

## **Benjamin Zinszer**

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### **Employment**

present      Postdoctoral Associate, Rochester Baby Lab  
Dept. of Brain and Cognitive Sciences, University of Rochester  
2014-16      Postdoctoral Associate, Raizada Lab, University of Rochester  
Dept. of Brain and Cognitive Sciences, University of Rochester

### **Education**

2014      Ph.D., Psychology, Pennsylvania State University  
2014      M.A.S., Applied Statistics, Pennsylvania State University  
2012      M.S., Psychology, Pennsylvania State University  
2008      B.A., Psychology, Wheaton College (IL)

### **Fellowships & Honors**

2013-14      Pennsylvania Space Grant Consortium Graduate Fellow  
2013      Multi-modal Neuroimaging Training Program (@ Carnegie Mellon & Univ. Pittsburgh)  
2012      NSF East Asia and Pacific Summer Institutes Fellow to Beijing, China  
2012      Confucius Institute Scholarship (for research on Chinese-English bilingualism)  
2012      Mu Sigma Rho, Statistics Honor Society, Charter member Penn State chapter  
2011      Center for Language Science PIRE Graduate Fellow to Beijing, China  
2009-12      University Graduate Fellowship, Pennsylvania State University

### **Teaching Experience**

Language and the Brain (BCS 265, *scheduled Spring 2017*), University of Rochester  
Psychology of Language (PSYCH/LING 457), Penn State University  
Introductory Statistics (PSYCH 200), Penn State University World Campus  
Basic Research Methods in Psychology (PSYCH 301W; Lab instructor), Penn State University

### **Papers Published**

**Zinszer, B. D.**, Anderson, A. J., Kang, O., Wheatley, T., & Raizada, R.D.S. (2016). Semantic structural alignment of neural representational spaces enables translation between English and Chinese words. *Journal of Cognitive Neuroscience*, 28(11), 1749-1759. doi:10.1162/jocn\_a\_01000.

Karuz, E., Li, P., Weiss, D. J., Bulgarelli, F., **Zinszer, B. D.**, & Aslin, R. (2016). Sampling over non-uniform distributions: A neural efficiency account of the primacy effect in statistical learning. *Journal of Cognitive Neuroscience*, 28(10), 1484-1500. doi:10.1162/jocn\_a\_00990.

Fang, S., **Zinszer, B. D.**, Malt, B.C., & Li, P. (2016). Bilingual object naming: A connectionist model. *Frontiers in Psychology: Cognitive Science*, in press. doi:10.3389/fpsyg.2016.00644

Anderson, A. J., **Zinszer, B. D.**, & Raizada, R. (2015). Representational similarity encoding for fMRI: Pattern-based synthesis to predict brain activity using stimulus-model-similarities. *Neuroimage*, 128, 44-53. doi:10.1016/j.neuroimage.2015.12.035

**Zinszer, B. D.**, Chen, P., Wu, H., Shu, H., & Li, P. (2015). Second language experience modulates neural specialization for L1 lexical tones. *Journal of Neurolinguistics*, 33, 50-66. doi:10.1016/j.jneuroling.2014.09.005

**Zinszer, B. D.**, Malt, B., Ameel, E., Li, P. (2014). Native-likeness in second language lexical categorization reflects individual language history and linguistic community norms. *Frontiers in Psychology*, 5(01203). doi:10.3389/fpsyg.2014.01203.

Zou, L., Abutalebi, J., **Zinszer, B.**, Yan, X., Shu, H., Peng, D., Ding, G. (2012). Second language experience modulates functional brain network for the native language production in bimodal bilinguals. *Neuroimage*, 62(3), 1367-75.

### **Papers Under Review / Revision**

Emberson, L., **Zinszer, B. D.**, Raizada, R. D. S., & Aslin, R. Decoding the infant mind: Multichannel pattern analysis (MCPA) using fNIRS.

