

CURRICULUM VITAE

NAME: Evelina (Ev) G. Fedorenko

ADDRESS: Massachusetts Institute of Technology
McGovern Institute for Brain Research /
Department of Brain & Cognitive Sciences
43 Vassar St., Building 46
Room 4141C (Kanwisher Lab) /
Room 3037F (Gibson Lab)
Cambridge, MA 02139
evelina9@mit.edu

PHONE: (617) 253-5774 [work]

WEB: <http://web.mit.edu/evelina9/www/>

POSITIONS:

Massachusetts Institute of Technology
McGovern Institute for Brain Research, Kanwisher Lab
Cambridge, MA
September 2007 – present
Postdoctoral Researcher

EDUCATION:

Massachusetts Institute of Technology
Cambridge, MA
2002-2007, PhD in Cognitive Science
Advisor: Nancy Kanwisher; Committee: David Caplan, John Gabrieli and Ken Wexler
Thesis title: *The nature of the working memory system underlying language processing and its relationship to the long-term memory system.*

Harvard University
Cambridge, MA
1998-2002, AB (Magna Cum Laude) in Linguistics/Psychology
Advisor: Alfonso Caramazza

GRANT FUNDING:

- NIH Pathway to Independence career development award (K99/R00)
Project title: *fMRI investigations of the functional architecture of the language system*
July 2009 – June 2014

ACADEMIC HONORS AND FELLOWSHIPS:

- Singleton Fellowship (MIT), 2006-2007.
- Summer Institute in Cognitive Neuroscience at Dartmouth College, June-July 2006.

- Vivian Smith Advanced Studies Institute of the International Neuropsychological Society Fellowship to attend the Summer Institute in Xylocastro, Greece, 2004.
- Presidential Fellowship (MIT), 2002-2003.

JOURNAL PUBLICATIONS:

Tily, H., Fedorenko, E. & Gibson, E. (in press). The relationship between lexical and structural retrieval in sentence comprehension. *Quarterly Journal of Experimental Psychology*.

Fedorenko, E. & Kanwisher, N. (2009). Neuroimaging of language: Why hasn't a clearer picture emerged? *Language and Linguistics Compass*, 3, 839-865

Fedorenko, E. & Gibson, E. (in press). Adding a third wh-element does not increase the acceptability of object-initial multiple-wh questions. *Syntax*.

Fedorenko, E., Patel, A., Casasanto, D., Winawer, J. & Gibson, E. (2009). Structural integration in language and music: Evidence for a shared system. *Memory and Cognition*, 37(1), 1-9.

Frank, M., Everett, D., Fedorenko, E. & Gibson, E. (2008). Number as a cognitive technology: Evidence from Pirahã language and cognition. *Cognition*, 108, 819-824.

Fedorenko, E., Gibson, E. & Rohde, D. (2007). The nature of working memory in linguistic, arithmetic and spatial integration processes. *Journal of Memory and Language*, 56(2).

Fedorenko, E., Gibson, E. & Rohde, D. (2006). The nature of working memory capacity in sentence comprehension: Evidence against domain-specific resources. *Journal of Memory and Language*, 54(4).

Costa, A., Kovacic, D., Fedorenko, E. & Caramazza, A. (2003). The gender congruency effect and the selection of freestanding and bound morphemes: Evidence from Croatian. *Journal of Experimental Psychology: LMC*, 29(6).

OTHER PUBLICATIONS (Conference proceedings, book chapters, etc.):

Frank, M., Fedorenko, E. & Gibson, E. (2008). Language as a cognitive technology: English-speakers match like Pirahã when you don't let them count. *30th Annual Meeting of Cognitive Science Society Proceedings*. (Recipient of the **Marr Prize**)

Fedorenko, E., Gibson, E. & Rohde, D. (2004). Verbal working memory in sentence comprehension. *26th Annual Meeting of Cognitive Science Society Proceedings*.

Fedorenko, E., Babyonyshev, M. & Gibson, E. (2004). The nature of case interference in online sentence processing in Russian. *NELS 34 Conference Proceedings*.

