

## CURRICULUM VITAE

LouAnn Gerken

June 27, 2018

<http://www.u.arizona.edu/~gerken>

<http://tweety.lab.arizona.edu/>

### Contact Information

Department of Psychology  
University of Arizona  
Tucson, AZ 85721-0068  
520-621-4327 (phone)  
520-621-9306 (fax)  
gerken@email.arizona.edu

### Personal Information

DOB: 20 May, 1959  
Citizenship: U.S.

### Education

- 1981 B.A., Psychology  
University of Rochester, Rochester, NY
- 1983 M.A., Experimental Psychology  
Columbia University in the City of New York  
The effect of clause segmentation on children's co-reference interpretations
- 1987 Ph.D., Experimental Psychology  
Columbia University in the City of New York  
Function morphemes in young children's speech perception and production

### Employment

- 1987-88 Post-doctoral Fellow, City University of New York, Graduate Center
- 1988-1994 Assistant Professor of Psychology, SUNY at Buffalo
- 1990 Summer Visiting Assistant Professor of Linguistics, University of Rochester
- 1994-1995 Associate Professor of Psychology, SUNY at Buffalo
- 1994-1995 Visiting Scholar, Speech and Hearing Dpt., University of Arizona
- 1995- 2003 Associate Professor of Speech and Hearing Sciences and Linguistics  
University of Arizona
- 2003-2004 Associate Professor of Psychology and Linguistics, University of Arizona
- 2003-2010 Director of the Cognitive Science Program
- 2004-present Professor of Psychology, Linguistics, and Cognitive Science University of Arizona
- 2008-present Affiliate Faculty in Speech, Language, and Hearing Sciences
- 2010-present Affiliate Faculty in School of Information: Science, Technology, & Arts
- 2008-2009 Acting Associate Dean for Academic Affairs, College of Social and Behavioral Sciences

### Honors and Awards

- Outstanding Faculty Service Award, University of Arizona Mortar Board Society (1996).
- ASHA Editors Award best article of 1998. *American Journal of Speech Language Pathology* (1998).
- Faculty Advising Award, University of Arizona College of Science (1999).
- Fellow of the Center for Advanced Study in the Behavioral Sciences (2005-present).

## Grants

- 1986 NSF Dissertation Improvement Grant (to Barbara Landau, advisor)
- 1988 NIH Post-doctoral Fellowship (declined)
- 1990 UUP New Faculty Development Award
- 1990 SUNY at Buffalo Research Development Funds
- 1990 SUNY at Buffalo Cognitive Science Center Small Grant
- 1991 SUNY at Buffalo Research Development Funds
- 1991 Development of Spoken Language Capacities (5% effort, co-PI, NIH #T32DC000036, \$417,000 5 yrs.)
- 1992 Prosody and Function Morphemes in Early Language Acquisition (20%, PI, NSF #9120952, \$64,980 2 yrs.)
- 1994 Prosody and Function Morphemes in Early Language Acquisition (20%, PI, NSF #9696072, \$146,000 3 yrs.)
- 1997 Prosody and Function Morphemes in Early Language Acquisition (20%, PI, NSF #9709774, \$316,271 5 yrs.)
- 2000 Measuring Hearing Aid Effectiveness in Young Children Using a Word Discrimination Task (10%, PI, Oticon Corporation, \$24,993 1 yr.)
- 2001 Learning Mechanisms involved in Language Acquisition (32%, co-PI, NIH #R01HD42170, \$789,155 3 yrs.)
- 2002 Receptive language skills in developmental language disorder (20%, co-PI, NIH #R01DC04726, \$925,000 6 yrs.)
- 2004 Learning Mechanisms involved in Language Acquisition (32%, PI, NIH #R01HD42170, \$1,390,988 7 yrs.)
- 2006 Eradicating subtle discrimination in the academy (10%, co-PI, NSF #0548130, \$3,300,000 5 yrs.) The major goals of this project are to increase the numbers and visibility of women in science, technology, engineering and mathematics.
- 2008 Receptive language skills in developmental language disorder (20%, co-PI, NIH #R01DC04726, \$1,717,625 5 yrs.)
- 2010 How much input is required for infant language learning: Exploring the role of types and tokens (32% PI, NSF BCS-0950601 \$394,149 5 years)
- 2017 Comparing infants' and adults' learning of three types of linguistic generalizations (32% PI, NSF BCS-1724842, \$315,978)

## Books

Gerken, L.A. (2009). *Language Development*. San Diego: Plural Publishing.

