

# MICHAEL S. PRATTE

## CURRICULUM VITAE

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### EDUCATION

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- 2007-2010      Ph.D. in Psychology, University of Missouri, Columbia  
Dissertation: *Assessing single- and dual-process accounts of recognition memory using hierarchical bayesian models*
- 2004-2007      M.A. in Psychology, University of Missouri, Columbia  
Master's Thesis: *Subliminal priming as a task-characteristic artifact*
- 2000-2004      B.A. in Psychology, University of Missouri, Columbia  
Honor's Thesis: *A double prime test of spreading activation*

### ACADEMIC APPOINTMENTS

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- 2010 - present    Postdoctoral Research Fellow, Vanderbilt University  
Adviser: Frank Tong

### FUNDING & AWARDS

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- 2012 - present    F32 Postdoctoral Ruth L. Kirschstein National Research Service Award (NRSA),  
National Eye Institute, National Institutes of Health.  
*Continuously decoding visual perception and working memory*
- 2014              Bob Fox Award For Excellence In Postdoctoral Research
- 2007-2008      Robert S. Daniel Teaching Fellow
- 2000              Max Mayers Undergraduate Research Award

## PUBLICATIONS

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- Ling, S., **Pratte, M.S.** & Tong, F. (in press). Attention alters orientation processing in the human LGN. *Nature Neuroscience*.
- Pratte, M.S.** & Tong, F. (2014). Spatial specificity of working memory representations in the early visual cortex. *Journal of Vision*. 14, 1–12.
- Lorenc, E.S., **Pratte, M.S.**, Angeloni, C.F. & Tong, F. (2014). Expertise for upright faces improves the precision but not the capacity of visual working memory. *Attention, Perception & Psychophysics*. 76, 1975–1984.
- Pratte, M.S.**, Ling, S., Swisher, J.D. & Tong, F. (2013). How attention extracts objects from noise. *Journal of Neurophysiology*. 110, 1346–1356.
- Rouder, J. N., Morey, R. D., & **Pratte, M. S.** (2013). Hierarchical Bayesian models. In W. H. Batchelder, H. Colonius, E. Dzhafarov, and J. I. Myung, (Eds.), *The new handbook of mathematical psychology, Volume 1: Measurement and methodology*. London: Cambridge University Press.
- Pratte, M.S.** & Rouder, J.N. (2012). Assessing the dissociability of recollection and familiarity in recognition memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*. 38, 1591–1607.
- Tong, F. & **Pratte, M.S.** (2012). Decoding patterns of human brain activity. *Annual Review of Psychology*. 63, 483–509.
- Pratte, M.S.** & Rouder, J.N. (2011). Hierarchical single- and dual-process models of recognition memory. *Journal of Mathematical Psychology*. 55, 36–46
- Morey, R.D., Rouder, J.N., **Pratte, M.S.**, & Speckman, P.L. (2011). Using MCMC chain outputs to efficiently estimate Bayes factors. *Journal of Mathematical Psychology*. 55, 368–378.
- Thiele, J., **Pratte, M.S.**, Rouder, J.N. (2011). On perfect working-memory performance with large numbers of items. *Psychonomic Bulletin & Review*. 18, 958–963.
- Pratte, M.S.**, Rouder, J.N., & Morey, R.D. (2010). Separating mnemonic process from participant and item effects in the assessment of ROC asymmetries. *Journal of Experimental Psychology: Learning, Memory, and Cognition*. 36, 224–232.
- Pratte, M.S.**, Rouder, J.N., Morey, R.D., & Feng, C. (2010). Exploring the differences in distributional properties between Stroop and Simon effects using delta plots. *Attention, Perception, & Psychophysics*. 72, 2013–2025.

