

# Maryia (Masha) Fedzechkina

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## Contact Information

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University of Pennsylvania  
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## EDUCATION

- |      |   |
|------|---|
| 2014 | <b>University of Rochester</b> , Rochester, NY<br>Ph.D., Brain & Cognitive Sciences<br><i>Dissertation</i> : Communicative efficiency, language learning, and language universals<br><i>Advisers</i> : T. Florian Jaeger & Elissa Newport |
| 2012 | <b>University of Rochester</b> , Rochester, NY<br>M.A., Brain & Cognitive Sciences  |
| 2011 | <b>LSA summer institute</b> ,<br>University of Colorado at Boulder, Boulder, CO   |
| 2009 | <b>University of Cologne</b> , Cologne, Germany<br>M.A., Linguistic Data Processing, English, & Phonetics   |
| 2007 | <b>Minsk State Linguistic University</b> , Minsk, Belarus<br>B.A., English & German   |

## ACADEMIC POSITIONS

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| 2014 - present | <b>Postdoctoral researcher</b><br><b>Language Development and Language Processing Lab</b> ,<br>Department of Psychology,<br>University of Pennsylvania<br><i>Advisers</i> : John Trueswell & Lila Gleitman |
| 2006 - 2009    | <b>Research assistant</b><br><b>Linguistic Data Processing</b> ,<br>University of Cologne<br><i>Adviser</i> : Juergen Rolshoven  |

## MANUSCRIPTS IN PREPARATION

- Roberts, G. & **Fedzechkina, M.** (in prep). Social and cognitive biases interact during language evolution: An iterated-learning study.
- Fedzechkina, M.** & Jaeger, T. F. (in prep). Effort vs. robust information transmission in language change.
- Fedzechkina, M.**, Pajak, B. & Jaeger, T. F. (in prep). L1 distance effects on L2 word order acquisition: A miniature language study.

## PAPERS

**Fedzechkina, M.**, Chu, B., Jaeger, T. F. (under review). Human information processing as a cause of language change: Learners prefer shorter dependencies. *Proceedings of the National Academy of Sciences*.

**Fedzechkina, M.**, Newport, E., Jaeger, T. F. (in press). Balancing effort and information transmission during language acquisition: Evidence from word order and case-marking. *Cognitive Science*.

**Fedzechkina, M.**, Newport, E., Jaeger, T. F. (in press) The miniature artificial language learning paradigm as a complement to typological data. In Ortega, L., Tyler, A., Park, H. I., Uno, M. (Eds.), *The Usage-based Study of Language Learning and Multilingualism*. Georgetown: GUP.

**Fedzechkina, M.**, Jaeger, T. F., Trueswell, J.C. (2015). Production is biased to provide informative cues early: Evidence from miniature artificial languages. *Proceedings of the 37th Annual Conference of the Cognitive Science Society*.

**Fedzechkina, M.**, Jaeger, T. F., Newport, E. (2013). Communicative biases shape structures of newly acquired languages. *Proceedings of the 35th Annual Conference of the Cognitive Science Society*.

**Fedzechkina, M.**, Jaeger, T. F., Newport, E. (2012). Language learners restructure their input to facilitate efficient communication. *Proceedings of the National Academy of Sciences*, 109(44): 17897-17902.

**Fedzechkina, M.**, Jaeger, T. F., Newport, E. (2011). Functional biases in language learning: Evidence from word order and case-marking interaction. *Proceedings of the 33rd Annual Conference of the Cognitive Science Society*.

## CONFERENCE PRESENTATIONS

TALKS THAT LEAD TO PROCEEDINGS PAPERS MENTIONED ABOVE ARE NOT INCLUDED BELOW

Jaeger, T. F. & **Fedzechkina, M.** (2016). Effort vs. robust information transmission in language evolution. To be presented at 11th International Conference on the Evolution of Language, New Orleans, MS, March 21-24.

Roberts, G. & **Fedzechkina, M.** (2016). Social biases vs. efficient communication: An iterated-learning study. To be presented at 11th International Conference on the Evolution of Language, New Orleans, MS, March 21-24.

**Fedzechkina, M.**, Jaeger, T. F., Trueswell, J.C. (2015). Processing biases in learning shape cross-linguistically frequent structures. 40<sup>th</sup> Annual Meeting of the Boston University Conference on Language Development, Boston, MA, November 13-15.

Roberts, G. & **Fedzechkina, M.** (2015). Population structure, social bias, and efficiency: An iterated-learning study. 13th International Cognitive Linguistics Conference, Newcastle, UK, July 20-25.

