

**Natasha Tokowicz, Ph.D.**  
642 Learning Research and Development Center  
3939 O'Hara Street  
University of Pittsburgh  
Pittsburgh, PA 15260

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Office (412) 624-7026  
Home (412) 521-7287  
Fax (412) 624-9149

Tokowicz@pitt.edu  
<http://www.andrew.cmu.edu/user/natashat/>

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### **POST-DOCTORAL EXPERIENCE**

<b>Post-doctoral Research Fellow</b> Learning Research and Development Center and the Center for the Neural Basis of Cognition, University of Pittsburgh; Mentor: Charles Perfetti	2002-present
<b>Post-doctoral Research Fellow</b> Department of Psychology and the Center for the Neural Basis of Cognition, Carnegie Mellon University; Mentor: Brian MacWhinney	2000-2002

### **EDUCATION**

<b>Ph.D., Psychology</b> The Pennsylvania State University at University Park Major in Cognitive Psychology; Minor in Psychobiology Dissertation: <i>Meaning Representation Within and Across Languages</i> Advisor: Judith F. Kroll	1998-2000
<b>M.S., Psychology</b> The Pennsylvania State University at University Park Thesis: <i>Reevaluating Concreteness Effects in Bilingual Translation</i> Advisor: Judith F. Kroll	1995-1997
<b>B.A., Psychology, cum laude</b> University of Massachusetts at Amherst	1991-1995

### **RESEARCH INTERESTS**

My research program investigates the cognitive factors that may help or hinder individuals who begin learning a new language as an adult, and the ways in which these individuals learn to overcome competition between their new language and their existing, well-established language. In addition, my research uses bilingualism as a window from which to view more general issues related to language learning and processing, such as individual differences in working memory capacity and eye-movement control during reading. I use high density event-related brain potential techniques in addition to more traditional measures, such as reaction time and accuracy, to examine these from the perspective of the biological basis of language learning.

### **RESEARCH TOPICS**

Language and Cognition  
Second Language Learning  
Electrophysiology of Language  
Bilingual Memory Representation  
Bilingual Language Processing  
Lexical Ambiguity Within & Across Languages

### **TEACHING TOPICS**

Introductory Psychology  
Cognitive Psychology/Science  
Psycholinguistics  
Bilingualism  
Research Methods in Psychology  
Memory and Language

**MANUSCRIPTS**

Kroll, J. F., Michael, E., Tokowicz, N., & Dufour, R. (2002). The development of lexical fluency in a second language. *Second Language Research*, 18, 137-171.

Kroll, J. F., & Tokowicz, N. (2001). The development of conceptual representation for words in a second language. In J. L. Nicol (Ed.), *One mind, two languages: Bilingual language processing* (pp. 49-71). Malden, MA: Blackwell Publishers.

Kroll, J. F., & Tokowicz, N. (in press). Models of bilingual representation and processing: Looking back and to the future. To appear in J.F. Kroll & A. M. B. De Groot, Eds., *Handbook of bilingualism: Psycholinguistic approaches*. New York: Oxford University Press.

Tokowicz, N., & Kroll, J. F. (under revision). *The interaction between concreteness and ambiguity in bilingual translation production and within-language lexical decision*.

Tokowicz, N., Kroll, J. F., De Groot, A. M. B., & Van Hell, J. G. (2002). Number-of-translation norms for Dutch-English translation pairs: A new tool for examining language production. *Behavior Research Methods, Instruments, and Computers*, 34, 435-451.

Tokowicz, N. & MacWhinney, B. (under review). Implicit versus explicit measures of sensitivity to violations in second language grammar: An event-related potential investigation. To appear in J. Hulstijn & R. Ellis, Eds. Implicit and explicit second-language learning [Special issue]. *Studies in Second Language Learning*.

Tokowicz, N., Michael, E. B., & Kroll, J. F. (revision under review). *The role of study abroad experience and working memory capacity in the types of errors made during translation*.