## Peer-Reviewed Journal Publications

1. Gergely, G., Gerken, L. A., Jandreau, S.M., & Bever, T.G. (1986). Experiments on the subjective relatedness of words in sentences. *Cognition*, 23, 251-277.
2. Gerken, L. A. & Bever, T.G. (1986). Linguistic intuitions are the result of perceptual processes and linguistic universals. *Cognitive Science*, 10, 457-476.
3. Gerken, L. A. , Landau, B., & Remez, R.E. (1990). Function morphemes in young children's speech perception and production. *Developmental Psychology*, 26, 204-216.
4. Gerken, L. A. (1991). The metrical basis for children's subjectless sentences. *Journal of Memory and Language*, 30, 431-451.
5. Gerken, L. A. & McIntosh, B.J. (1993). The interplay of function morphemes and prosody in early language. *Developmental Psychology*, 29, 448-457.
6. Gerken, L. A. (1994). Young children's representation of prosodic structure: Evidence from English-speakers' weak syllable omissions. *Journal of Memory and Language*, 33, 19-38.

7. Gerken, L. A. (1994). A metrical template account of children's weak syllable omissions. *Journal of Child Language*, 21, 565-584.
8. Gerken, L. A. , Jusczyk, P.W. & Mandel, D.R. (1994). When prosody fails to cue syntactic structure: Nine-month-olds' sensitivity to phonological versus syntactic phrases. *Cognition*, 51, 237-265.
9. Gerardi, G.M. & Gerken, L. A. (1995). The development of affective responses to modality and melodic contour. *Music Perception*, 12, 279-290.
10. Gerken, L. A. , Murphy, W.D. & Aslin, R.N. (1995). Three- and four-year-olds' perceptual confusions for spoken words. *Perception and Psychophysics*, 57, 475-486.
11. Kemler Nelson, D.G., Jusczyk, P.W., Mandel, D.R., Myers, J, Turk, A. & Gerken, L. A. (1995). The headturn preference procedure for testing auditory perception. *Infant Behavior and Development*, 18, 111-116.
12. Turk, A., Jusczyk, P.W. & Gerken, L. A. (1995). Infants' sensitivity to syllable weight as a determinant of English stress. *Language and Speech*, 38, 143-158.
13. Gerken, L. A. (1996). Prosody's role in language acquisition and adult parsing. *Journal of Psycholinguistic Research*, 25, 341-352.
14. Gerken, L. A. (1996). Prosodic structure in young children's language production. *Language*, 72, 683-712.
15. Boyle, M.K. & Gerken, L. A. (1997). Effects of lexical familiarity on children's function morpheme omissions. *Journal of Memory and Language*, 36, 117-128.
16. Gerken, L. A. & McGregor, K. (1998). An overview of prosody and its role in normal and disordered child language. *American Journal of Speech Language Pathology*, 7, 38-48. (won ASHA Editors Award best article of 1998)
17. McNamara, M., Carter, A., McIntosh, B. & Gerken, L. A. (1998). Sensitivity to grammatical morphemes in children with specific language impairment. *Journal of Speech and Hearing Research*, 41, 1-11.
18. Shafer, V. Shucard, J. Shucard, D. & Gerken, L. A. (1998). An electrophysiological study of infants' sensitivity to the sound patterns of English speech. *Journal of Speech and Hearing Research*, 41, 874-886.
19. Shady, M.E. & Gerken, L. A. (1999). Grammatical and caregiver cues in early sentence comprehension. *Journal of Child Language*, 26, 1-13.
20. Gómez, R.L. & Gerken, L. A. (1999). 11-month-olds are sensitive to structure in an artificial grammar. *Cognition*, 70, 109-135.
21. Gómez, R.L. & Gerken, L. A. (2000). Infant artificial language learning and language acquisition. *Trends in Cognitive Sciences*, 4, 178-186.
22. Gómez, R. L., Gerken, L. A. & Schvaneveldt, R. (2000). The basis of transfer in artificial grammar learning. *Memory & Cognition*, 28, 253-263.
23. Maye, J., Werker, J. & Gerken, L. A. (2002). Infant sensitivity to distributional information can affect phonetic discrimination. *Cognition*, 82, 101-111.
24. Plante, E., Gómez, R. & Gerken, L. A. (2002). Sensitivity to word order cues by normal and language/learning impaired adults. *Journal of Communication Disorders*, 35, 453-462.
25. Carter, A. K. & Gerken, L. A. (2003). Similarities in weak syllable omissions between children with specific language impairment and normally developing language: A preliminary report. *Journal of Communication Disorders*, 36, 165-179.
26. Carter, A., & Gerken, L. A. (2004). Do children's omissions leave traces? *Journal of Child Language*, 31, 561-586.