Jones, D., Wolf, F., Gibson, E., Williams, E., Fedorenko, E., Reynolds, D. & Zissman, M. (2003). Measuring the readability of automatic speech-to-text transcripts. *Proceedings of Eurospeech*.

MANUSCRIPTS IN PROGRESS:

Submitted / in revision (in alphabetical order):

- Breen, M., Fedorenko, E., Wagner, M. & Gibson, E. Acoustic correlates of information structure.
- Fedorenko, E., Frank, M., Everett, D. & Gibson, E. Phonological and spatial short-term memory in an isolated Amazonian tribe.
- Fedorenko, E. & Gibson, E. Syntactic parallelism as an account of superiority effects: Empirical investigations in English and Russian.
- Fedorenko, E., Piantadosi, S., Frank, M. & Gibson, E. The interaction of syntactic and lexical information sources in language processing: The case of the noun-verb ambiguity.
- Fedorenko, E., Tily, H. & Gibson, E. The role of animacy information in the processing of relative clauses.
- Fedorenko, E., Woodbury, R. & Gibson, E. Direct evidence of memory retrieval as a source of difficulty in long-distance structural dependencies in language.
- Frank, M., Fedorenko, E., Saxe, R. & Gibson, E. Language for number is a cognitive technology for abstraction.
- Gibson, E., Fedorenko, E. & Ishizuka, T. The role of discourse predictability in the processing of subject- and object-extracted relative clauses.
- Jaeger, F., Fedorenko, E. & Gibson, E. Anti-locality effects in English: Consequences for theories of sentence comprehension.

In preparation (in alphabetical order):

- Fedorenko, E., Cherkasskiy, L., Piantadosi, S., Scholz, J. & Saxe, R. The meaning of attribution expressions: What do people really think when they say “I think”.
- Fedorenko, E., Frank, M. & Gibson, E. Syntactic complexity effects in Jabberwocky sentences.
- Fedorenko, E. & Gibson, E. The relationship between syntactic storage and syntactic integration resources.
- Fedorenko, E. & Gibson, E. A quantitative evaluation of the acceptability of multiple-wh-questions in different contexts.
- Fedorenko, E., Gibson, E. & Rohde, D. Further evidence for an overlap in verbal working memory resources between language comprehension and arithmetic processing.
- Fedorenko, E., Hsieh, P.-J., Whitfield-Gabrieli, S. & Kanwisher, N. Functional localization in the domain of language: A new take on the questions of functional specificity.
- Fedorenko, E. & Kanwisher, N. Syntactic processing in the human brain: What we know, what we don't know and how to proceed.
- Fedorenko, E., Kanwisher, N. et al. Investigating domain-specificity of language-sensitive cortical regions using the functional localization approach.
- Fedorenko, E. & Levy, R. The effects of information structure on the processing of non-canonical word orders: Evidence from Russian.

Gibson, E., Singh, R. & Fedorenko, E. An experimental investigation of the processing of the presupposition trigger “too”.

Gibson, E. & Fedorenko, E. A quantitative approach to research in syntax.

Gibson, E. & Fedorenko, E. Working memory constraints on language processing: A review.

Levy, R., Fedorenko, E., Breen, M. & Gibson, E. The processing of extraposed structures in English.

Levy, R., Fedorenko, E. & Gibson, E. The syntactic complexity of Russian relative clauses.

Singh, R., Fedorenko, E. & Gibson, E. Dissociating theories of presupposition using online acceptability judgments.

TALKS:

Evelina Fedorenko

Functional localization in the domain of language: A new take on the questions of functional specificity.
McGovern Institute for Brain Research Retreat, Cambridge, MA, June 2009.

Evelina Fedorenko, Rebecca Woodbury & Edward Gibson

Making the object noun phrase more easily retrievable from memory facilitates the processing of object-extracted relative clauses: Direct evidence for memory-based accounts.
The 22nd CUNY Conference on Human Sentence Processing, UC Davis, March 2009.