Tokowicz, N. & Perfetti, C. A. (in press). Introduction to section II: Comprehension. To appear in J.F. Kroll & A. M. B. De Groot, Eds., *Handbook of bilingualism: Psycholinguistic approaches*. New York: Oxford University Press.

**MANUSCRIPTS IN PREPARATION**

Francis, W. S., Tokowicz, N., & Kroll, J. F. (in preparation). *Translation priming as a function of bilingual proficiency and item difficulty*.

Reichle, E. D., Tokowicz, N., & Perfetti, C. A. (in preparation). *The neural bases of eye-movement control in reading: An ERP evaluation of the E-Z Reader model*.

Tokowicz, N., & Kroll, J. F. (in preparation). *Cross-language ambiguity and concreteness effects: The role of meaning and form ambiguity in cross-language processing*.

**RESEARCH SUPPORT**

Individual Post-doctoral National Research Service Award (NIH NIMH 1 F32 HD42948-01), "Second language syntactic and semantic development" \$44,212	2002-2003
Penn State University Department of Psychology Dissertation Support Award \$250	2000
Penn State University College of the Liberal Arts Research and Graduate Studies Office Dissertation Support Grant \$4,000	1999
Principal Investigator, Sigma Xi Grant-in-Aid of Research, "Cognitive psychophysiology of first and second language processing" \$973.20	1998
Principal Investigator, Sigma Xi Grant-in-Aid of Research, "Understanding the meaning of words in two languages: A test of two models of bilingual representation" \$1,101.12	1997
Principal Investigator, Sigma Xi Pennsylvania State University Chapter Matching Research Grant	1997

**PRESENTATIONS**

Reichle, E. D., Tokowicz, N., & Perfetti, C. A. (2004, June). Using ERP to examine eye-movement control during reading. In F. Hutzler (Chair), *Eye movements and reading*. Symposium to be conducted at the Eleventh Annual Meeting of the Society for the Scientific Study of Reading, Amsterdam, Netherlands.

**PRESENTATIONS, continued**

Tokowicz, N., Dunlap, S., & Perfetti, C. A. (2003, November). *Where in the brain is "it"? Does it depend on what "it" is?* Poster to be presented at the Forty-Fourth Annual Meeting of the Psychonomic Society, Vancouver, BC, Canada.

Francis, W. S., Tokowicz, N., & Kroll, J. F. (2003, April). *Translation priming as a function of bilingual proficiency and item difficulty*. Poster presented at the Fourth International Symposium on Bilingualism, Tempe, AZ.

Michael, E. B., Tokowicz, N. & Kroll, J. F. (2003, April). *Modulating access to L2 words: The role of individual differences and language immersion experience*. Paper presented at the Fourth International Symposium on Bilingualism, Tempe, AZ.

Tokowicz, N., Michael, E. B. & Kroll, J.F. (2003, April). *The role of L2 immersion experience and working memory capacity on translation performance*. Paper presented at the Fourth International Symposium on Bilingualism, Tempe, AZ.

Tokowicz, N., & MacWhinney, B. (2002, November). *Second language syntactic development: An event-related potential investigation*. Paper presented at the Forty-Third Annual Meeting of the Psychonomic Society, Kansas City, MO.

Tokowicz, N., & MacWhinney, B. (2002, April). *Judging grammatical acceptability in L2: Competing grammatical systems in the second language learner*. Paper presented at the Forty-Seventh Annual Meeting of the International Linguistic Association, Toronto, Canada.

Tokowicz, N., & Kroll, J. F. (2001, November). *Using evidence from repetition priming to evaluate the form of interlanguage connections*. Poster presented at the Forty-Second Annual Meeting of the Psychonomic Society, Orlando, FL.

Tokowicz, N., & Kroll, J. F. (2001, April). *The effects of ambiguity on bilingual translation: Does meaning competition depend on concreteness?* Paper presented at the third International Symposium on Bilingualism, Bristol, United Kingdom.

Tokowicz, N. (2000, March). *How do "glass" and "culture" differ?: Implications for bilinguals*. Poster presented at the Fifteenth Annual Graduate Research Exhibition, The Pennsylvania State University, University Park, PA.