27. Gerken, L. A. (2004). Nine-month-olds extract structural principles required for natural language. *Cognition*, 93, B89-B96.
28. Zamuner, T., Gerken, L. A., & Hammond, M. (2004). Phonotactic probabilities in young children's speech productions. *Journal of Child Language*, 31, 515-536.
29. Gerken, L. A. & Aslin, R. N. (2005). Thirty years of research on infant speech perception: The legacy of Peter W. Jusczyk. *Language Learning and Development*, 1, 5-21.
30. Gerken, L. A., Wilson, R., & Lewis, W. (2005). 17-month-olds can use distributional cues to form syntactic categories. *Journal of Child Language*, 32, 249-268.
31. Zamuner, T., Gerken, L. A., & Hammond, M. (2005). The acquisition of phonology based on input: A closer look at the relation of cross-linguistic and child language data. *Lingua*, 115(10), 1329-1474.
32. Gerken, L. A. (2006). Decisions, decisions: Infant language learning when multiple generalizations are possible. *Cognition*, 98, B67-B74.
33. Richardson, J., Harris, L., Plante, E., & Gerken, L. A. (2006). Subcategory learning in normal and language learning-disabled adults: How much information do they need? *Journal of Speech, Language, & Hearing Research*, 49: 1257-1266.
34. Goffman, L., Gerken, L. A., & Lucchesi, J. (2007). Relations between segmental and motor variability in prosodically complex sequences. *Journal of Speech, Language, & Hearing Research*, 50(2), 444-458.
35. Lany, J., Gómez, R. L., & Gerken, L. A. (2007). The role of prior experience in language acquisition. *Cognitive Science*, 31, 481-508.
36. Balcomb, F. K., & Gerken, L. A. (2008). Three-year-old children can access their own memory to guide responses on a visual matching task. *Developmental Science*, 11, 750-760.
37. Gerken, L. A., & Bollt, A. (2008). Three exemplars allow at least some linguistic generalizations: Implications for generalization mechanisms and constraints. *Language Learning and Development*, 4(3), 228-248.
38. Bahl, M., Plante, E., & Gerken, L. (2009). Processing prosodic structure by adults with language-based learning disability. *Journal of Communication Disorders*, 42(5), 313-323.
39. Dawson, C., & Gerken, L. A. (2009). Language and music become distinct domains through experience. *Cognition*, 111(3), 378-382.
40. Richtsmeier, P. T., Gerken, L. A., Goffman, L., & Hogan, T. (2009). Statistical frequency in perception affects children's lexical production. *Cognition*, 111(3), 372-377.
41. Gerken (2010). Infants use rational decision criteria for choosing among models of their input. *Cognition*, 115(2), 362-366.
42. Plante, E., Bahl, M., Vance, R., & Gerken, L. A. (2010). Children with specific language impairment show rapid, implicit learning of stress assignment rules. *Journal of Communication Disorders*, 43(5), 397-406.
43. Dawson, C., & Gerken, L. A. (2011). When global structure "explains away" evidence for local grammar: A Bayesian account of rule induction in tone sequences. *Cognition*, 120(3), 350-359.
44. Gerken, L. A., Balcomb, F. K., & Minton, J. (2011). Infants avoid "laboring in vain" by attending more to learnable than unlearnable linguistic patterns. *Developmental Science*, 14(5), 972-979.
45. Plante, E., Bahl, M., Vance, R., & Gerken, L. A. (2011). Beyond phonotactic frequency: Presentation frequency effects word productions in specific language impairment. *Journal of Communication Disorders*, 44, 91-102.
46. Richtsmeier, P. T., Gerken, L. A., & Ohala, D. K. (2011). Contributions of phonetic

