

## Jason D. Arndt

### Contact Information

Department of Psychology  
Middlebury College  
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### Education

1995 B.A., University of Kansas, Lawrence, Kansas (Psychology)  
1997 M.A., University of North Carolina at Chapel Hill, Chapel Hill, NC (Cognitive Psychology)  
2000 Ph.D., University of North Carolina at Chapel Hill, Chapel Hill, NC (Cognitive Psychology)

### Professional History

August, 2000 – August, 2002:  
Post Doctoral Research Associate  
Carnegie Mellon University  
Mentor: Lynne M. Reder

September, 2002 – June, 2009:  
Assistant Professor of Psychology  
Middlebury College

July, 2009 – June, 2012:  
Neuroscience Program Director  
Middlebury College

July, 2009 – June, 2014:  
Associate Professor of Psychology  
Middlebury College

July, 2014 – Present:  
Professor of Psychology  
Middlebury College

July, 2020 – Present:  
Chair of Psychology Department  
Middlebury College

**Publications** (\* indicates Middlebury student)

- Hirshman, E. & Arndt, J. (1997). Discriminating alternative conceptions of false recognition: The cases of word concreteness and word frequency. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 23, 1306-1323.
- Arndt, J. & Hirshman, E. (1998). True and false recognition in MINERVA2: Explanations of a global matching perspective. *Journal of Memory and Language*, 39, 371-391.
- Hirshman, E., Passannante, A., & Arndt, J. (1999). The effect of midazolam on the modality-match effect in implicit memory. *Cognitive Brain Research*, 7, 473-479.
- Hirshman, E., Passannante, A., & Arndt, J. (2001). Midazolam amnesia and conceptual processing in implicit memory. *Journal of Experimental Psychology: General*, 130, 453-465.
- Arndt, J. & Reder, L. (2002). Word frequency and receiver operating characteristic curves in recognition memory: Evidence for a dual-process interpretation. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 28, 830-842.
- Hirshman, E., Fisher, J., Henthorn, T., Arndt, J., & Passannante, A. (2002). Midazolam amnesia and dual-process models of the word frequency mirror effect. *Journal of Memory and Language*, 47, 499-516.
- Arndt, J., & Reder, L. M. (2003). The effect of distinctive visual information on false recognition. *Journal of Memory and Language*, 48, 1-15.
- Hirshman, E., Fisher, J., Henthorn, T., Arndt, J., & Passannante, A. (2003a). Midazolam amnesia and retrieval from semantic memory: Developing methods to test theories of implicit memory. *Brain & Cognition*, 53, 427-432.
- Hirshman, E., Fisher, J., Henthorn, T., Arndt, J., & Passannante, A. (2003b). The effect of midazolam on conscious, controlled processing: Evidence from the Process-Dissociation Procedure. *Memory & Cognition*, 31, 1181-1187.
- Arndt, J., Passannante, A., & Hirshman, E. (2004). The effect of midazolam on implicit and explicit memory in category exemplar production and category cued recall. *Memory*, 12, 158-173.
- Arndt, J. (2006). Distinctive information and false recognition: The contribution of encoding and retrieval factors. *Journal of Memory and Language*, 54, 113-130.
- Fisher, J., Hirshman, E., Henthorn, T., Arndt, J., & Passannante, A. (2006). Midazolam amnesia and short-term/working memory processes. *Consciousness and Cognition*, 15, 54-63.

