

MARY C. POTTER

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Education

Swarthmore College, B.A., with High Honors, 1952 (Psychology)
University College, London, 1956-58 (Psychology)
Harvard University, Ph.D., 1961 (Cognition; Experimental and Social
Psychology)
Harvard University, Center for Cognitive Studies, Postdoctoral
Fellow, 1962-65.

Fellowships and Honors

Hannah Leedom Fellowship, 1953-54
Phi Beta Kappa, 1955
NSF Pre-doctoral Fellowship, 1956-57
Gilman Fellow (Carnegie project on career options for women), MIT,
1973-74
Distinguished Lecturer in Psychology, University of Richmond, 1976
Fellow, AAAS, 1982-; Section J Nominating Committee, 1992-4
Fellow, American Psychological Association, 1990-
Fellow, Association for Psychological Science, 1991-
Fellow, Cognitive Science Society, 2012-
Governing Board, Psychonomic Society, 1986-1991; Chair, 1991.
Chair of the Faculty, MIT, 1985-1987.
Member, Executive Committee of the International Association for the
Study of Attention and Performance, 1994-2002.
Member, Society of Experimental Psychologists, 2004-
Keynote Speaker, Psychonomic Society Annual Meeting, 2006
Invited Speaker, European Society for Cognitive Psychology, 2007
Keynote/Masterclass Speaker, Academy Colloquium, Royal Netherlands Academy
of Arts and Sciences, 2007

Professional Experience

Research Assistant and Teaching Fellow, Department of Social Relations, Harvard University, 1953-56.
Research Fellow, Center for Cognitive Studies, Harvard University, 1960-1967.
Lecturer in General Education, Harvard University, 1962-63.
Lecturer, Department of Psychology, Wellesley College, 1967.
Lecturer, Department of Urban Studies and Planning, MIT 1967-1970; Associate Professor, 1970-1975.
Associate Professor, Department of Psychology, MIT, 1975-1982.
Professor, Department of Psychology (since 1985, Department of Brain and Cognitive Sciences), MIT, 1982-2015; Professor Emerita, 2015-.

Other Experience

Editorial:

Consulting Editor for *Memory & Cognition* (1990-1994; 1997-00); *Journal of Verbal Learning and Verbal Behavior* (now *Journal of Memory and Language*) (1982-1988); *Cognition* (1984-02); *Journal of Experimental Psychology: Learning, Memory, and Cognition* (1975-1980; 1984-1986; 1995-97); *Journal of Experimental Psychology: Human Perception and Performance* (2003-2011); *Cognitive Psychology* (1995-1998); *Visual Cognition* (2005-2011); *European Journal of Cognitive Psychology* (now *Journal of Cognitive Psychology*) (2008-).

Ad hoc reviewer for *Canadian Journal of Psychology*, *Journal of Experimental Psychology: General, Perception & Psychophysics* (now *Attention, Perception, & Psychophysics*), *Developmental Psychology*, *Neuropsychologia*, *Psychological Review*, *Language and Speech*, *Acta Psychologica*, *Behavioral Neuroscience*, *Psychology and Aging*, *Science*, *Quarterly Journal of Experimental Psychology*, *Psychological Science*, *Psychological Bulletin & Review*, *Cognitive Neuroscience*, *European Journal of Psychology*, MIT Press, Winthrop Publishers, Harvard University Press, W. H. Freeman, Oxford University Press.

Government:

Member, Subcommittee on Memory and Cognitive Processes of the Division of Behavioral and Neural Sciences, NSF, 1979-1982. NSF Oversight Review Committee, Division of Behavioral and Neural Sciences, 1984, 1989. Reviewer, NSF LIS Program. NSF panelist, Visiting Professorships for Women Program,

1987. Ad hoc panel member, site visitor, and reviewer, NIMH, NSF; reviewer, AFOSR. Chair, NSF Oversight Review Committee, Division of Behavioral and Cognitive Sciences (Directorate of Social, Behavioral, and Economic Sciences), 1992. Advisory Committee, Directorate for Engineering, NSF, 1993-1995.

Other:

Selection Panel for John Merck Scholars, the John Merck Fund, 1990-99.

Visiting Committee, Department of Psychology, Princeton University, 1995-98.

Review Committee, Department of Psychology, Hunter College, 1990, 1994.

Review Committee, Department of Psychology, University of Chicago, 1998.

Committee on Women Faculty in the School of Science, M.I.T., Member 1994-96, Chair 1997-98.

Advisory Board, Gender Equity Project, Hunter College, 2002-2007.

Review Committee, Department of Psychology, Temple University, 2004.

Advisory Board, NSF Spatial Intelligence and Learning Center, Temple University, University of Chicago, 2007-.

Publications

Potter, M.C. (1961). *Decision making in a psychophysical situation*. Doctoral dissertation, Harvard University, 1961.

Bruner, J.S., & Potter, M.C. (1964). Interference in visual recognition. *Science*, 144, 424-425. Reprinted in R.N. Haber (Ed.) (1968), *Contemporary theory and research in visual perception*, and in J.S. Bruner (1973), *Beyond the information given*.