- Rouder, J.N., Yue, Y., Speckman, P.L., **Pratte, M.S.**, & Province, J.M. (2010). Gradual growth vs. shape invariance in perceptual decision making. *Psychological Review*, 117, 1267 – 1274.
- Rouder, J.N., **Pratte, M.S.**, & Morey, R.D. (2010). Latent mnemonic strengths are latent: A comment on Mickes, Wixted, and Wais (2007). *Psychonomic Bulletin & Review*, 17, 427 – 435.
- Pratte, M.S.** & Rouder, J.N. (2009). A task-difficulty artifact in subliminal priming. *Attention, Perception, & Psychophysics*, 71, 1276-1283.
- Rouder, J.N., Speckman, P.L., Steinley, D., **Pratte, M.S.**, & Morey, R.D. (2009). A bootstrap test of shape invariance across distributions. *Current methodological developments of statistics in the social sciences*. 159–174. (Wiley, New York).
- Morey, R.D., **Pratte, M.S.**, & Rouder, J.N. (2008). Problematic effects of aggregation in  $z$ ROC analysis and a hierarchical modeling solution. *Journal of Mathematical Psychology*, 52, 376-388.
- Rouder, J.N., Morey, R.D., Cowan, N., Zwilling, C.E., Morey, C.C., & **Pratte, M.S.** (2008). An assessment of fixed-capacity models of visual working memory. *Proceedings of the National Academy of Science*, 105, 5975-5979.
- Speckman, P., Rouder, J.N., Morey, R.M., & **Pratte, M.S.** (2008). Delta plots and coherent distribution ordering. *American Statistician*, 62, 262-266.
- Rouder, J.N., Morey, R.D., Speckman, P., & **Pratte, M.S.** (2007). Detecting chance: A solution to the null sensitivity problem in subliminal priming. *Psychonomic Bulletin & Review* 14, 597 - 605.

### **Manuscripts In Review or Preparation**

- Pratte, M.S.**, Sy, J.L., Swisher, J.D. & Tong, F. (in review). The radial bias is not necessary for orientation decoding.
- Cohen, E., **Pratte, M.S.** & Tong, F. (in review). fMRI pattern analysis reveals rotation-invariant shape representation in the lateral occipital complex.
- Pratte, M.S.** & Tong, F. (in revision). Continuous decoding of visual features from fMRI voxel patterns.
- Pratte, M.S.** & Tong, F. (in prep). Assessing tilt illusions in human visual cortex using fMRI and multivariate pattern analysis.

## PRESENTATIONS

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- Pratte, M.S., Sy, J.L., & Tong, F. (2014). The radial bias is not necessary for orientation decoding. Paper presented at the Vision Sciences Society, St. Petersburg, FL.
- Pratte, M.S. (2014). Using fMRI to study feature and object representations in the visual cortex. Invited talk at the University of California, Irvine.
- Pratte, M.S., & Tong, F. (2013). FMRI pattern analysis reveals rotation-invariant shape representation in the lateral occipital complex. Poster presented at the Society for Neuroscience, San Diego, CA.
- Pratte, M.S., & Tong, F. (2013). Assessing tilt illusions in human visual cortex using fMRI and multivariate pattern analysis. Paper presented at the Vision Sciences Society, Naples, FL.
- Pratte, M.S., Ling, S., Swisher, J., & Tong, F. (2012). Cortical mechanisms underlying the attentional selection of objects embedded in visual noise. Paper presented at the Vision Sciences Society, Naples, FL.
- Pratte, M.S. (2009). Assessing single factor models of recognition memory. Invited talk at Indiana University
- Pratte, M.S. & Rouder J.N. (2009). A single-factor model of recognition memory. Paper presented at the the Society for Mathematical Psychology, University of Amsterdam, Amsterdam.
- Pratte, M.S. & Rouder, J.N. (2007). A task-difficulty artifact in subliminal priming. Poster presented at the Annual Meeting of the Psychonomic Society, South Beach, CA.
- Pratte, M.S., Rouder, J.N., & Morey, R.D. (2007). A hierarchical model of signal detection. Paper presented at the Society for Mathematical Psychology, Irvine, CA.
- Pratte, M.S., & Rouder, J.N. (2004). A double prime test of spreading activation. Poster presented at the Annual Meeting of the American Psychological Society, Chicago, IL.

## TEACHING EXPERIENCE

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### Lecturer:

2009-2010 *Statistical Methods in Psychology*, University of Missouri  
2007-2008 *Cognitive Psychology*, University of Missouri

### Teaching Assistant:

2010 *Honors Cross-Cultural Psychology*, University of Missouri  
2004-2006 *Research Methods*, University of Missouri  
2004-2005 *Human Senses*, University of Missouri  
2004-2005 *Human Memory*, University of Missouri

## PROFESSIONAL SERVICE

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### Consultant Editor:

Psychological Bulletin & Review

### Ad Hoc Reviewer:

Journal of Neuroscience  
NeuroImage  
Psychological Review  
JEP: General  
Psychological Science  
JEP: Learning, Memory & Cognition  
Journal of Mathematical Psychology  
Attention, Perception and Psychophysics  
Journal of Cognitive Psychology  
Psychological Research  
Acta Psychologica  
Cognitive Neurodynamics  
PLoS ONE