

Tamiko Azuma

Curriculum Vitae (*Updated July 2004*)

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Education

Arizona State University

Ph.D., Cognitive Psychology, August, 1995.
M.A., Cognitive Psychology, December, 1991.

University of California, Santa Cruz

B.A., Psychology (College Honors), June, 1989.

Academic Positions

Assistant Professor, Department of Speech & Hearing Science, Arizona State University,
August 1998 - present.

Visiting Assistant Professor, Department of Psychology, Arizona State University, August,
1997 - May, 1998.

Post-Doctoral Research Fellow, National Center for Neurogenic Communication Disorders,
The University of Arizona, August, 1995 - July, 1997.

Graduate Research Assistant, Department of Psychology, Arizona State University, August,
1989 - August, 1995.

Research & Scholarship

Research Interests

Interactions between memory and language processing in healthy individuals, normal aging, dementia, Parkinsons disease, and aphasia. Specific interests include: working memory, attention, semantic processing, memory errors, and resolution of lexical ambiguity.

Current Research Collaborators

Kathryn A. Bayles, Ph.D., Head, Department of Speech and Hearing Sciences, The University of Arizona.

Donald Connor, Ph.D., Center for Clinical Research, Sun Health Research Center.

Marwan Sabbagh, M.D., Director, Center for Clinical Research, Sun Health Research Center.

Stephen D. Goldinger, Ph.D., Department of Psychology, Arizona State University.

Grants & Awards

National Institute on Deafness and Communicative Disorders (NIDCD) R01 Grant: *Speech Perception and Memory in an Episodic Lexicon*. Competing renewal of Grant 1 R01-DC04535-01-3. Award: \$714,236. Principle Investigator: S.D. Goldinger. Co-Investigator: **T. Azuma**. Award period: August, 2003 – July, 2006.

NIH: Small Grant (R03) Program for the NIDCD: *Effects of Aging and Disease on Semantic Processing* (5 R03 DC04231-03). Award: \$150,000 (\$50,000 per year). Primary Investigator: **T. Azuma**. Award period: Jan. 2001 - Dec. 2003.

Arizona Alzheimer's Disease Core Center: *Language Production in Healthy Aging, Mild Cognitive Impairment, and Alzheimer's Disease*. Award: \$25,000. Principle Investigator: N. Silverberg. Key Personnel: **T. Azuma**. Award period: 2002-2003.

Arizona State University, Faculty Grant-In-Aid: *Aging and Semantic Memory*. Award: \$7000. Awarded January 1999.

Post-doctoral fellowship, National Center for Neurogenic Communication Disorders, The University of Arizona. Fall 1995 - Spring 1997. \$19,600 per year.

Achievement Rewards for College Scientists (ARCS) Foundation Scholarship. Award: \$6000 for the 1993-1994 academic year.

Arizona State University, Regents Graduate Academic Scholarship. Awarded for 1989-1990 and 1991-1992 academic years.

University of California, Regents Scholarship. Awarded for 1986-1987, 1987-1988, and 1988-1989 academic years.

Doctoral Dissertation

Azuma, T. Sensing Senses: Detecting Ambiguity in Words with Related and Unrelated Meanings. Arizona State University. *Dissertation Abstracts International: Section B: The Sciences and Engineering*. 1995 Dec; Volume 56(6-B). Page 3482.

Refereed Articles Published & In Press (* denotes student author)

Azuma, T. (1996). Familiarity and relatedness of word meanings: Ratings for 110 homographs. *Behavior Research Methods, Instruments, & Computers*, 28, 109-124.

Tomoeda, C.K., Bayles, K.A., Trosset, M.W., **Azuma T.**, & McGeagh, A. (1996). Cross-sectional analysis of Alzheimer Disease effects on oral discourse in a picture description task. *Alzheimer's Disease and Related Disorders*, 10, 204-215.

Bayles, K.A., Tomoeda, C.K., Wood, J.A., Montgomery, E.B., Cruz, R.F., **Azuma, T.**, & McGeagh, A. (1996). Change in cognitive function in idiopathic Parkinson's disease. *Archives of Neurology*, 53, 1140-1146.

Azuma, T., & Van Orden, G.C. (1997). Why SAFE is better than FAST: The relatedness of a word's meanings affects lexical decision times. *Journal of Memory and Language*, 36, 484-504.

Goldinger, S.D., **Azuma, T.**, Abramson, M., & Jain, P. (1997). Open wide and say "blah!" Attentional dynamics of delayed naming. *Journal of Memory and Language*, 37, 190-216.

Azuma, T., & Bayles, K.A. (1997). Memory impairments underlying language difficulties in dementia. *Topics in Language Disorders*, 18, 58-71.