- Diana, R.A., Reder, L.M., Arndt, J., & Park, H. (2006). Models of recognition: A review of arguments in favor of a dual-process account. *Psychonomic Bulletin & Review*, *13*, 1-21.
- Arndt, J., & Gould, C.\* (2006). An examination of two-process theories of false recognition. *Memory*, *14*, 814-833.
- Park, H., Arndt, J., & Reder, L. (2006). A contextual interference account of distinctiveness effects in recognition. *Memory & Cognition*, *34*, 743-751.
- Arndt, J., & Jones, T.C. (2008). Elaborative processing and conjunction errors in recognition memory. *Memory & Cognition*, *36*, 899-912.
- Arndt, J., Lee, K.\*, & Flora, D.B. (2008) Recognition without identification for words, Pseudowords and Nonwords. *Journal of Memory and Language*, *59*, 346-360.
- Guillet, R.\* & Arndt, J. (2009). Taboo words: The effect of emotion on memory for peripheral information. *Memory & Cognition*, *37*, 866-879.
- Arndt, J. (2010). The role of memory activation in creating false memories of encoding context. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *36*, 66-79.
- Arndt, J. (2012). The influence of forward and backward associative strength on false recognition. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *38*, 747-756.
- Giammattei, J.\*, & Arndt, J. (2012). Hemispheric asymmetries in the activation and monitoring of memory errors. *Brain and Cognition*, *80*, 7-14.
- Beato, M., & Arndt, J. (2014). False recognition production indexes in forward associative strength (FAS) lists with three critical words. *Psicothema*, *26*, 457-463.
- Arndt, J. (2015). The influence of forward and backward associative strength on false memories for encoding context, *Memory*, *23*, 1093-1111.
- James, T., Strunk, J., Arndt, J., & Duarte, A. (2016). Age-related deficits in selective attention during encoding increase demands on episodic reconstruction during context retrieval: An ERP study. *Neuropsychologia*, *86*, 66-79
- Beato, M., & Arndt, J. (2017). The role of backward associative strength in false recognition of DRM lists with multiple critical words, *Psicothema*, *29*, 358-363.
- Strunk, J., James, T., Arndt, J., & Duarte, A. (2017). Age-related changes in neural oscillations supporting context memory retrieval. *Cortex*, *91*, 40-55.
- Arndt, J. & Beato, M. (2017). The role of language proficiency in producing false memories. *Journal of Memory and Language*, *95*, 146-158.

Beato, M., & Arndt, J. (2021). Questioning the role of the forward associative strength (FAS) in false memories: Evidence from DRM lists with three critical lures, *Frontiers in Psychology*, 12, article 724594.

### **Chapters in Edited Volumes**

Arndt, J. (2012). False recollection: Empirical findings and their theoretical implications. In B.H. Ross (Ed.) *Psychology of Learning and Motivation*, Vol. 56, pgs. 81-124. USA: Academic Press.

### **Encyclopedia Entries**

Arndt, J. (2008). Explicit memory. In N.J. Salkind (Ed.) *Encyclopedia of Educational Psychology*. Thousand Oaks, CA: Sage Publications, Inc.

Arndt, J. (2012). Paired-associate learning. In N.M. Seel (Ed.) *Encyclopedia of the Sciences of Learning*. New York: Springer

Arndt, J. (2012). Arousal and paired-associate learning. In N.M. Seel (Ed.) *Encyclopedia of the Sciences of Learning*. New York: Springer

### **Grants**

**NSF REU 0452869:** *Research in Psychology: Discovering the Process*. Jason Arndt & Michelle McCauley, Co-PIs. March 1, 2005 – February 28, 2006

**NIH 1R15 MH077665:** *Associations between perceptual information and events that were never perceived*. Jason Arndt, Principal Investigator. April 1, 2007 – March 31, 2010

**VT-EPSCOR Pilot Research Grant:** *Development and testing of MINERVA-DP, a Model of Recognition Memory*. Jason Arndt, Principal Investigator. June 1, 2008 – May 30, 2009

**NSF-ROA:** *The influence of attention on associative memory in the young and old*. Supplemental funding for NSF Grant 1125683, Audrey Duarte, Principal Investigator. July 1, 2012 – June 30, 2013

**NSF-ROA:** *Studies of memory reactivation during sleep using intracranial recordings*. Supplemental funding for NSF Grant 1829414, Ken Paller, Principal Investigator. September 1, 2020-August 31, 2021.

### **Journal Editorial Service**

Associate Editor, *Memory & Cognition*, 2013-2014; July, 2018-2019

Consulting Editor, *Memory & Cognition*, 2008-2012; 2014-June, 2018; 2020-Present

Consulting Editor, *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 2004-2006; 2008-present

Editorial Board, *Psychological Science*, 2004-2007

## **Ad-hoc reviewer**

*Acta Psychologica; American Journal of Psychology; Applied Cognitive Psychology; Behavior Research Methods, Instruments, & Computers; Behavioral and Brain Functions; Canadian Journal of Experimental Psychology; Cognition and Emotion; Cognitive Psychology; Developmental Psychology; European Journal of Cognitive Psychology; Experimental Psychology; Journal of Experimental Psychology: General; Journal of Experimental Psychology: Learning, Memory, and Cognition; Journal of Memory and Language; Journal of Undergraduate Neuroscience Education; Learning and Motivation; Memory & Cognition; PLOS-ONE; Psychological Review; Psychological Science; Psychology, Crime, and Law; Psychonomic Bulletin and Review; Psychopharmacology; Quarterly Journal of Experimental Psychology; Trends in Cognitive Science*

