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Citizenship: dual Canada/USA

EDUCATIONAL/PROFESSIONAL HISTORY

Brown University, Department of Cognitive and Linguistic Sciences

Postdoctoral Research Associate, September 2005 – present

Postdoctoral Research Fellow, September 2002 – August 2005 (NRSA fellowship)

Johns Hopkins University, Department of Psychology

Ph. D. 2002

“The acquisition of inflection morphology in early perceptual knowledge of syntax”

Advisors: Peter W. Jusczyk (deceased August 2001)
Barbara Landau (2001-2002)

Committee: Gregory Ball
Margaret Bruck
Deborah Kemler Nelson
Barbara Landau
Michael McCloskey

M.A. 2000

“Effects of prosodic well-formedness on infants’ recognition of embedded syntactic units and non-units”

Advisor: Peter W. Jusczyk

Massachusetts Institute of Technology

B.S. 1998

Major: Biology

Minor: Cognitive Science

Undergraduate research experience in the laboratories of:

Ann Graybiel
Steven Pinker
Kenneth Wexler

AWARDS AND GRANTS

- National Research Service Award Individual Postdoctoral Fellowship (NICHD) 2002-2005
- NSF Graduate Research Fellowship 1999-2002
- Johns Hopkins University School of Arts and Sciences Owen Fellowship 1998-2002

PRIMARY RESEARCH INTERESTS

Grammatical development in infants and toddlers

- What knowledge do infants have about properties of the grammar?
- What is the relationship between toddlers' productive and perceptual linguistic abilities?
- What is the developmental progression of grammatical knowledge?

The role of environment in language development

- What are the properties of maternal and infant-directed speech?
- What cues in the language input do infants use to acquire linguistic knowledge?
- What effects do different linguistic environments have on infant language development?

REFEREED AND INVITED JOURNAL PUBLICATIONS

Soderstrom, M., Blossom, M., Foygel, I., & Morgan, J.L. (in press). Acoustical cues and grammatical units in speech to two preverbal infants. *Journal of Child Language*.

Soderstrom, M. (in press). Early perception-late comprehension? The case of verbal -s (A response to de Villiers & Johnson, 2007). *Journal of Child Language*.

Morgan, J.L., Soderstrom, M., Conwell, E., & Feldman, N. (accepted). Statistical learning in language acquisition: Beyond demonstrations, towards a theory. *Developmental Science*.

Soderstrom, M. & Morgan, J.L. (2007). Twenty-two-month-olds discriminate fluent from disfluent adult-directed speech. *Developmental Science*, 10, 641-653.

Soderstrom, M., White, K.S., Conwell, E. & Morgan, J.L. (2007). Receptive grammatical knowledge of familiar content words and inflection in 16-month-olds. *Infancy*, 12, 1-29.

Soderstrom, M. (2007). Beyond babytalk: Re-evaluating the nature and content of speech input to preverbal infants. *Developmental Review*, 27, 501-532.

Soderstrom, M., Kemler Nelson, D. G., & Jusczyk, P. W. (2005). Six-month-olds recognize clauses embedded in different passages of fluent speech. *Infant Behavior and Development*, 28, 87-94.

Soderstrom, M., Seidl, A., Kemler Nelson, D. G., & Jusczyk, P. W. (2003). The prosodic bootstrapping of phrases: Evidence from prelinguistic infants. *Journal of Memory and Language*, 49, 249-267.

BOOK CHAPTERS AND PROCEEDINGS

Soderstrom, M., & Morgan, J.L. (in press) Twenty-two month olds detect verb-noun exchanges in fluent speech: Evidence for category preferences for familiar content words. In *Proceedings of the 32nd Annual Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press.

Soderstrom, M., Mathis, D. & Smolensky, P. (2006). Abstract genomic encoding of universal grammar in Optimality Theory. In *The harmonic mind: From neural computation to Optimality-Theoretic grammar, Vol. 2, Linguistic and philosophical implications*, Paul Smolensky and Géraldine Legendre, pp. 403-471. Cambridge, MA: MIT Press.