Tokowicz, N., & Kroll, J. F. (1999, November). *Conceptual access in bilingual translation*. Poster presented at the Fortieth Annual Meeting of the Psychonomic Society, Los Angeles, CA.

Tokowicz, N., & Kroll, J. F. (1998, May). *Assessing the role of meaning in bilingual translation*. Paper presented at the Tenth Annual Meeting of the American Psychological Association, Washington, DC.

Tokowicz, N., & Kroll, J. F. (1998, April). *When is meaning accessed for second language words? It depends on what you mean!* Paper presented at the Forty-Third Annual Meeting of the International Linguistic Association, New York, NY.

Kroll, J. F., Michael, E., Elsinger, C., Tokowicz, N., & Miller, N. (1997, April). *Early stages of second language learning: The role of individual differences in acquiring L2 vocabulary*. Paper presented at the First International Symposium on Bilingualism, Newcastle-upon-Tyne, United Kingdom.

Johnson, S. H., Hawley, E., Tokowicz, N., & Rosenbaum, D. A. (1996, November). *Virtual reaching to visual objects*. Poster presented at the Thirty-Seventh Annual Meeting of the Psychonomic Society, Chicago, IL.

Tokowicz, N. (1996, March). *Language representation in the bilingual: Evidence for two routes to translation*. Poster presented at the Eleventh Annual Graduate Research Exhibition, The Pennsylvania State University, University Park, PA.

Tokowicz, N., & Kroll, J. F. (1996, March). *Priming two routes to translation*. Paper presented at the Sixty-Seventh Annual Meeting of the Eastern Psychological Association, Philadelphia, PA.

**PRESENTATIONS, continued**

Kroll, J. F., Elsinger, C., & Tokowicz, N. (1994, November). *Priming interlanguage connections: Evidence for two routes to translation*. Paper presented at the Thirty-Fifth Annual Meeting of the Psychonomic Society, St. Louis, MO.

**RESEARCH EXPERIENCE**

<i>Postdoctoral Research Fellow</i> with Charles Perfetti, Learning Research and Development Center at the University of Pittsburgh, research on electrophysiology of language, second language acquisition	2002-present
<i>Postdoctoral Research Fellow</i> with Brian MacWhinney, Carnegie Mellon University, research on second language acquisition	2000 – 2002
<i>Graduate Research Assistant</i> , The Pennsylvania State University, research on bilingual memory representation and ambiguity effects in within and cross-language processing; Advisor: Dr. Judith F. Kroll	1995 – 2000
<i>Visiting Research Scholar</i> at the Nijmegen Institute for Cognition and Information, Nijmegen, The Netherlands, research on bilingual meaning representation	Fall, 1999
<i>Graduate Research Assistant</i> , The Pennsylvania State University, research on the cognitive psychophysiology of bilingualism; Collaborators: Dr. J. Toby Mordkoff and Dr. Judith F. Kroll	1996-1998
<i>Visiting Research Scholar</i> at the Cemanahuac Educational Community, Cemanahuac, Morelos, Mexico, research on concreteness effects in bilingual translation	Summer, 1997
<i>Undergraduate Research Assistant</i> , University of Massachusetts, Amherst, research on motor control Advisors: Dr. Scott Johnson and Dr. David Rosenbaum	1994-1995
<i>Undergraduate Research Assistant</i> , University of Trieste, Italy (work completed at the University of Massachusetts, Amherst), research on lexical ambiguity; Principal Investigator: Dr. Patrizia Tabossi	1994
<i>Undergraduate Research Assistant</i> , University of Massachusetts, Amherst and Mount Holyoke College, research on bilingual memory representation; Advisor: Dr. Judith F. Kroll	1993-1994