Potter, M.C. (1966). On perceptual recognition. In J.S. Bruner, R.A. Olver, & P.M. Greenfield (Eds.), *Studies in cognitive growth* (pp. 103-134). New York: Wiley.

Potter, M.C. (1966, April). Technical note, *Science*.

Potter, M.C., & Levy, E.I. (1968). Spatial enumeration without counting. *Child Development*, 39, 265-272.

Potter, M.C., & Levy, E.I. (1969). Recognition memory for a rapid sequence of pictures. *Journal of Experimental Psychology*, 81, 10-15.

Potter, M.C. (1972). Review of James Marston Fitch, "American building 2: The environmental forces that shape it", *Landscape Architecture*, July, 360-361.

Potter, M.C. (1972). How people see signs: Implications of findings in perceptual and cognitive psychology. Technical Report, Ashley-Meyer-Smith, Inc., Cambridge, MA.

Potter, M.C. (1973). Goals for women in science. (Co-author, M.E. Law, ed.) *Technology Review*, 75 (7), 48-57.

Potter, M.C. (1975). Meaning in visual search. *Science*, 187, 965-966.

- Potter, M.C., & Faulconer, B.A. (1975). Time to understand pictures and words. *Nature*, 253, 437-438.
- Potter, M.C. (1976). Short-term conceptual memory for pictures. *Journal of Experimental Psychology: Human Learning and Memory*, 2, 509-522.
- Potter, M.C., Valian, V.V., & Faulconer, B.A. (1977). Representation of a sentence and its pragmatic implications: Verbal, imagistic, or abstract? *Journal of Verbal Learning and Verbal Behavior*, 16, 1-12.
- Potter, M.C., & Faulconer, B.A. (1979). Understanding noun phrases. *Journal of Verbal Learning and Verbal Behavior*, 18, 509-521.
- Potter, M.C. (1979). Mundane symbolism: The relations among objects, names, and ideas. In N.R. Smith & M. B. Franklin (Eds.), *Symbolic functioning in childhood* (pp. 41-65). Hillsdale, NJ: Erlbaum.
- Potter, M.C., Kroll, J.F., & Harris, C. (1980). Comprehension and memory in rapid sequential reading. In R. Nickerson (Ed.), *Attention and Performance VIII* (pp. 395-418). Hillsdale, NJ: Erlbaum.
- Potter, M.C. (1983). Representational buffers: The eye-mind hypothesis in picture perception, reading, and visual search. In K. Rayner (Ed.), *Eye movements in reading: Perceptual and language processes* (pp. 423-437). New York: Academic Press.
- Potter, M.C. (1983). Review of U. Neisser, "Memory observed: Remembering in natural contexts", in *Contemporary Psychology*, 28, 272-274.
- Potter, M.C. (1984). Rapid serial visual presentation (RSVP): A method for studying language processing. In D. Kieras & M. Just (Eds.), *New methods in reading comprehension research* (pp. 91-118). Hillsdale, NJ: Erlbaum.
- Kroll, J.F., & Potter, M.C. (1984). Recognizing words, pictures, and concepts: A comparison of lexical, object, and reality decisions. *Journal of Verbal Learning and Verbal Behavior*, 23, 39-66.
- Potter, M.C., So, K.-F., Von Eckardt, B., & Feldman, L. (1984). Lexical and conceptual representation in beginning and proficient bilinguals. *Journal of Verbal Learning and Verbal Behavior*, 23, 23-38.
- Von Eckardt, B., & Potter, M.C. (1985). Clauses and the semantic representation of words. *Memory & Cognition*, 13, 371-376.
- Potter, M.C., Kroll, J.F., Yachzel, B., Carpenter, E., & Sherman, J. (1986). Pictures in sentences: Understanding without words. *Journal of Experimental Psychology: General*, 115, 281-294.
- Potter, M.C., & Kroll, J.F. (1987). Conceptual representation of pictures and words: Reply to Clark. *Journal of Experimental Psychology: General*, 116, 310-311.
- Kanwisher, N.G., & Potter, M.C. (1989). Repetition blindness: The effects of stimulus modality and spatial displacement. *Memory & Cognition*, 17, 117-124.

