extension? Mini-Conference on Attention and Perception, Eastern Psychological Association 2002.

Intraub, H. Spatial Representation of Scenes in a Deaf and Blind Observer. Symposium I: What we can learn from special populations; Forty-first Annual Meeting of the Psychonomic Society, Orlando, FL, November, 2001.

Intraub, H., Hoffman, J.E., Wetherhold, C.J., & Stoehs, S. Does Direction of a Planned Eye Movement Affect Boundary Extension? Forty-first Annual Meeting of the Psychonomic Society, Orlando, FL, November, 2001

Intraub, H. & Morelli, F. Anticipatory Spatial Representation in Vision and Haptics. Mini-Conference on Attention and Perception, Eastern Psychological Association, March 2001.

Intraub, H. Spatial Representation in a Deaf and Blind Observer. Fortieth Annual Meeting of the Psychonomics Society, New Orleans, November, 2000 (abstract)

Intraub, H. Spatial inference in scene perception for 3-D Scenes. Paper presented at the European Conference on Visual Perception (ECVP), Groningen, The Netherlands, August 2000

Intraub, H., Turner, A., & Clement, R. Boundary extension in the 3-D world. Paper presented at the Fortieth Annual Meeting of the Psychonomics Society, Los Angeles, CA, November, 1999.

Gottesman, C.V. & Intraub, H. The effect of background construal on memory for objects. Paper presented at the Thirty-ninth Annual Meeting of the Psychonomics Society, Dallas, TX, November, 1998.

Gottesman, C.V., & Intraub, H. What is a scene? Thirty-eighth Annual Meeting of the Psychonomics Society, Philadelphia, PA, November 1997.

Sable, J., & Intraub, H. The role of sensory information and decision criteria in reality monitoring. Eastern Psychological Association Convention, Washington, DC, April, 1997

Intraub, H., Gottesman, C.V., Bills, A.J. Differences in the mental representation of objects and scenes. 36<sup>th</sup> Annual Meeting of the Psychonomics Society, Los Angeles, CA, November, 1995.

Eames, R.T. & Intraub, H. The m effect and transfer appropriate processing, Eastern Psychological Association Convention, Boston, MA isleading, March, 1995

Eames, R.T., & Intraub, H. Picture tests improve mislead subjects' memory performance. Memory and Reality Conference, Baltimore, MD, December, 1994.

Intraub, H., Zuk, I. & Gottesman, C.V. Boundary extension for briefly glimpsed pictures. Thirty-fifth Annual Meeting of the Psychonomics Society, St. Louis, November, 1994.

Gottesman, C.V. & Intraub, H. Representational differences between pictures of objects and pictures of scenes. Thirty-fourth Annual Meeting of the Psychonomics Society, Washington D.C., November, 1993.

Intraub, H., Bodamer, J., and Willey, E. Boundary Extension: Traces of a perceptual schema. Thirty-third Annual Meeting of the Psychonomic Society, St. Louis, MO, November, 1992.

Intraub, H. & Berkowits, D. Beyond the edges of a pictures. Presented at the Thirty-second Annual Meeting of the Psychonomic Society, San Francisco, CA, November, 1991.

Intraub, H. Bender, R., & Mangels, J. Looking at pictures but remembering scenes. Presented at the Thirty-first Annual Meeting of the Psychonomic Society, New Orleans, LA, November, 1990.

Intraub, H., Bender, R., & Mangels, J. Nonveridical memory for picture boundaries. Presented at the Thirtieth Annual Meeting of the Psychonomic Society, Atlanta, GA, November, 1989

Intraub, H. & Richardson, M. Wide-angle memories of close-up scenes. Presented at the Twenty-eighth Annual Meeting of the Psychonomic Society, Seattle. Washington, November, 1987.

Intraub, H. & Hoffman, J. E. Reading and visual memory: Remembering scenes that were never seen. Presented at the Twenty-seventh Annual Meeting of the Psychonomic Society, New Orleans, Louisiana, November, 1986.

Intraub, H. Illusory conjunctions: Integration errors in a very short term store. Presented at the Twenty-sixth Annual Convention of the Psychonomic Society, Boston, MA, Nov., 1985.

Intraub, H. Visual dissociation of pictures and forms. Presented at the Twenty-fifth Annual Convention of the Psychonomic Society, San Antonio, TX, November, 1984.

Intraub, H., & Nicklos, S. Effect of orienting questions on free recall of visual scenes. Presented at the Twenty-fourth Annual Convention of the Psychonomic Society, San Diego, CA, November, 1983.

Intraub, H., & Nicklos, S. Capacity of short term memory for successively presented pictures. Presented at the 89th Annual Convention of the American Psychological Association, Los Angeles, CA, August, 1981.

Intraub, H. Dissociation of concurrently presented visual information. Presented at the Twenty-third Annual Convention of the Psychonomic Society, Philadelphia, PA, November, 1981.

Intraub, H., & Freidner, R. Short-term memory for briefly presented successive pictures. Presented at the 88th Annual Convention of the American Psychological Association, Montreal, September, 1980.

Intraub, H. Rapid semantic identification of pictures. Presented at the 50th Annual Meeting of the Eastern Psychological Association, Philadelphia, PA, April, 1979.

Intraub, H. Selective attention for a subset of sequentially presented visual scenes. Presented at the 87th Annual Convention of the American Psychological Association, NY, August, 1979.