

## MELISSA TROYER

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Department of Cognitive Science  
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### Education

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- In progress    **PhD Candidate**  
Department of Cognitive Science  
University of California—San Diego, La Jolla, CA
- 2012            **S.M.**, Cognitive Science  
Master's Thesis: *Individual Differences in Sentence Processing*  
Department of Brain and Cognitive Sciences  
Massachusetts Institute of Technology, Cambridge, MA
- 2008            **B.S.**, Psychology *with Honors*  
Honors Thesis: *Audiovisual Phonological Fusion and Temporal Asynchrony*  
**B.S.**, Cognitive Science and **B.A.**, Linguistics and French  
General honors distinction, *Summa cum laude*  
Indiana University, Bloomington, IN

### Research and Professional Experience

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- 2012-present   Graduate Research Assistant, Kutas Cognitive Electrophysiology Lab, UCSD.  
Supervisor: Marta Kutas.
- 2012            Contractor, Speech and Language Technologies, Raytheon BBN Technologies Corp.,  
Cambridge, MA. Supervisor: Liz Boschee.
- 2008-2011      Graduate Research Assistant, Gibson Language Lab, MIT. Supervisor: Ted Gibson.
- 2006-2008      Computer Programmer, Busey Lab, Indiana University, Bloomington. Supervisor: Tom  
Busey.
- 2005-2008      Undergraduate Research Assistant, Speech Research Lab, Indiana University.  
Supervisor: David Pisoni.

### Major Scholarship and Fellowship Awards

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- 2016-2017      Frontiers of Innovation Scholars Program Award, UCSD
- 2012-2016      Kroner Fellowship, UCSD
- 2011-2012      Henry E. Singleton Award, MIT
- 2008-2014      National Science Foundation Graduate Research Fellowship
- 2008-2011      National Defense Science and Engineering Graduate Fellowship

### Other Awards and Honors

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- 2017            Kavli Summer Institute in Cognitive Neuroscience Fellow
- 2017            Summer Graduate Teaching Scholar, UCSD
- 2015, 2017      Travel Awards, Graduate Student Association, UCSD
- 2015            Best Poster Award, Graduate Student Association Travel Grant Symposium, UCSD
- 2014-2017      Travel Awards, Cognitive Science Department, UCSD

## Journal Publications

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- Troyer, M.** & Borovsky, A. (2017). Maternal socioeconomic status influences the range of expectations during language comprehension in adulthood. *Cognitive Science*.
- Troyer, M.**, Hofmeister, P., & Kutas, M. (2016). Elaboration over a discourse facilitates retrieval in sentence processing. *Frontiers in Psychology*, 7, 374.
- Wang, H., Ma, L., Wang, Y., **Troyer, M.**, and Li, Q. (2015). An ERP study in English relative clause processing by Chinese-English bilinguals. *Chinese Journal of Applied Linguistics*, 38(1), 3-35.
- Troyer, M.**, Curley, L.B., Miller, L.E., Saygin, A.P., and Bergen, B.K. (2014). Action verbs are processed differently in metaphorical and literal sentences depending on the semantic match of visual primes. *Frontiers in Human Neuroscience*, 8, 982.
- DeLong, K.A., **Troyer, M.**, and Kutas, M. (2014). Pre-processing in sentence comprehension: Sensitivity to likely upcoming meaning and structure. *Language and Linguistics Compass*, 8(12), 631-645.
- Miller, B.R., **Troyer, M.**, and Busey, T.A. (2008). Virtual EEG: A software-based electroencephalogram designed for undergraduate neuroscience-related courses. *The Journal of Undergraduate Neuroscience Education (JUNE)*, 7(1), A19-A25. Software available at <http://virtualeeg.psych.indiana.edu>.

## Other Published Work (Tech Reports, Conference Proceedings, etc.)

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- Troyer, M.** and Kutas, M. (2017). It's all in your head: Effects of expertise on real-time access to knowledge during written sentence processing. To appear in *Proceedings of the 39<sup>th</sup> Annual Conference of the Cognitive Science Society*.
- Troyer, M.** and Borovsky, A. (2015). Childhood SES affects anticipatory language comprehension in college-aged adults. In Noelle, D.C., Dale, R., Warlaumont, A.S., Yoshimi, J., Matlock, T., Jennings, C.D. & Maglio, P.P., (Eds.), *Proceedings of the 37<sup>th</sup> Annual Conference of the Cognitive Science Society* (p. 2428-2433). Austin, TX: Cognitive Science Society.
- Troyer, M.**, O'Donnell, T.J., Fedorenko, E. and Gibson, E. (2011). Storage and computation in syntax: Evidence from relative clause priming. In L. Carlson, C. Hölscher, & T. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 336-341). Austin, TX: Cognitive Science Society.
- Troyer, M.**, Loebach, J.L., and Pisoni, D.B. (2009). Perception of temporal asynchrony in audiovisual phonological fusion. *Research on Spoken Language Processing*, Progress Report 29, 156-182.
- Troyer, M.** and Montaña, F.A. (2008). A surface-level account of French word-initial [w] in sandhi and non-sandhi contexts. *IULC Working Papers Online*, 8(4), 1-23.