**Fedzechkina, M.**, Newport, E., Jaeger, T. F. (2014). The miniature artificial language learning paradigm as a complement to typological data. Georgetown University Round Table on Languages and Linguistics 2014, Washington, DC, March 14-16, 2014.

**Fedzechkina, M.**, Newport, E., Jaeger, T. F. (2014). Functional biases in acquisition shape cross-linguistically frequent structures. Georgetown University Round Table on Languages and Linguistics 2014, Washington, DC, March 14-16.

Jaeger, T. F., **Fedzechkina, M.**, Kurumada, C., Newport, E. (2012). Confusability reduction in production and acquisition. DGfS 2012 workshop 'Information Density and Linguistic Variation', Frankfurt, Germany, March 9.

## CONFERENCE POSTERS

**Fedzechkina, M.**, Chu, B., Jaeger, T. F., & Trueswell, J. (2016). Processing preferences shape language change. To be presented at 11th International Conference on the Evolution of Language, New Orleans, MS, March 21-24.

**Fedzechkina, M.,** Jaeger, T. F., Trueswell, J. (2015). Producing informative cues early: Evidence from a miniature artificial language. 28<sup>th</sup> Annual CUNY Conference on Human Sentence Processing, Los Angeles, CA, March 19-21.

**Fedzechkina, M.,** Chu, B., Jaeger, T. F. (2015). 'Long before short' preference in a head-final artificial language: In support of dependency minimization accounts. 28<sup>th</sup> Annual CUNY Conference on Human Sentence Processing, Los Angeles, CA, March 19-21.

**Fedzechkina, M.,** Newport, E., Jaeger, T. F. (2014). Trading off robust information transmission in language learning and language structure. 39<sup>th</sup> Annual Meeting of the Boston University Conference on Language Development, Boston, MA, November 7-9.

**Fedzechkina, M.,** Newport, E., Jaeger, T. F. (2014). Language processing shapes language change: Redundant cues are less likely to be maintained in language. 27<sup>th</sup> Annual CUNY Conference on Human Sentence Processing, Columbus, OH, March 13-15.

**Fedzechkina, M.,** Jaeger, T. F., Newport, E. (2011). Functional biases in acquisition: Language learners restructure the input to avoid uncertainty. 36<sup>th</sup> Annual Meeting of the Boston University Conference on Language Development, Boston, MA, November 4-6.

**Fedzechkina, M.,** Jaeger, T. F., Newport, E. (2011). Functional biases in (artificial) language learning. 24<sup>th</sup> Annual CUNY Conference on Human Sentence Processing, Stanford, CA, March 24-26.

**Fedzechkina, M.,** Jaeger, T. F., Newport, E. (2011). Word order and case-marking in language acquisition and processing. 85<sup>th</sup> Annual Meeting of the Linguistic Society of America, Pittsburgh, PA, January 6-9. **[designated particularly media-worthy]**

#### **INVITED TALKS**

**2017.** TBD. 30<sup>th</sup> Annual CUNY Conference on Human Sentence Processing, MIT, Cambridge, March 30-April 1. **[keynote speaker]**

**2014.** Communication shapes structures of newly acquired languages. Department of Linguistics, University at Buffalo -- SUNY, Buffalo, NY, January 27.

**2013.** Learners' communicative preferences shape structures of newly acquired languages. Language and Cognition Lab, Department of Psychology, Stanford University, Palo Alto, CA, November 18.

**2013.** Learners' communicative preferences shape structures of newly acquired languages. Language Development and Language Processing Lab, Department of Psychology, University of Pennsylvania, Philadelphia, PA, May 15.

**2011.** Are there functional biases in language acquisition? Cognitive and Computational Approaches to Language Group, Department of Linguistics, The Ohio State University, Columbus, OH, January 10.

#### **TEACHING EXPERIENCE**

Fall 2015

**Guest Lecturer,** Psychology of Language,  
University of New Hampshire

Taught by Maureen Gillespie

Topic: The relationship between constraints on language production and language structure

Spring 2013

**Teaching Assistant,** Language Development,  
University of Rochester

Taught by Susan Thompson

Gave 3 guest lectures on syntactic & morphological development, planned & held review sessions, wrote & graded exams & homeworks, held weekly office hours