Refereed Articles, continued

- Azuma, T.**, Bayles, K.A., Cruz, R.F., Tomoeda, C.K., Wood, J.A., McGeagh, A., & Montgomery, E.B. (1997). Comparing the difficulty of letter, semantic, and name fluency tasks for normal elderly and Parkinson patients. *Neuropsychology*, *11*, 488-497.
- Bayles, K.A., Tomoeda, C.K., Wood, J.A., Cruz, R.F., **Azuma, T.**, & Montgomery, E.B., (1997). The effect of Parkinson's disease on language. *Journal of Medical Speech-Language Pathology*, *5*, 157-166.
- Bayles, K.A., **Azuma, T.**, Cruz, R.F., Tomoeda, C.K., Wood, J.A., & Montgomery, E.B. (1999). Gender differences in language of Alzheimer's Disease patients revisited. *Alzheimer's Disease and Associated Disorders*, *13*, 138-146.
- Azuma, T.**, Cruz, R.F., Bayles, K.A., Tomoeda, C.K., Wood, J.A., & Montgomery, E.B. (2000). Incidental learning and verbal memory in individuals with Parkinson Disease. *Journal of Medical Speech Language Pathology*, *8*, 163-174.
- Bayles, K.A., Tomoeda, C.K., Montgomery, E.B., Cruz, R.F., & **Azuma, T.** (2000). The relation of mental status to integrity of lexical-semantic knowledge in Parkinson's Disease. *Advances in Speech-Language Pathology*, *2*, 67-75.
- Forster, K.I., & **Azuma, T.** (2000). Masked priming for prefixed words with bound stems: Does revive prime survive? *Language and Cognitive Processes*, *15*, 539-561.
- Azuma, T.**, Cruz, R.G., Bayles, K.A., Tomoeda, C.K., & Montgomery, E.B. (2003). A longitudinal study of neuropsychological change in individuals with Parkinson's Disease. *International Journal of Geriatric Psychiatry*, *18*, 1115-1120.
- Goldinger, S.D., & **Azuma, T.** (2003). Puzzle-solving science: The quixotic quest for units in speech perception. *Journal of Phonetics*, *31*, 305-320.
- Goldinger, S.D., Kleider, H.M., **Azuma, T.**, & Beike, D. (2003). "Blaming the victim" under memory load. *Psychological Science*, *14*, 81-85.
- Azuma, T.** (2004). Working memory and perseveration in verbal fluency. *Neuropsychology*, *18*, 69-77.
- *Davie, J.E., **Azuma, T.**, Goldinger, S.D., Connor, D.J., Sabbagh, M.N., & Silverberg, N. (2004). Sensitivity to expectancy violations in healthy aging and Mild Cognitive Impairment. *Neuropsychology*, *18*, 269-275
- *Jones, W., Mathy, P., **Azuma, T.**, & Liss, J. (2004). The effect of general and specific synthetic cues on the intelligibility of a speaker with ALS. *Augmentative and Alternative Communication*, *20*, 22-29.
- Azuma, T.**, *Williams, E., *Davie, J.E. (in press). Paws + Cause = Pause? Working memory load and memory blends in homophone recognition. *Psychonomic Bulletin & Review*.
- Goldinger, S.D., & **Azuma, T.** (in press). Auditory episodes reflected in printed word naming. *Psychonomic Bulletin and Review*.

Non-Refereed Papers

- Goldinger, S.D., **Azuma, T.**, Kleider, H.M., & Holmes, V. (2003). Font-specific memory: More than meets the eye? In J.S. Bowers & C. Marsolek (Eds.), *Rethinking Implicit Memory*. Oxford University Press. Pp. 157-196. (Peer-reviewed volume.)

Goldinger, S.D., & **Azuma, T.** Resonance within and between linguistic beings. *Behavioral and Brain Sciences* (in press).

Major Research Presentations

*Baker, L., LaPointe, L., **Azuma, T.**, & Katz, R. Sustained attention and working memory following traumatic brain injury. Conference of the American Speech and Hearing Association. November, 2001.

Goldinger, S.D., & **Azuma, T.** Puzzle-Solving Science: The quixotic quest for units in speech perception. Keynote Address: Temporal integration in the perception of speech. Aix-en-Provence, France. April 2002.

*Davie, J.E., **Azuma, T.**, Connor, D.J., Sabbagh, M.N., Silverberg, N., & Goldinger, S.D. Contextual bias and hyper-inhibition in mild cognitive impairment. 43rd Annual Meeting of the Psychonomic Society. Kansas City. November 2002.

*Nixon, S.M., LaPointe, L.L., Duane, D.D., **Azuma, T.**, & Case, J.L. (2003). Too much noise? Auditory distraction and written fluency in adults with ADHD. Conference of the American Speech and Hearing Association. November, 2003.

*Choe, Y., Mathy, P., & **Azuma, T.** (2004). Treatment Effect of Computer and AAC Device Practice on Naming in Aphasia. Conference of the Arizona Speech-Language-Hearing Association. May, 2004

Other Scholarly Work

Azuma, T. (1997). Learning and memory: Remembering what's been learned. ASHA Continuing Education Tape. Tucson: Canyonlands Publishing, Inc.

Work in Progress

Azuma, T. (in preparation A). Working memory span and the detection of ambiguity.

Azuma, T. (in preparation B). Intra-word relatedness effects in a semantic priming task.