- Kanwisher, N.G., & Potter, M.C. (1990). Repetition blindness: Levels of processing. *Journal of Experimental Psychology: Human Perception and Performance*, 16, 30-47.
- Potter, M.C. (1990). Remembering. In D. Osherson & E. Smith (Eds.), *An invitation to cognitive science. Vol. 3: Thinking* (pp. 3-32). Cambridge, MA: Bradford/MIT Press.
- Potter, M.C., & Lombardi, L. (1990). Regeneration in the short-term recall of sentences. *Journal of Memory and Language*, 29, 633-654.
- Bavelier, D., & Potter, M.C. (1992). Visual and phonological codes in repetition blindness. *Journal of Experimental Psychology: Human Perception and Performance*, 18, 134-147.
- Lombardi, L., & Potter, M.C. (1992). The regeneration of syntax in short term memory. *Journal of Memory and Language*, 31, 713-733.
- Potter, M.C., Moryadas, A., Abrams, I., & Noel, A. (1993). Word perception and misperception in context. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 19, 3-22.
- Potter, M.C. (1993). Very short-term conceptual memory. *Memory & Cognition*, 21, 156-161.
- Chun, M.M., & Potter, M.C. (1995). A two-stage model for multiple target detection in rapid serial visual presentation. *Journal of Experimental Psychology: Human Perception and Performance*, 21, 109-127.
- Potter, M.C., Stiefbold, D., & Moryadas, A. (1998). Word selection in reading sentences: Preceding versus following contexts. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 24, 68-100.
- Potter, M.C., & Lombardi, L. (1998). Syntactic priming in immediate recall of sentences. *Journal of Memory and Language*, 38, 265-282.
- Potter, M. C., Chun, M. M., Banks, B. S., & Muckenhoupt, M. (1998). Two attentional deficits in serial target search: The visual attentional blink and an amodal task-switch deficit. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 24, 979-992.
- Potter, M. C. (1999). Understanding sentences and scenes: The role of Conceptual Short Term Memory. In V. Coltheart (Ed.), *Fleeting memories: Cognition of brief visual stimuli* (pp.13-46). Cambridge, MA: MIT Press.
- Xu, Y., Pollatsek, A., & Potter, M. C. (1999). The activation of phonology during silent Chinese word reading. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 25, 838-857.
- Chun, M. M., & Potter, M. C. (2001). The attentional blink and task-switching within and across modalities. In K. Shapiro (Ed.), *The limits of attention: Temporal constraints on human information processing* (pp. 20-35). Oxford: Oxford University Press.

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- Potter, M. C., Staub, A., & O'Connor, D. H. (2002). The time course of competition for attention: Attention is initially labile. *Journal of Experimental Psychology: Human Perception and Performance, 28*, 1149-1162.
- Potter, M. C., Staub, A., Rado, J., & O'Connor, D. H. (2002). Recognition memory for briefly-presented pictures: The time course of rapid forgetting. *Journal of Experimental Psychology: Human Perception and Performance, 28*, 1163-1175.
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- Potter, M. C., Staub, A., & O'Connor, D. H. (2004). Pictorial and conceptual representation of glimpsed pictures. *Journal of Experimental Psychology: Human Perception and Performance, 30*, 478-489.
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- Potter, M. C., Nieuwenstein, M. R., & Strohminger, N. (2008). Whole report versus partial report in RSVP sentences. *Journal of Memory and Language, 58*, 907-915.
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- Potter, M. C., & Fox, L. F. (2009). Detecting and remembering simultaneous pictures in a rapid serial visual presentation. *Journal of Experimental Psychology: Human Perception and Performance, 35*, 28-38.

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<http://dx.plos.org/10.1371/journal.pone.0013562>
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- Potter, M. C., Wyble, B., & Olejarczyk, J. (2011) Attention blinks for selection, not perception or memory: Reading sentences and reporting targets, *Journal of Experimental Psychology: Human Perception and Performance*, 37, 1915-1923.
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- Potter, M. C. (2012). Conceptual short term memory in perception and thought. *Frontiers in Psychology*, 3:113. doi: 10.3389/fpsyg.2012.00113
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- Gil-Gómez de Liaño, B., Potter, M. C., & Rodriguez, C. (2013). Working memory effects in speeded RSVP tasks. *Psychological Research*, DOI 10.1007/s00426-013-0479-7

- Potter, M. C., Wyble, B., Haggmann, C. E., & McCourt, E. S. (2014). Detecting meaning in RSVP at 13 ms per picture. *Attention, Perception, & Psychophysics*, 76(2), 270-279. DOI 10.3758/s13414-013-0605-z
- Endress, A. D., & Potter, M. C. (2014). Large capacity temporary visual memory. *Journal of Experimental Psychology: General*. 143(1), 548–565. doi: 10.1037/a0033934
- Endress, A. D., & Potter, M. C. (2014). Something from (almost) nothing: buildup of object memory from forgettable single fixations. *Attention, Perception, & Psychophysics*, 76 (8), 2413-2423. DOI 10.3758/s13414-014-0706-3
- Potter, M. C. (2014). Detecting and remembering briefly presented pictures. In K. Kveraga & M. Bar (Eds.), *Scene Vision* (pp. 177-197). Cambridge, MA: MIT Press.
- Potter, M. C., & Haggmann, C. E. (2015). Banana or fruit? Detection and recognition across categorical levels in RSVP. *Psychonomic Bulletin & Review*, 22(2), 578-585. DOI 10.3758/s13423-014-0692-4
- Potter, M. C. (in press). Conceptual Short Term Memory (CSTM) supports core claims of Christiansen and Chater. Commentary on "The Now-or-Never Bottleneck: A Fundamental Constraint on Language," *Behavioral and Brain Sciences*.
- Haggmann, C. E., & Potter, M. C. (under review). Ultrafast scene detection and recognition with low spatial frequencies.