## **Grant Reviewing**

Panelist, National Science Foundation: Perception, Action, and Cognition Program (Fall, 2007 & Fall, 2008)

External Reviewer, National Science Foundation: Perception, Action, and Cognition Program (Spring, 2008, Fall, 2009, Spring, 2011, Fall, 2011)

External Reviewer, National Science Foundation: Cognitive Neuroscience Program (Spring, 2010)

External Reviewer, National Science Foundation: Developmental and Learning Sciences Program (Fall, 2012)

External Reviewer, Natural Sciences and Engineering Research Council of Canada (Fall, 2010, 2013)

## **Other Professional Service**

Psychonomic Society Young Investigator Award Committee, 2015-2018

External Reviewer, Trinity College Neuroscience Program, 2017

External Reviewer (Chair), Union College Psychology Department, 2018

External Reviewer, Rhodes College Psychology Department, 2020

## **Presentations** (\* indicates Middlebury student)

Schreiber, T., Zhu, X., & Arndt, J. (1995). Separating context-free and context dependent processes in implicit and explicit memory. Paper presented at the annual meeting of the Psychonomic Society, Los Angeles, CA.

Hirshman, E., Master, S., & Arndt, J. (1995). Encoding variables and the mirror effect. Paper presented at the annual meeting of the Psychonomic Society, Los Angeles, CA.

Arndt, J., & Hirshman, E. (1996). Encoding variables and the mirror effect. Poster presented at the annual meeting of the Carolina Cognition Group, Greensboro, NC.

Arndt, J., & Hirshman, E. (1997). False Recognition: A computational approach. Poster presented at the annual meeting of the Carolina Cognition Group, Chapel Hill, NC.

Arndt, J., & Hirshman, E. (1997). Applying MINERVA2 to false recognition. Poster presented at the annual meeting of the Psychonomic Society, Philadelphia, PA.

Hirshman, E., Passannante, A., & Arndt, J. (1998). Using midazolam to examine the modality-match effect in implicit memory. Poster presented at the annual meeting of the Psychonomic Society, Dallas, TX.

Hirshman, E., Passannante, A., & Arndt, J. (1999). The influence of midazolam on the modality-match effect in implicit memory. Paper presented at the annual meeting of the Carolina Cognition Group, Raleigh, NC.

Arndt, J., Hirshman, E., & Passannante, A. (1999). Is there implicit memory for semantic associations? Poster presented at the annual meeting of the Carolina Cognition Group, Raleigh, NC.

Arndt, J., Passannante, A., & Hirshman, E. (1999). Midazolam and the influence of conceptual processing on implicit memory. Paper presented at the annual meeting of the Psychonomic Society, Los Angeles, CA.

Arndt, J., Passannante, A., & Hirshman, E. (2001). Midazolam amnesia and conceptually based implicit memory. Paper presented at the annual meeting of the Psychonomic Society, Orlando, FL.

Arndt, J. & Reder, L. M. (2001). Evidence for a dual-process interpretation of the word frequency mirror effect. Poster presented at the annual meeting of the Psychonomic Society, Orlando, FL.

Arndt, J. & Reder, L. M. (2002). The effect of distinctive visual information on false recognition. Poster presented at the annual meeting of the Psychonomic Society, Kansas City, MO.

Hirshman, E., Fisher, J., Henthorn, T., Arndt, J. & Passannante, A. (2002). The effect of midazolam on performance in the exclusion and inclusion tasks. Paper presented at the annual meeting of the Psychonomic Society, Kansas City, MO.

Arndt, J. (2003). Word frequency and models of recognition memory. Invited talk given at Brandeis University, Waltham, MA.

Arndt, J. & Dumas, J. (2003). The contribution of perceptual mechanisms to the spacing effect. Poster presented at the annual meeting of the Psychonomic Society, Vancouver, BC, Canada.

Park, H., Arndt, J., & Reder, L.M. (2003). Distinctiveness: An operational definition with empirical support. Poster presented at the annual meeting of the Psychonomic Society, Vancouver, BC, Canada.

Arndt, J., & Lee, K.\* (2004). The effect of blocking study list presentation on false recognition. Poster presented at the annual meeting of the American Psychological Society, Chicago, IL.

Arndt, J., & Carney, J.\* (2004). Distinctive visual information and false recognition: The role of encoding and retrieval factors. Poster presented at the annual meeting of the Psychonomic Society, Minneapolis, MN.