Fall 2012	<b>Guest Lecturer,</b> Language and Psycholinguistics University of Rochester Taught by T. Florian Jaeger Topic: Child language processing
Fall 2011	<b>Teaching Assistant,</b> Language and Psycholinguistics, University of Rochester Taught by T. Florian Jaeger Gave a guest lecture on child sentence processing, wrote & graded weekly assignments, planned & held review sessions, held weekly office hours
Fall 2010	<b>Teaching Assistant,</b> Language and Psycholinguistics, University of Rochester Taught by Patricia Reeder Gave a guest lecture on parsing development in children, planned & held review sessions, graded exams & papers, held weekly office hours
Spring 2010	<b>Teaching Assistant,</b> Language Development, University of Rochester Taught by Sara Finley Wrote & graded exams, held weekly office hours

#### **UNDERGRADUATE MENTORSHIP**

##### **Undergraduate research assistants, University of Pennsylvania:**

- Anton Relin, Fall 2015 - present
- Logan Castrucci, Fall 2015 - present
- Emily Eck, Summer 2015 - present
- Ivy Gregory, Spring 2015
- Barry Oshiba, Fall 2014
- Juan Padilla, Fall 2014 - Spring 2015

##### **Undergraduate research assistants, University of Rochester:**

- Madeline Clark, Spring 2015 - present
- Becky Chu, Spring 2014 - present
- Patrick Davis, Summer 2013
- Suzanne Blackley, Spring 2013 - Spring 2014
- Shreya Krishnan, Summer 2012, Spring 2013, Fall 2013 - Spring 2014
- Erica Williams, Spring 2013, Fall 2013 - Spring 2014
- Kate Heffernan, Spring 2013
- Meghan Hennessy, Spring 2013
- Christopher Anzalone, Fall 2012
- Elisa Hoyos, Fall 2012
- Rachel Aronovitz, Fall 2012
- Cynthia Orr, Fall 2012
- Theodore Lincoln, Summer 2012
- Greta Smith, Fall 2012 - Spring 2013
- Tara Stanley, Fall 2011 - Summer 2013
- Vivian Choi, Fall 2010 - Spring 2011
- Keryn Bernstein, Fall 2010 - Spring 2011
- Colleen Dolan, Summer 2010, Fall 2011 - Spring 2012

- Rebecca Glass, Summer 2010

#### **Independent study students, University of Rochester:**

- Becky Chu, Summer 2014. Topic: 'First and second language influences on the acquisition of case-marking in the third language'.
- Suzanne Blackley, Summer 2013 - Summer 2014. Topic: 'Communicative influences on the acquisition of optional case systems: A partner study using miniature artificial languages'.
- Delarom Menhaj, Spring 2013. Topic: 'The role of language experience in morphological acquisition'.
- Eric Partridge, Spring, 2012. Topic: 'Production strategies in two-word stage children'.
- Shreya Krishnan, Spring, 2012. Topic: 'Production strategies in two-word stage children'.
- Tara Stanley, Spring 2011. Topic: 'Functional biases in language acquisition'.
- Colleen Dolan, Spring 2010. Topic: 'Processing influences on word order acquisition'.
- Rebecca Glass, Spring 2010. Topic: 'Processing influences on word order acquisition'.

#### **PROFESSIONAL SERVICE**

##### **Ad-hoc reviewer:**

- Psychological Science
- Journal of Memory and Language
- Cognition
- Language, Learning, & Development
- Language, Cognition, & Neuroscience
- Wiley Interdisciplinary Reviews: Cognitive Science
- Frontiers in Psychology
- Cognitive Science Society Conference
- Evolution of Language International Conference (EvoLang)
- CUNY Conference on Human Sentence Processing

#### **MEDIA COVERAGE**

**Fedzechkina, M.**, Jaeger, T. F., Newport, E. (2012). Language learners restructure their input to facilitate efficient communication. *Proceedings of the National Academy of Sciences*, 109(44): 17897-17902.

*Reported in:* Psychology Today, Academic Minute, Sceptic's Guide to the Universe, ScienceOmega, Rochester Review, Futurity, Phys.org, ScienceBlog, Science Daily, E-Science News, Sify News, ThruthDrive, BioSpace.

#### **SCHOLARSHIPS AND AWARDS**

2011	<b>Paula Menyuk travel award</b> for BUCLD 2011
2011	<b>LSA summer institute</b> fellowship
2007—2009	<b>Koelner Gymnasial- und Stiftungsfonds</b> , Cologne, Germany Scholarship for academic excellence
2007	<b>University of Cologne</b> , Cologne, Germany Tuition waver
2000—2004	<b>Minsk State Linguistic University</b> , Minsk, Belarus Scholarship for academic excellence

## LANGUAGES

**Belarusian** (native)  
**Russian** (native)  
**English** (fluent)  
**German** (fluent)  
**Italian** (intermediate)

Philadelphia, PA  
January 12, 2016