- token variability and word-type frequency to phonological representations. *Journal of Child Language*.
47. Lindsey, B. A. & Gerken, L. A. (2012). The role of morphophonological regularity in young Spanish-speaking children's production of gendered noun phrases. *Journal of Child Language*, 39(4), 835-862.
  48. Newman-Smith, K., Yourison, R., Gerken, L. A., Bootzin, R., Nadel, L., & Gomez, R. (2012). State of rest in 17-month old infants differentially affects attention to new information. *SLEEP*, 35: A96-A96.
  49. Plante E, Vance R, Moody A, Gerken L. A. (2013). What influences children's conceptualizations of language input? *Journal of Speech, Language, and Hearing Research*, 56(5):1613-1624.
  50. Davis, A. K., & Gerken, L. (2014). When more is not better: Variable input in the formation of robust word representations. *The Journal of the Acoustical Society of America*, 136(4), 2261-2261.
  51. Hawthorne, K., & Gerken, L. (2014). From pauses to clauses: Prosody facilitates learning of syntactic constituency. *Cognition*, 133(2), 420-428.
  52. Gerken, L. A., Dawson, C., Chatila, R., & Tenenbaum, J. (2015). Surprise! Infants consider possible bases of generalization for a single input example. *Developmental Science*, 80-89.
  53. Gerken, L., & Knight, S. (2015). Infants generalize from just (the right) four words. *Cognition*, 143, 187-192.
  54. Gonzales, K., Gerken, L., & Gómez, R. L. (2015). Does hearing two dialects at different times help infants learn dialect-specific rules?. *Cognition*, 140, 60-71.
  55. Hawthorne, K., Mazuka, R., & Gerken, L. (2015). The acoustic salience of prosody trumps infants' acquired knowledge of language-specific prosodic patterns. *Journal of memory and language*, 82, 105-117.
  56. Hawthorne, K., Rudat, L., & Gerken, L. (2016). Prosody and the acquisition of hierarchical structure in toddlers and adults. *Infancy*, 21(5), 603-624.
  57. Gerken, L. A. & Quam, C. M. (2016). Infant learning is influenced by local spurious generalizations. *Developmental Science*.
  58. Quam, C. M., Knight, S., & Gerken, L. A. (2017). The distribution of talker variability impacts infants' word learning. *Laboratory Phonology*, 8(1).

### Book Chapters

1. Gerken, L. A. (1987). Telegraphic speaking does not imply telegraphic listening. *Papers and Reports on Child Language Development*, 26, 48-55.
2. Gerken, L. A. (1990). Do adults and children have different feet? *Chicago Linguistics Society*, 26, *Parasession on the Syllable*.
3. Gerken, L. A. (1990). A metrical account of children's subjectless sentences. *Proceedings of the North East Linguistics Society*, 20, 121-134.
4. Gerken, L. A. (1990). Performance constraints in early child language: The case of subjectless sentences. *Papers and Reports on Child Language Development*, 29, 54-61.
5. Gerken, L. A. (1994). Sentential processes in early child language: Evidence from the perception and production of function morphemes. In H.C. Nusbaum and J.C. Goodman (eds.), *The transition from speech sounds to spoken words* (pp. 271-298). Cambridge, MA: MIT Press.
6. Gerken, L. A. (1994). Child phonology. In M. Gernsbacher (ed.), *The handbook of psycholinguistics* (pp. 781-820). Academic Press.