Evelina Fedorenko

The nature of working memory resources underlying language processing.
Center for Research on Language, Mind and Brain Distinguished Lecture Series, McGill University, February 2009.

Evelina Fedorenko, Lillia Cherkasskiy, Steven Piantadosi, Jonathan Scholz, and Rebecca Saxe
Speak Your Mind: Listeners' Representations of the Speaker's Thoughts Depend on Prosody
Society for Psychology and Philosophy, UPenn, June 2008.

Evelina Fedorenko, Ani Patel, Daniel Casasanto, Jon Winawer & Edward Gibson

Structural integration in language and music: A shared system.
Language & Music II Conference, Tufts University, July 2008.

Michael Frank, Evelina Fedorenko, and Edward Gibson

English as a cognitive technology: English-speakers match like Pirahã when you don't let them count.
The Annual Meeting of the Cognitive Science Society, Washington, DC, July 2008.

Evelina Fedorenko, Lillia Cherkasskiy, Steven Piantadosi, Jonathan Scholz, and Rebecca Saxe

The effects of prosody on the listener's representation of the speaker's thoughts.
Experimental and Theoretical Advances in Prosody, Cornell University, April 2008.

Mara Breen, Michael Wagner, Evelina Fedorenko, and Edward Gibson

Prosody signals focus location, not focus type.
Experimental and Theoretical Advances in Prosody, Cornell University, April 2008.

Evelina Fedorenko & Edward Gibson

The relationship between lexical and structural retrieval in sentence comprehension.

The 21st CUNY Conference on Human Sentence Processing, UNC Chapel Hill, March 2008.

Florian Jaeger, Evelina Fedorenko, Philip Hofmeister & Edward Gibson

Expectation-based syntactic processing: Anti-locality outside of head-final languages.

The 21st CUNY Conference on Human Sentence Processing, UNC Chapel Hill, March 2008.

Evelina Fedorenko, Ani Patel, Daniel Casasanto, Jon Winawer & Edward Gibson

Structural integration in language and music: A shared system.

The 20th CUNY Conference on Human Sentence Processing, UC San Diego, March 2007.

Roger Levy, Evelina Fedorenko & Edward Gibson

The syntactic complexity of Russian relative clauses.

The 20th CUNY Conference on Human Sentence Processing, UC San Diego, March 2007.

Evelina Fedorenko

Working memory in language processing and other cognitive processes.

A special colloquium, sponsored jointly by the Symbolic Systems Programs, the Department of Linguistics and SPLAT (Speech and Language Tea), Stanford University, March 2006.

Evelina Fedorenko, Edward Gibson & Douglas Rohde

Working memory in sentence processing and beyond.

The 18th CUNY Conference on Human Sentence Processing, University of Arizona, March 2005.

POSTER PRESENTATIONS:

Evelina Fedorenko & Nancy Kanwisher. "A new approach to investigating the functional specificity of language regions in the brain."

Poster to be presented at the Neurobiology of Language Conference, Chicago, October 2009.

Evelina Fedorenko, Michael Frank & Edward Gibson. "Syntactic complexity effects in Jabberwocky sentences."

Poster at the 22nd CUNY Conference on Human Sentence Processing, UC Davis, March 2009.

Daniel Grodner, Evelina Fedorenko, Michael Hsieh & Eric Glickman. "The role of verbal working memory in structural ambiguity resolution."

Poster at the 22nd CUNY Conference on Human Sentence Processing, UC Davis, March 2009.

Pritty Patel, Patrick Grosz, Evelina Fedorenko & Edward Gibson. "Experimental evidence against a strict version of the Formal Link Condition on E-Type pronouns."

Poster at the 22nd CUNY Conference on Human Sentence Processing, UC Davis, March 2009.

Melissa Troyer, Evelina Fedorenko & Edward Gibson. "Production priming of object- and subject-extracted relative clauses."

Poster at the 22nd CUNY Conference on Human Sentence Processing, UC Davis, March 2009.

Evelina Fedorenko, Lillia Cherkasskiy, Steven Piantadosi, Jonathan Scholz & Rebecca Saxe. "Prosody influences the listener's online representation of the speaker's thoughts."