## Selected Conference Presentations

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- Troyer, M.** & Kutas M. (July 2017). It's all in your head: Effects of expertise on real-time access to knowledge during written sentence processing. Talk to be presented at CogSci 2017, London.
- Troyer, M.** & Kutas, M. (March 2017). Harry Potter and the Chamber of WHAT?: Real-time semantic access is a function of the individual's knowledge. Poster at the Cognitive Neuroscience Society, San Francisco, CA.

- Troyer, M.** & Borovsky, A. (March 2015). Childhood SES affects anticipatory language comprehension in college-age adults. Poster presented at the 28<sup>th</sup> CUNY Conference on Human Sentence Processing, University of Southern California, Los Angeles, CA.
- Troyer, M.**, Hofmeister, P., & Kutas, M. (March 2015). Pronoun resolution is sensitive to the complexity of the antecedent: Evidence from ERPs. Poster presented at the Cognitive Neuroscience Society, San Francisco, CA.
- Troyer, M.**, Guerra, E., Amsel, B.D., Urbach, T.P., DeLong, K.A., Knoeferle, P., & Kutas, M. (April 2014). Spatial distance influences the neural response to different semantic relations. Poster presented at the Cognitive Neuroscience Society, Boston, MA.
- Troyer, M.**, Hofmeister, P., and Kutas, M. (March 2014). Elaboration of concepts facilitates their retrieval in sentence processing. Poster presented at the 27<sup>th</sup> CUNY Conference on Human Sentence Processing, Ohio State University, Columbus, OH.
- Troyer, M.**, O'Donnell, T.J., Fedorenko, E. and Gibson, E. (July 2011). Storage and computation in syntax: Evidence from relative clause priming. Talk presented at the 33<sup>rd</sup> Annual Meeting of the Cognitive Science Society, Boston, MA.
- Troyer, M.**, Fedorenko, E., and Gibson, E. (March 2009). Production priming of object- and subject-extracted relative clauses. Poster at the 22nd CUNY Conference on Human Sentence Processing, University of California--Davis, Sacramento, CA.

### Teaching Experience

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- 2015, 2016 Graduate Advocate, *Summer Training for Research in the Sciences Program (STARS)*, UCSD. Supervisor: Elisa Maldonado.
- 2014, 2016 Teaching Assistant, COGS 101C, *Language*, UCSD. Supervisors: Seana Coulson, Benjamin Bergen.
- 2013, 2015 Teaching Assistant, COGS 115, *Neural Development and Cognitive Change*, UCSD. Supervisors: Kaya de Barbaro, Gedeon Deák.
- 2015 Teaching Assistant, COGS 109, *Modeling and Data Analysis*, UCSD. Supervisor: Jake Olson.
- 2014, 2015 Teaching Assistant, COGS 154, *Communication Disorders in Children and Adults*, UCSD. Supervisors: Dorothy Yang, Erica Ellis.
- 2015 Teaching Assistant, COGS 172, *Brain Disorders and Cognition*, UCSD. Supervisor: Luke Miller.
- 2014 Teaching Assistant, COGS 3, *Introduction to Computing*, UCSD. Supervisor: Mary Boyle.
- 2011, 2010 Teaching Assistant, 9.00, *Introduction to Psychology*, MIT. Supervisor: John Gabrieli.
- 2009 Teaching Assistant, 9.59, *Psycholinguistics*, MIT. Supervisor: Ted Gibson.
- 2005, 2006 Undergraduate Teaching Instructor, COGS-Q 250, *Math and Logic for Cognitive Science*, Indiana University, Bloomington. Supervisor: Ruth Eberle.