Wu, R., Pruitt, Z., **Zinszer, B. D.**, & Cheung, O. S. Increased experience amplifies rapid task-irrelevant attentional capture

**Zinszer, B. D.**, Rolotti, S. V., Li, F. Li, P. Bayesian word learning in multiple language environments.

### **Papers in Preparation**

Weiss, D. J, Poepsel, T. J., **Zinszer, B. D.** Detecting structural changes in statistical learning.

**Zinszer, B. D.**, Bayet, L., Emberson, L. E., & Aslin, R. N. Decoding semantic representations from fNIRS signals.

**Zinszer, B. D.**, Wang, R., & Li, P. Bilinguals' native language production shows on-line influence from L2 lexical semantics: evidence from the anterior cingulate and pars triangularis.

**Zinszer, B. D.**, Wang, R., & Li, P. Ventral stream activity in picture naming revisited through richer object naming norms.

### **Refereed Conference Papers**

**Zinszer, B. D.**, Anderson, A. J., Raizada, R.D.S. (2016). Chinese and English speakers' neural representations of word meaning offer a different picture of cross-language semantics than corpus and behavioral measures. *Proceedings of the 38th Annual Conference of the Cognitive Science Society*.

**Zinszer, B. D.**, Anderson, A. J., Kang, O., Wheatley, T., & Raizada, R.D.S. (2015). You say potato, I say tudou: How speakers of different languages can share the same concept. *Proceedings of the 37th Annual Conference of the Cognitive Science Society*.

Fang, S., **Zinszer, B. D.**, Malt, B.C., & Li, P. (2015). A computational model of object naming convergence in the bilingual lexicon. *Proceedings of the 37th Annual Conference of the Cognitive Science Society*.

**Zinszer, B. D.** & Weiss, D. J. (2013). When to hold and when to fold: Detecting structural changes in statistical learning. *Proceedings of the 35th Annual Conference of the Cognitive Science Society*.

**Zinszer, B. D.** & Li, P. (2010). A SOM model of first language lexical attrition. In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.

### **Refereed Presentations**

**Zinszer, B. D.**, Bayet, L., Emberson, L., & Aslin, R. Decoding semantic representations from fNIRS signals. Poster presented at the Society for Functional Near-infrared Spectroscopy, October 13-16, 2016.

Emberson, L., **Zinszer, B. D.**, Raizada, R.D.S., & Aslin, R. Decoding the infant mind: Multichannel pattern analysis (MCPA) using fNIRS. Poster presented at the Society for Functional Near-infrared Spectroscopy, October 13-16, 2016.

**Zinszer, B. D.**, Emberson, L., Raizada, R. D. S., & Aslin, R. Decoding the infant mind: Multichannel pattern analysis (MCPA) using fNIRS. Poster presented at the Cognitive Neuroscience Society, April 4, 2016.

**Zinszer, B. D.**, Anderson, A. J., Kang, O., Wheatley, T., & Raizada, R.D.S. Chinese and English speakers share representations for word-elicited concepts, but semantic models struggle to capture