Poster at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, April 2008.

Ani Patel, Robert Slevc, Evelina Fedorenko, Daniel Casasanto, Jonathan Winawer, Jason Rosenberg & Edward Gibson. "Interference between syntactic processing in language and music."
Poster at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, April 2008.

Evelina Fedorenko, Lillia Cherkasskiy, Steven Piantadosi & Rebecca Saxe. "Prosody influences the listener's online representation of the speaker's thoughts."
Poster at the 21st CUNY Conference on Human Sentence Processing, Chapel Hill, March 2008.

Roger Levy, Edward Gibson & Evelina Fedorenko. "Expectation-based processing of extraposed structures in English."
Poster at the 21st CUNY Conference on Human Sentence Processing, Chapel Hill, March 2008.

Mara Breen, Michael Wagner, Evelina Fedorenko & Edward Gibson. "An empirical investigation of the acoustic features associated with markers of information structure."
Poster at the 21st CUNY Conference on Human Sentence Processing, Chapel Hill, March 2008.

Evelina Fedorenko & Edward Gibson. "A resource-based account of animacy effects in the processing of relative clauses."
Poster at the Interdisciplinary Approaches to Relative Clauses, Cambridge, U.K., Sept. 2007.

Evelina Fedorenko, William Badecker & Edward Gibson. "Syntactic complexity effects in sentence production."
Poster at the 20th CUNY Conference on Human Sentence Processing, San Diego, March 2007.

Evelina Fedorenko & Roger Levy. "Information structure and word order in Russian sentence comprehension."
Poster at the 20th CUNY Conference on Human Sentence Processing, San Diego, March 2007.

Evelina Fedorenko & Edward Gibson. "The interaction of syntactic and lexical information sources in language processing."
Poster at the 20th CUNY Conference on Human Sentence Processing, San Diego, March 2007.

Evelina Fedorenko & Edward Gibson. "A resource-based account of animacy effects in the processing of relative clauses."
Poster at the 20th CUNY Conference on Human Sentence Processing, San Diego, March 2007.

Edward Gibson, Evelina Fedorenko & Tomoko Ishizuka. "The role of discourse-level predictability in sentence comprehension."
Poster at the 20th CUNY Conference on Human Sentence Processing, San Diego, March 2007.

Edward Gibson, Evelina Fedorenko & Mara Breen. "Processing Extraposed Structures in English: Grammatical and Processing Factors."
Poster at the 19th CUNY Conference on Human Sentence Processing, CUNY, March 2006.

Evelina Fedorenko & Edward Gibson. "Independence of Syntactic Storage and Syntactic Integration Resources."
Poster at AMLaP, Gent, Belgium, September 2005.

Evelina Fedorenko & Edward Gibson. "Syntactic Priming in Comprehension."
Poster at the 18th CUNY Conference on Human Sentence Processing, Tucson, March 2005.

Adam Szczegieliak, Evelina Fedorenko & Edward Gibson. "Processing VP Ellipsis."
Poster at the 18th CUNY Conference on Human Sentence Processing, Tucson, March 2005.

Florian T. Jaeger, Evelina Fedorenko & Edward Gibson. "Dissociation between comprehension and production complexity."
Poster at the 18th CUNY Conference on Human Sentence Processing, Tucson, March 2005.

Evelina Fedorenko & Edward Gibson. "Processing relative clauses in Russian."
Poster at the 3rd Hopkins Workshop on Language (HOWL 3), Johns Hopkins University, January 2005.

Evelina Fedorenko, Edward Gibson & Douglas Rohde. "Verbal Working Memory in Sentence Comprehension."
Poster at the 26th Annual Meeting of the Cognitive Science Society, Chicago, August 2004.

Evelina Fedorenko, Edward Gibson & Maria Babyonyshev. "The Bayesian Basis for Linguistic Expectations in Language Processing."
Poster at the 17th CUNY Conference on Human Sentence Processing, University of Maryland, March 2004.