Gould, C.\* & Arndt, J. (2005). The effects of repetition, associates and retrieval speed on false memory. Poster presented at the annual meeting of the Eastern Psychological Association, Boston, MA.

Arndt, J. (2005). Perceptually-based memories of events that were never perceived. Invited talk given at Psychology Department Colloquium, Colby College, Waterville, ME.

Arndt, J., Osborne, A., Stone, M.\* , Carney, J.\* , & Lee, K.\* (2005). Does distinctive visual information enhance monitoring of false memories? Poster presented at the annual meeting of the Psychonomic Society, Toronto, ON.

Devine, M.K.\* , Toelle, M., Lam, C.F.\* , Sindel, C.\* , Swearingin, L., Gould, C.\* , & Arndt, J. (2006). The effects of associative strength, study time, and retrieval speed on false memory. Paper presented at the annual meeting of the Eastern Psychological Association, Baltimore, MD.

Lam, C.F.\* , Sindel, C.\* , Swearingin, L., Devine, M.K.\* , Toelle, M., & Arndt, J. (2006). False memory for the visual presentation of words that were never seen. Poster presented at the annual meeting of the Eastern Psychological Association, Baltimore, MD.

Arndt, J., & Jones, T.C. (2006). Conceptual processing and conjunction lure errors in recognition memory. Poster presented at the annual meeting of the Psychonomic Society, Houston, TX.

Arndt, J., Lee, K.\* , Huff, M.\* , & Lam., C.F.\* (2007). Can recognition memory familiarity support novel learning? Paper presented at the annual meeting of the Eastern Psychological Association, Philadelphia, PA.

Guillet, R.\* , & Arndt, J. (2007). Taboo words: The effect of emotional words on memory for peripheral detail. Poster presented at the annual meeting of the Eastern Psychological Association, Philadelphia, PA.

Arndt, J., Read, E.\* , Huff, M.\* , Lam, C.F.\* , & Ng., Y.\* (2007). The role of activation in creating false memories of perceptual experience. Poster presented at the annual meeting of the Psychonomic Society, Long Beach, CA.

Feighery, E.\* , Gebhard, N.\* , Frazier, E.\* , Huff, M.\* , Molyneux, E.\* , Pfaff, A.\* , & Arndt, J. (2008). The influence of lure activation on source memory errors. Poster presented at the annual meeting of the Eastern Psychological Association, Boston, MA.

Arndt, J., Lee, K.\*, Flora, D.B., Molyneux, E.\*, Huff, M.\*, & Lam, C.F.\* (2008). Modality-match effects in recognition without identification for words, pseudowords, and nonwords. Poster presented at the annual meeting of the Psychonomic Society, Chicago, IL.

Arndt, J. & Pesesky, M.\* (2009). MINERVA-DP: A dual-process model of recognition memory. Paper presented at the Context and Episodic Memory Symposium, Palm Beach, FL.

Arndt, J. (2009). The role of memory activation in creating false memories of encoding context. Invited talk given at Psychology department colloquium, University of Massachusetts, Amherst.

Bennion, K.\*, Pfaff, A.\*, Dorot, S.\*, Feighery, E.\*, Frazier, E.\*, Galgano, J.\*, & Arndt, J. (2009). The role of memory activation in producing false memories of encoding context. Poster presented at the annual meeting of the Eastern Psychological Association, Pittsburgh, PA.

Bennion, K.\*, Dede, A.\*, Shasha, C.\*, Dorot, S.\*, Guillet, R.\*, & Arndt, J. (2009). The impact of emotion on item and associative recognition. Poster presented at the annual meeting of the Psychonomic Society, Boston, MA.

Bacon, E.\*, Corbett, K.\*, Dede, A.\*, Shasha, C.\*, Bennion, K.\*, Guillet, R.\*, & Arndt, J. (2010). The impact of emotion on source memory. Poster presented at the annual meeting of the Eastern Psychological Association, Brooklyn, NY.

Tomasko, J.\*, Galgano, J.\*, & Arndt, J. (2010). Comparing strategies to reduce the social misinformation effect. Poster presented at the annual meeting of the Eastern Psychological Association, Brooklyn, NY.

Bennion, K.\* & Arndt, J. (2010). The testing effect in multiple-choice recognition of word pairs. Poster presented at the annual meeting of the Association for Psychological Science, Boston, MA.