Azuma, T., *Davie, J.E., Connor, D.J., & Sabbagh, M.N. (in preparation A). Working memory source errors in healthy aging.

Azuma, T., *Davie, J.E., Connor, D.J., & Sabbagh, M.N. (in preparation B). Detection of ambiguity in healthy aging and mild cognitive impairment.

Goldinger, S.D., **Azuma, T.**, & Bailey, J. (in preparation). Perceptual-conceptual tradeoffs in memory for words and voices.

Teaching and Mentoring

Teaching Interests

Psycholinguistics, Cognitive Psychology, Cognitive Neuropsychology, Dementia

Teaching Experience

Note: The scale for Evaluation Scores ranges from 1 to 4, with 1 reflecting the highest score.

SHS 367: Language Science

This course covers the major areas of language research and theory. The diverse topics include basic linguistic principles, memory and language, the organization of internal knowledge, speech, reading, discourse processing, and neurolinguistics.

Spring 1999:	Mean Evaluation Score:	1.13	(n = 25)
Spring 2000:	Mean Evaluation Score:	1.21	(n = 15)
Fall 2000:	Mean Evaluation Score:	1.27	(n = 34)
Fall 2001:	Mean Evaluation Score:	1.10	(n = 50)
Fall 2002:	Mean Evaluation Score:	1.15	(n = 55)

SHS 394: Brain, Memory, and Language

This course covers basic brain functions and their relation to memory and language processing. We examine the impact of brain damage and resulting disorders, such as amnesia, dyslexia, and aphasia. The relationship between cognition and the brain are explored by studying neuro-imaging techniques, case studies, and illuminating research.

Fall 2002:	Mean Evaluation Score:	1.04	(n = 21)
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SHS 485: Acquired Speech and Language Disorders

This course covers a range of language disorders resulting from stroke, TBI, disease, and other brain disorders. The nature of speech and language impairment and treatment approaches are discussed.

Spring 2001:	Mean Evaluation Score:	1.09	(n = 19)
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SHS 500: Research Methods in Speech and Hearing Science

This graduate level course covers the essential aspects of scientific study, including proper methods, research design, statistics, theoretical development, and hypothesis testing. The class also includes interpretation of statistical tests, including ANOVA and multiple regression, and ethics in human research.

Spring 2002:	Mean Evaluation Score:	1.12	(n = 22)
Spring 2003:	Not yet available		

SHS 580: Right Hemisphere, Traumatic Brain Injury, and Dementia

This course covers the impact of TBI, dementia, and RH damage on cognitive and communicative functions. Compensatory strategies and therapies emphasizing intact abilities are discussed and evaluated.

Spring 2001: Mean Evaluation Score: 1.03 (n = 9)

SHS 591: Cognitive Interactions with Linguistic Functions

This course covers current theories and research in cognition, including working memory, long-term memory, attention, visuo-spatial skills, and pattern recognition. The interactions of these processes and language are highlighted.

Fall 2000: Mean Evaluation Score: 1.15 (n = 19)

Fall 2001: Mean Evaluation Score: 1.05 (n = 15)

SHS 598: The Psychology of Language

This course covers advanced topics in psycholinguistics. Discussion areas include: dyslexia, models of and basic research in word perception, and visual and spoken language processing.

Spring 1999: Mean Evaluation Score: 1.29 (n = 6)

During my Visiting Assistant Professorship in the ASU Department of Psychology, I also taught the following courses (two sections each). Evaluations were uniformly excellent.

PSY 324: Memory & Cognition

PSY 290: Research Methods

Teaching Awards

Listed in Who's Who Among America's Teachers, 2000 edition.

Graduate Student Mentoring

Chair:	Laurie Baker Juliet Davie Yu-kyong Choe	(Co-Chair, Masters degree awarded 2000) (Masters degree awarded 2002) (Masters degree awarded 2003)
	Juliet Davie Yu-kyong Choe	(Ph.D. candidate: Fall 2002-present) (Ph.D. candidate: Fall 2003-present)
Committee:	Stephanie Nixon Jeannine Bailey Wylanta Jones Breeta Garland Patricia McCarthy	(Masters degree awarded 1999) (Masters degree awarded 2000) - Psychology (Masters degree awarded 2001) (Masters degree awarded 2002) (Ph.D. committee, 2001-present)

Undergraduate Honors Theses

Chair: Erica Brooks (Honors completed Spring 2002)
Committee: Christine Lippman (Honors completed Spring 2001, Psychology)

Academic Service

National Committees

Academy of Neurologic Communication Disorders and Sciences, ad hoc Committee on Practice Guidelines for Dementia

Professional Affiliations

American Psychological Society
American Psychological Association

Reviewing

Journals: *Behavior Research Methods, Instruments, and Computers*
 International Journal of Geriatric Psychiatry
 Journal of Medical Speech-Language Pathology
 Journal of Speech, Hearing, and Language Research
 Quarterly Journal for Experimental Psychology
 Journal of Memory and Language

Grant Agencies: Alzheimer's Association