- this similarity. Poster presented at the Society for the Neurobiology of Language, October 16, 2015.
- Zinszer, B. D.,** Wang, R., & Li, P. Bilingual categorization reveals cross-language lexical semantic competition in naming. Talk presented at the 10<sup>th</sup> International Symposium on Bilingualism, May 2015.
- Zhang, T., **Zinszer, B. D.,** Wang, R., & Li, P. Bilinguals' anterior cingulate and *pars triangularis* reflect both native and second language norms during native language production. Poster presented at the 22<sup>nd</sup> annual meeting of the Cognitive Neuroscience Society, March 2015.
- Zinszer, B. D.,** Poepsel, T., Aslin, R., & Weiss, D. J. When to hold and when to fold: Detecting structural changes in statistical learning. Poster presented at the 39<sup>th</sup> annual Boston University Conference on Language Development, November 7, 2014.
- Zinszer, B. D.,** Malt, B., Ameel, E., & Li, P. What is a cup? Effects of immersion, language, and learner variables on lexical category convergence. Poster presented at Psychonomic Society 54<sup>th</sup> Annual Meeting, November 26, 2013.
- Zinszer, B. D.,** Holt, T., Han, W., Shu, H., & Li, P. Age of L2 onset modulates left MTG specialization for L1 lexical tones. Society for the Neurobiology of Language, November 6, 2013.
- Zinszer, B. D. & Weiss, D. J.** When to hold and when to fold: Detecting structural changes in statistical learning. Poster presented at the 35<sup>th</sup> Annual Conference of the Cognitive Science Society, August 3, 2013.
- Rolotti, S. V., **Zinszer, B. D.,** Carlson, E. A. & Li, P. Bayesian Word Learning in Multiple Languages. Poster presented at the 35<sup>th</sup> Annual Conference of the Cognitive Science Society, August 3, 2013.
- Zinszer, B. D.,** Malt, B., Ameel, E., & Li, P. Effects of immersion, language, and learner variables on lexical category convergence. Talk presented at the 9<sup>th</sup> International Symposium of Bilingualism, June 13, 2013.
- Weiss, D.J., Poepsel, T., & **Zinszer, B.** Know when to hold 'em: Detecting structural changes in statistical learning. Talk presented at the Association for Psychological Science, Washington, D.C., May 23-26, 2013.
- Rolotti, S. V., **Zinszer, B. D.,** & Li, P. Bayesian Inference for Bilingual Word Learning. Poster presented at The Society for Computers in Psychology, November 14, 2012.
- Zinszer, B. D. & Li, P.** Predictors of native-like categorization in Chinese learners of English. Talk presented at Second Language Research Forum, October 21, 2012.
- Zinszer, B. D. & Li, P.** Bilingual categorization behavior: internally or externally emergent? Talk presented at the 8<sup>th</sup> International Symposium of Bilingualism, June 15-18, 2011.
- Zinszer, B. D. & Li, P.** Cross-Language Lexical Interaction in Object Naming. Poster presented at Psychonomic Society 51<sup>st</sup> Annual Meeting, November 20, 2010.
- Zinszer, B. D. & Li, P.** Modeling age of onset in first language lexical attrition. Talk presented at Society for Computers in Psychology 40<sup>th</sup> Annual Meeting, November 18, 2010.
- Zinszer, B. & Li, P.** A SOM model of first language lexical attrition. Talk presented at the 32<sup>nd</sup> Annual Conference of the Cognitive Science Society, Portland, Oregon, August, 2010.
- Zinszer, B. D. & Phinney, R. E.** Effects of mask-to-target energy ratio on cyclopean metacontrast masking. Poster presented Vision Sciences Society 9<sup>th</sup> Annual Meeting, May 13-18 2009.

### **Computational & Technical Experience**

Matlab (incl. SPM8, SOM Toolbox, HomER/HomER2); Python; Statistical computing (R/R-Studio, SPSS); Functional near-infrared spectroscopy (Hitachi ETG-4000, Techen CW6); Multi-voxel pattern analysis for fMRI & fNIRS; Effective connectivity modeling of functional neuroimaging data

### **Reviewer**

Behavior Research Methods, Bilingualism: Language and Cognition, Brain & Language, Developmental Cognitive Neuroscience, Journal of Neurolinguistics, The Modern Language Journal, Neuropsychologia

**Professional Service**

- Brain Awareness Week presenter for 2<sup>nd</sup>-3<sup>rd</sup> grade children (Rochester, NY, USA), Spring 2016
- Brain & Language workshop instructor on MVPA methods, Jiangsu Normal University (Xuzhou, Jiangsu province, China), Summer 2015
- Statistical consultant to Guangwai Brain and Language Lab, Guangdong University of Foreign Studies (Guangzhou, China), Summer & Fall 2013
- Statistical Consulting Center consultant (Penn State Univ.), Spring 2013
- Delegate to The 2<sup>nd</sup> Young Scientist Forum, US-China Consultation on People-to-People Exchange (Beijing, China), Summer 2012
- Judge for Pennsylvania Junior Science and Humanities Symposium (State College, PA), 2011