7. Levinsky, S. & Gerken, L. A. (1995). Children's knowledge of pronoun usage in discourse. In E. Clark (ed.), *Proceedings of the twenty-sixth annual child language research forum* (pp. 189-196). Palo Alto, CA: Stanford University Press.
8. Shady, M.E. & Gerken, L. A. (1995). Grammatical and caregiver cues in early sentence comprehension. In E. Clark (ed.), *Proceedings of the twenty-sixth annual child language research forum* (pp. 194-103). Palo Alto, CA: Stanford University Press.
9. Shady, M.E., Gerken, L. A. & Jusczyk, P.W. (1995). Some evidence of sensitivity to prosody and word order ten-month-olds. *Proceedings of the Boston University Conference on Language Development*, Vol. 2 (pp. 553-562). Somerville, MA: Cascadilla Press.
10. Gerken, L. A. (1996). Phonological and distributional cues to syntax acquisition. In J. Morgan & K. Demuth (eds.), *Signal to syntax: Bootstrapping from speech to grammar in early acquisition*, Mahwah, NJ: Erlbaum.
11. Gerken, L. A. & Shady, M.E. (1996). The picture selection task. In D. McDaniel, C. McKee and H. Cairns (eds.), *Methods for assessing children's syntax*. Cambridge, MA: MIT Press.
12. Carter, A. & Gerken, L. A. (1997). Children's use of grammatical morphemes in on-line sentence comprehension. In E. Clark (ed.), *Proceedings of the twenty-eighth annual child language research forum*. Palo Alto, CA: Stanford University Press.
13. Gómez, R.L. & Gerken, L. A. (1997). Artificial grammar learning in one-year-olds: Evidence for generalization to new structure. *Proceedings of the 21st Boston University Conference on Language Development*. Boston, MA: Cascadilla Press.
14. Ohala, D. & Gerken, L. (1997). Lexical familiarity effects on children's weak syllable omissions. *Proceedings of the 21st Boston University Conference on Language Development*. Boston, MA: Cascadilla Press.
15. Carter, A. & Gerken, L. A. (1998). Evidence for adult prosodic representations in weak syllable omissions of young children. In E. Clark (ed.), *Proceedings of the twenty-ninth annual child language research forum*. Palo Alto, CA: Stanford University Press.
16. Massar, A. & Gerken, L. A. (1998). Abstract output: An optimality-theoretic analysis of children's omissions from prosodically complex structures. NELS 29.
17. Zamuner, T. & Gerken, L. A. (1998). Young children's production of coda consonants in different prosodic environments. In E. Clark (ed.), *Proceedings of the twenty-ninth annual child language research forum*. Palo Alto, CA: Stanford University Press.
18. Gerken, L. A. (1999). Examining young children's morpho-syntactic development through elicited imitation. In L. Menn and N. Bernstein-Ratner (eds.), *In the beginning was the wug: Methods for the study of language production*. Mahwah, NJ: Erlbaum.
19. Gerken, L. & Ohala, D. (2000). The development of language production. In L. Wheeldon (ed.), *Language Production*. MIT Press.
20. Maye, J. & Gerken, L. A. (2000). Distributional cues to phonemic categories. *Proceedings of the 21st Boston University Conference on Language Development*. Boston, MA: Cascadilla Press.
21. Gerken, L. A. (2001). Signal to syntax: Building a bridge. In J. Weissenborn and S. Powers (eds.), *Signal to Syntax II*. Berlin: John Benjamins.
22. Gómez, R. L. & Gerken, L. A. (2001). Artificial language learning as a means for investigating language acquisition. In M. Tomasello and E. Bates (eds.), *Language Development: The Essential Readings*. Blackwell.
23. Maye, J. & Gerken, L.A. (2001). Learning phonemes: How far can the input take us? *Proceedings of the 21st Boston University Conference on Language Development*. Boston, MA: Cascadilla Press.