## Departmental Talks, Invited Presentations, and Guest Lectures

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- 2017 “Harry Potter and the Chamber of *What?*: Brain potentials to congruous words are systematically related to knowledge.” Talk, Center for Research in Language talk series, UCSD.
- 2016 “Harry Potter and the Chamber of *What?*: Real-time semantic access is a function of the individual’s knowledge.” Poster at the Frontiers of Innovation Scholars Program Symposium, UCSD.
- 2016 “Event-related brain potentials.” Guest lecture, Cognitive Science COGS 1, *Introduction to Cognitive Science*, UCSD.
- 2015 “Variability in semantic access during language comprehension: The role of prior knowledge.” Third-year talk, Cognitive Science Department, UCSD.
- 2015 “Pronoun resolution is sensitive to the complexity of the antecedent: Evidence from ERPs.” Poster at the UCSD Graduate Student Association Travel Grant Symposium. *Best Poster Award Recipient*.
- 2015 “Language Disorders in Adults.” Guest lecture, Cognitive Science COGS 154, *Communication Disorders in Children and Adults*, UCSD.
- 2015 “Language: What we can learn from neuropsychology.” Guest lecture, Psychology PSYC 120, *Learning and Cognition*, Holy Names University.
- 2015 “Language Disorders: Aphasia.” Guest lecture, Cognitive Science COGS 172, *Brain Disorders and Cognition*, UCSD.
- 2015 “Language Disorders: Laterality and Right-hemisphere Damage.” Guest lecture, Cognitive Science COGS 172, *Brain Disorders and Cognition*, UCSD.
- 2014 “Conceptual elaboration facilitates retrieval in sentence processing.” Talk, Center for Research in Language talk series, UCSD.
- 2014 “Language development.” Guest lecture, Cognitive Science COGS 154, *Communication Disorders in Children and Adults*, UCSD.
- 2014 “Language development: Innateness and critical periods.” Guest lecture, Cognitive Science COGS 101C, *Language*, UCSD.
- 2014 “Language development: Learning sounds and grammar.” Guest lecture, Cognitive Science COGS 101C, *Language*, UCSD.
- 2014 “Elaboration of concepts facilitates their retrieval in sentence processing.” Second-year Talk, Cognitive Science Department, UCSD.
- 2014 “Elaboration of concepts facilitates their retrieval in sentence processing.” Poster at the UCSD Cognitive Science Alumni Reunion.
- 2012 “Storage and computation in syntax: Evidence from relative clause priming.” Talk, Center for Research in Language talk series, UCSD.
- 2012 “Individual differences in sentence processing.” Talk, Language and Cognition talk series, Harvard University.
- 2011 “Investigating storage and computation in syntax using relative clause priming.” Talk, Perception, Cognition, and Development Brownbag talk, Cornell University.

- 2011 “Storage and computation in syntax: Evidence from sentence production priming studies.” Talk, Cog Lunch Talk Series, MIT.
- 2011 “Vision.” Guest lecture, Brain & Cognitive Sciences 9.00, *Introduction to Psychology*, MIT.
- 2009 “Language Processing.” Lecture, Discover Brain and Cognitive Science Freshman Pre-Orientation Program, MIT.
- 2009 “Speech.” Guest lecture, Brain & Cognitive Sciences 9.59, *Psycholinguistics*, MIT.

### **Academic Service and Outreach**

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- 2016-2017 Organizing Committee and Event Coordinator, Taste of Science
- 2015- Coordinator, Center for Research in Language Talk Series, UCSD
- 2015- Organizing Committee, ComSciCon-SD (<http://comscicon.com/comscicon-sandiego-2016>)
- 2014-2016 Cognitive Science Interview Weekend Committee, UCSD
- 2014- Co-Editor, Center for Research in Language Tech Reports, UCSD
- 2013- Contributor, NeuWriteSD.org
- 2013-2016 Moderator, Cognitive Science Department Blog, UCSD
- 2013-2014 Organizer, Cognitive Science Department Peer Mentorship, UCSD
- 2013 Volunteer, Society for the Neurobiology of Language, San Diego, CA
- 2009-2011 Brain and Cognitive Sciences Outreach Committee, MIT
- 2009-2011 Brain and Cognitive Sciences Graduate Student Interview Weekend Committee, MIT
- 2009-2010 Coordinator, Cog Lunch talk series, MIT
- 2009-2010 Graduate Student Representative, MIT

### **Software/Teaching tools**

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Virtual EEG: <http://virtualeeg.psych.indiana.edu>

Bootstrapping statistical software: <http://cognitn.psych.indiana.edu/busey/homepage/Statistics.html/>

### **Additional Skills**

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Languages: French (conversational fluency), Spanish (beginner)

Programming languages: R, Matlab, Java, Python, HTML, CSS

### **Ad hoc reviewing**

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*Quarterly Journal of Experimental Psychology*

*Neuropsychologia*

Embodied and Situated Language Processing Conference

Cognitive Science Society

CRL Tech Reports (UCSD)

Indiana Undergraduate Journal of Cognitive Science (Indiana University)