**TEACHING EXPERIENCE**

Facilitator	Seminar on Readings in Bilingualism	Spring, 2001; Spring, 2002
Instructor	Introductory Psychology	Summer, 1999
Attendee	Teaching of Psychology Training Course	Spring, 1999
Recitation Instructor (2 sections)	Enhanced Introductory Psychology	Fall, 1999
Recitation Coordinator (11 sections)	Enhanced Introductory Psychology	Fall, 1999
Experimental/Statistical Software Evaluator	Basic Research Methods	Summer, 1998
Teaching Assistant	Advanced Sensation and Perception	Fall 1997
Teaching Assistant	Introduction to Cognitive Psychology	Fall, 1997
Teaching Assistant	Advanced Cognitive Psychology	Spring 1997
Computer Lab Teaching Assistant	Basic Research Methods	Fall, 1996- Spring, 1997
Lab Instructor	Basic Research Methods	Fall, 1996
Teaching Assistant	Basic Research Methods	Fall, 1995- Spring, 1996

**ACADEMIC AWARDS, HONORS, AND FELLOWSHIPS**

Institutional Post-doctoral National Research Service Award (NIMH, T32 MH19102-11)	2000-2002
Penn State University College of the Liberal Arts Research and Graduate Studies Office Conference Travel Grants	1999, 1998
Eileen Wirtshafter and Herschel W. Leibowitz Fund Travel Award	1997
Phi Beta Kappa	1995

**INVITED COLLOQUIA**

“Why is Adult Second Language Learning So Difficult?”. Talk given at the Nijmegen Institute for Cognition and Information, Nijmegen, The Netherlands, April, 2003.

“Second Language Syntactic and Semantic Development: An Event-Related Potential Investigation”. Talk given at the University of Pittsburgh’s Department of Linguistics Speaker Series, November, 2002.

**RECENT EDITORIAL EXPERIENCE**

Ad hoc reviewer: (1) *Applied Psycholinguistics*; (2) *Behavior Research Methods, Instruments, and Computers*; (3) *Language Learning*; (4) *Neuropsychologia*; (5) *Scientific Studies of Reading*

**PROFESSIONAL AFFILIATIONS**

Affiliate member, American Psychological Association  
Associate member, Psychonomic Society  
Associate member, Sigma Xi

**SERVICE ACTIVITIES**

Member of the promotion committee of Béryl Schulpen, University of Nijmegen, The Netherlands	2003
Member of the Center for the Neural Bases of Cognition Annual Retreat Planning Committee, Center for the Neural Bases of Cognition	2002
Co-coordinator of the Post-doctoral Training Seminar, Carnegie Mellon University	2001-2002
Graduate student liaison to the Department of Psychology Director of Graduate Training, The Pennsylvania State University	1998-1999
Graduate student advisor to the Department of Psychology Headship Search Committee, The Pennsylvania State University	1998

## REFERENCES

Dr. Judith Kroll  
Department of Psychology  
641 Moore Bldg.  
The Pennsylvania State University  
University Park, PA 16802  
Phone: (814) 863-0126  
Fax: (814) 863-7002  
E-mail: jfk7@psu.edu

Dr. Brian MacWhinney  
Department of Psychology  
254M Baker Hall  
Carnegie Mellon University  
Pittsburgh, PA 15213  
Phone: (412) 268-3793  
Fax: (412) 268-7251  
E-mail: macw@cmu.edu

Dr. Charles Perfetti  
644 Learning Research and Development Center  
University of Pittsburgh  
Pittsburgh, PA 15260  
Phone: (412) 624-7071  
Fax: (412) 624-9149  
E-mail: perfetti@pitt.edu

Dr. Karen Quigley  
Assistant Professor of Psychiatry  
University of Medicine & Dentistry of New Jersey  
and VA Medical Center  
East Orange, NJ 07018-1095  
Phone: (973) 676-1000 x 1414  
E-mail: quigleks@umdnj.edu

Dr. Erik Reichle  
635 Learning Research and Development Center  
University of Pittsburgh  
Pittsburgh, PA 15260  
Phone: (412) 624-7457  
Fax: (412) 624-9149  
E-mail: reichle@pitt.edu

Dr. Robert M. Stern  
Department of Psychology  
512 Moore Bldg.  
The Pennsylvania State University  
University Park, PA 16802  
Phone: (814) 865-1712  
Fax: (814) 863-7002  
E-mail: rs3@psu.edu