24. Gerken, L. A. (2003) Linguistic Aspects of Child Language Impairment – Prosody. In R. Kent (ed.), *MIT Encyclopedia of Communication Disorders*, Cambridge, MA: MIT Press.
25. Gerken, L. A. (2005). Sensitivity to linguistic form. In K. Brown (ed.), *The Encyclopedia of Language and Linguistics*. Amsterdam: Elsevier.
26. Shultz, T. R., & Gerken, L. A. (2005). A model of infant learning of word stress. *Proceedings of the Twenty-seventh annual Conference of the Cognitive Science Society*. Mahwah, NJ: Erlbaum. 2015-2020.
27. Gerken, L. A. (2005). What develops in language development. In R. Kail (ed.), *Advances in Child Development and Behavior*, Amsterdam: Elsevier.
28. Dawson, C., & Gerken L. A. (2006). *Proceedings of the Twenty-ninth annual Conference of the Cognitive Science Society*. Mahwah, NJ: Erlbaum. 1198-1203.
29. Gerken, L. A., & Zamuner, T. (2007). Exploring the basis for generalization in language acquisition. In J. Cole & J. Hualde (eds.), *LabPhon IX: Change in Phonology*. The Hague: Mouton de Gruyter).
30. Gerken, L. A. (2007). Acquiring linguistic structure. In E. Hoff & M. Shatz (eds.), *Handbook of Language Development*, NY: Blackwell.
31. Gerken, L. A. (2009). Are infants constrained in their linguistic generalizations? Some theoretical and methodological observations. In J. Colombo, P. McCardle & L. Freund (Eds.), *Infant pathways to language: Methods, models, and research disorders*. (pp. 49-63). New York, NY US: Psychology Press.
32. Gerken, L. A., Wilson, R., Gomez, R., & Nurmsoo, E. (2009). The relation between linguistic analogies and lexical categories. In J. P. Blevins & J. Blevins (Eds.), *Analogy in Grammar: Form and Acquisition*. Oxford: Oxford University Press.
33. Richtsmeier, P. T., Gerken, L. A., & Ohala, D. K. (2009). Induction of phonotactics from word-types and word-tokens. In J. Chandlee, M. Franchini, S. Lord & M. Rheiner (Eds.), *Proceedings of the 33rd Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press.
34. Cristià, A., Seidl, A., & Gerken, L. A. (2011). Young infants learn sound patterns involving unnatural sound classes. *University of Pennsylvania Working Papers in Linguistics*, 17(1), Article 9.
35. Gerken, L. A., & Balcomb, F. K. (2010). Three observations about infant learning and their implications for learning mechanisms. In M. Banich & D. Caccamise (Eds.), *Optimizing generalization of knowledge: Multidisciplinary perspectives*. New York: Psychology Press.
36. Fryberg, S. A. & Gerken, L. A. (2012). Twins separated at birth? Critical moments in cross-race mentoring relationships. In K. L. Dace (Ed.). *Why we can't "just get along": Women of color and white women in the academy*.
37. Dawson, C., & Gerken, L. A. (2012). Can rational models be good accounts of developmental change? The case of language development at two time scales. In F. Xu & T. Kushnir (Eds.), *Rational constructivism in cognitive development*. Elsevier publishing.
38. Gerken, L. A., & Dawson, C. (in press). Grammar learning as model building. In T. Mintz (Ed.), *Statistical approaches to language*: Taylor Francis.

**Ph.D. dissertation or Master's thesis supervisor for:**

1. Susan Garcia, M.S. Speech Language and Hearing Sciences, 1997
2. Allyson Carter, Ph.D. Linguistics 1998
3. Tanya Zamuner, Ph.D. Linguistics 1999
4. Maryam Sadrzadeh, M.S. Speech Language and Hearing Sciences, 1999
5. Robin Thrift, M.S. Speech Language and Hearing Sciences, 1999
6. Jessica Maye, Ph.D. Linguistics 2000
7. Frances Balcomb, M.S. Speech Language and Hearing Sciences, 2001
8. Rachel Wilson, Ph.D. Psychology 2001
9. Frances Balcomb, Ph.D. Psychology 2007
10. Peter Richtsmeier, Ph.D. Linguistics 2008
11. Brittany Lindsey, Ph.D. Second Language Acquisition and Teaching 2009
12. Colin Reimer Dawson, Ph.D. Psychology 2010
13. Kara Hawthorne, Ph.D. Linguistics 2012
14. Andréa Davis, Ph.D. Linguistics 2015
15. Megan Figueroa, Ph.D. Linguistics 2018

**Post doctoral supervisor for:**

1. Rebecca Gómez
2. Diane Ohala
3. Carolyn Quam