Bacon, E.\* & Arndt, J. (2010). Perceptual representations do not underlie false memories. Poster presented at the annual meeting of the Association for Psychological Science, Boston, MA.

Dede, A.\*, Shasha, C.\*, Dorot, S.\*, Corbett, K.\*, & Arndt, J.\* (2010). Association directionality and false recognition. Poster presented at the annual meeting of the Psychonomic Society, St. Louis, MO.

Shasha, C.\*, Hommel, N.\*, Dede, A.\*, Whitaker, E.\*, Corbett, K.\*, & Arndt, J. (2011). The role of associations in producing false memories. Poster presented at the annual meeting of the Eastern Psychological Association. Cambridge, MA.

Bennion, K.\* & Arndt, J. (2011). The testing effect in multiple-choice recognition of word pairs: Implications for education. Poster presented at the biennial meeting of the International Mind, Brain, and Education Society, San Diego, CA.



Arndt, J., Hyatt, A.\*, Dethier, D.\*, Whitaker, E.\*, Hommel, N.\*, & Boxwala, M.\* (2011). Forward association strength and false memory. Poster presented at the annual meeting of the Psychonomic Society, Seattle, WA.

Bennion, K.\*, Appelson, J.\*, Wasserman, S.\*, & Breton, J.\* & Arndt, J. (2012). The role of recollection in producing the testing effect. Poster presented at the annual meeting of the Eastern Psychological Association, Pittsburgh, PA.

Dede, A.\*, & Arndt, J. (2012). Recollection and familiarity sum together: Evidence from ERP. Poster presented at the annual meeting of the Cognitive Neuroscience Society. Chicago, IL.

Giammattei, J.\*, Arndt, J., & Dethier, D.\* (2012). Hemispheric differences in the activation and monitoring of memory errors. Poster presented at the annual meeting of the Psychonomic Society, Minneapolis, MN.

Arndt, J. (2012). Association directionality and false memories of encoding context. Talk given at Georgia Institute of Technology, Department of Psychology Cognitive Brown Bag.

Arndt, J., & Duarte, A.L. (2013). The effect of selective attention at encoding on post-retrieval monitoring. Poster presented at the annual meeting of the Society for Neuroscience, San Diego, CA.

Breton, J.\*, Wasserman, S.\*, Wieboldt, J.\*, Boxwala, M.\*, Newman, H.\*, Rungratsameetaweemana, N.\*, Woodworth, H.\*, & Arndt, J. (2013). The influence of testing on relational and item-specific information. Poster presented at the annual meeting of the Psychonomic Society, Toronto, ON.

Rungratsameetaweemana, N.\* & Arndt, J. (2014). The Influence of Internal and External Arousal on Memory. Poster presented at the annual meeting of the Psychonomic Society, Long Beach, CA.

Goodfriend, J.\*, Rea, E.\*, Valle Flores, D.\*, & Arndt, J. (2015). Integrative item-context encoding increases false memories of encoding context. Poster presented at the annual meeting of the Psychonomic Society, Chicago, IL.

Valle Flores, D.\*, Xu, I.\*, Smith Randle, T.\*, & Arndt, J. (2016). Integrative item-context encoding increases font match effects for true and false memories. Poster presented at the annual meeting of the Psychonomic Society, Boston, MA.

Wu, J.\*, Morris, D.\*, Xu, I.\*, Smith Randle, T.\*, Valle Flores, D.\*, Goodfriend, J.\*, Hogenhuis, A.\*, Arndt, J. (2018). Erroneous retrieval attempts hard memory for novel associations. Poster presented at the annual meeting of the Psychonomic Society, New Orleans, LA.

Beato, M., Arndt, J., Suarez, M. (2019). Survival processing: The effect of retention interval. Poster presented at the 21<sup>st</sup> Conference of the European Society for Cognitive Psychology, Tenerife, Canary Islands, Spain.

Kraner, A. \*, Lotstein, M. \*, Morris, D. \*, Xu, I. \*, Wu, G. \* & Arndt, J. (2019). Does the self-administered interview protect against misinformation? Poster presented at the annual meeting of the Psychonomic Society, Montreal, QC, Canada.

Soriano-Cruz, S. \*, Morris, D. \*, Lu, Y. \*, & Arndt, J. (2020). Does generating an error during learning affect cue-target associations? Poster presented at the annual meeting of the Psychonomic Society (Virtual Conference).

**Panelist**

Council on Undergraduate Research Panel on NSF-REU programs (2007). *CUR Dialogues*, Washington, D.C.