Evelina Fedorenko, Edward Gibson and Douglas Rohde. "Verbal Working Memory in Sentence Comprehension."
Poster at the 17th CUNY Conference on Human Sentence Processing, University of Maryland, March 2004.

Evelina Fedorenko & Edward Gibson. "Processing Relative Clauses in Russian."
Poster at the 17th CUNY Conference on Human Sentence Processing, University of Maryland, March 2004.

Evelina Fedorenko, Maria Babyonyshev & Edward Gibson. "The Role of Morpho-Syntactic Feature Repetition in Sentence Processing."
Poster at NELS 34, Stony Brook University, November 2003.

TEACHING EXPERIENCE:

Selected guest lectures:

- *"Domain-specificity of the working memory system underlying language"*
 - **9.591**(Language Processing, graduate seminar): Fall 2004, 2005
- *"The short-term / working memory system"*
 - **9.012** (Introduction to Cognitive Science, graduate seminar): Spring 2005
 - **9.65** (Cognitive Processes, undergraduate class): Spring 2006, 2008, 2009
- *"The neural basis of language"*
 - **9.71** (fMRI of High-Level Vision, undergraduate class): Fall 2006, 2007, 2009
 - **9.591** (Language Processing, graduate seminar): Fall 2006
 - **9.59** (Psycholinguistics, undergraduate class): Spring 2007, 2008, 2009
- *"Introduction to language"*
 - **9.65** (Cognitive Processes, undergraduate class): Spring 2006, 2007, 2008, 2009

Co-Instructor (with Ted Gibson), Brain & Cognitive Sciences 9.591 (MIT), "Language processing: An introduction to the experimental investigation of language, above the word level", Fall 2008.

Co-Instructor (with Ted Gibson), Linguistics Society of America Summer Institute (Stanford University), "Working memory and informational constraints in language processing", Summer 2007.

Teaching Assistant, Psych 1 (Harvard University), "Introduction to Psychology", Spring 2007.

Teaching Assistant, Science B-62 (Harvard University), "The Human Mind", Spring 2006.

Teaching Assistant, Brain & Cognitive Sciences 9.65 (MIT), "Cognitive Processes", Spring 2006.

Teaching Assistant, Psychology 1 (Harvard University), "Introduction to Psychology", Fall 2005.

Teaching Assistant, Linguistics Society of America Summer Institute (MIT), "Sentence Processing" (Ted Gibson), "Making Syntax of Sense" (Kay Bock), "Semantic Development in First Language Acquisition" (Stephen Crain), "Syntactic Universals" (Martin Haspelmath), Summer 2005.

Teaching Assistant, Brain & Cognitive Sciences 9.012 (MIT), "Introduction to Cognitive Science" (graduate-level seminar), Spring 2005.

Teaching Assistant, Brain & Cognitive Sciences 9.59 (MIT), "Psycholinguistics", Spring 2005.

Teaching Assistant, Linguistics 130 (Harvard University), "Psycholinguistics", Spring 2005.

Teaching Assistant, Linguistics 88 (Harvard University), "Language and Cognition", Fall 2004.

Teaching Assistant, Brain & Cognitive Sciences 9.00 (MIT), "Introduction to Psychology", Fall 2003.

MEMBERSHIPS AND PROFESSIONAL SERVICE:

Member, Cognitive Neuroscience Society.

Ad-hoc reviewer: Amlap conference (2009); Applied Psycholinguistics; Cerebral Cortex; Cognition; CUNY conference (2008, 2009); Journal of Experimental Psychology: LMC; Journal of Memory and Language; Language; Language and Cognitive Processes; Memory & Cognition; Neuropsychologia; Proceedings of the National Academy of Sciences; Psychological Research; Psychonomic Bulletin & Review; Psychophysiology; Quarterly Journal of Experimental Psychology; Simons Foundation.

LANGUAGES:

Native: Russian. Fluent: English. Reading knowledge: French, Polish, German.

INTERESTS:

- Cognitive and neural architecture of the language system
- The extent of domain-specificity of language and other cognitive processes