- Soderstrom, M. & Morgan, J.L. (2006). Toddlers are sensitive to prosodic correlates of disfluency in spontaneous speech. In *Proceedings of Speech Prosody '06*. Dresden, Germany, May 2-5.
- Soderstrom, M. & Morgan, J.L. (2005). Disfluency in speech input to infants? The interaction of mother and child to create error-free speech input for language acquisition. In *Proceedings of DiSS'05*. Aix-en-Provence, France, September 10-12.
- Soderstrom, M., Wexler, K. & Jusczyk, P.W. (2002). English-learning toddlers' sensitivity to agreement morphology in receptive grammar. In B. Skarabela, S. Fish, & A. H.-J. Do (Eds.), *Proceedings of the 26th Annual Boston University Conference on Language Development, Vol. 2* (pp. 643-652). Somerville, MA: Cascadilla Press.
- Soderstrom, M., Mathis, D., & Smolensky, P. (2001). Toward computational empirical testing of linguistic innateness: Abstract genomic encoding of an optimality-theoretic grammar. *Proceedings of the Third International Conference on Cognitive Science, Beijing, China* (pp. 14-25). Beijing: University of Science and Technology of China Press.
- Soderstrom, M., Jusczyk, P.W., & Kemler Nelson, D. (2000). Evidence for the use of phrasal packaging in English-learning 9-month-olds. *Proceedings of the 24th Annual Boston University Conference on Language Development, Vol. 2*. Somerville, MA: Cascadilla Press.
- Soderstrom, M., Jusczyk, P.W., & Wexler, K. (2000). 19-month olds' sensitivity to negation/tense dependencies. In L.R. Gleitman & A.K. Joshi (Eds.), *Proceedings of the 22nd Annual Conference of the Cognitive Science Society*, (p. 1056). Mahwah, NJ: Lawrence Erlbaum.
- Ganger, J., Wexler, K., & Soderstrom, M. (1998). The genetic basis for the development of tense: A preliminary report on a twin study. A. Greenhill, M. Hughes, H. Littlefield, & H. Walsh (eds.). *Proceedings of the 22nd Annual Boston University Conference on Language Development, Vol. 1* (pp. 224-234). Somerville, MA: Cascadilla Press.

CONFERENCE PRESENTATIONS

- Soderstrom, M., Sauter, D., & Morgan, J.L. (2008, May – forthcoming). *Understanding relief and achievement: Infants' discrimination and crossmodal perception of two positive affective expressions*. 16th Biennial Conference on Infant Studies, Vancouver.
- Soderstrom, M. (2008, May – forthcoming). *How infants acquire grammatical categories: The role of distributional, prosodic and phonotactic information in the acquisition of noun and verb categories (symposium chair)*. 16th Biennial Conference on Infant Studies, Vancouver.
- Morgan, J.L., & Soderstrom, M. (2007, November). *Twenty-two month olds detect verb-noun exchanges in fluent speech: Evidence for category preferences for familiar content words*. 32nd Annual Boston University Conference on Language Development, Boston.
- Soderstrom, M. (2006, November). *Twenty-two-month-olds discriminate fluent from disfluent adult-directed speech based on prosodic characteristics*. 31st Annual Boston University Conference on Language Development, Boston.
- Soderstrom, M. & Morgan, J. (2006, May). *Toddlers are sensitive to prosodic correlates of disfluency in spontaneous speech*. Third International Conference on Speech Prosody, Dresden.

- Soderstrom, M., White, K. & Conwell, E. (2005, November). *Evidence for grammatical knowledge of content words in 16-month-olds*. 30th Annual Boston University Conference on Language Development, Boston.
- Soderstrom, M., & Morgan, J.L. (2005, September) *Disfluency in speech input to infants? The interaction of mother and child to create error-free speech input for language acquisition*. DiSS'05, Aix-en-Provence.
- Soderstrom, M., White, K., Conwell, E., & Morgan, J. (2005, July). *Sixteen-month-olds are beginning to form categories of "noun" and "verb"*. IASCL 2005, Berlin.
- Soderstrom, M., Foygel, I., & Morgan J.L. (2004, May). *Variability in the input: Prosodic cues to syntax in different input environments*. 14th Biennial International Conference on Infant Studies, Chicago.
- Soderstrom, M., Seidl, A., Kemler Nelson, D.G., & Morgan, J. (2003, April). *Exploring Infants' Sensitivity to the Prosodic Contours of Phrases*. BOOT-LA workshop, University of Indiana.
- Soderstrom, M. (2002, April). *Prosodic packaging of syntactic units in infants' speech processing*. Memorial Symposium for Dr. Peter W. Jusczyk, 13th Biennial International Conference on Infant Studies, Toronto.
- Soderstrom, M., Jusczyk, P. W., & Wexler, K. (2001, November). *English-learning toddlers' sensitivity to agreement morphology in receptive grammar*. 26th Annual Boston University Conference on Language Development, Boston.
- Soderstrom, M., Jusczyk, P. W., & Wexler, K. (2000, August). *19-Month-Olds' sensitivity to negation/tense dependencies*. Cognitive Science Society 22nd Annual Meeting, Philadelphia.
- Soderstrom, M., Jusczyk, P. W., & Wexler, K. (2000, March). *19-Month-Olds' understanding of the negation/adverbial difference*. Eastern Psychological Association 71st Annual Meeting, Baltimore.

CURRENT PROJECTS AND COLLABORATIONS

Grammatical development in infants and toddlers

- *A Kohonen network model of syntactic categories with frequent frames as input* (working title) with Feldman, N., & Morgan, J.L. (Brown University)
- *The role of -ing and -ly in segmentation of novel words* (working title) with Golinkoff, R. (University of Delaware), & Morgan, J.L. (Brown University)

The role of environment in language development

- *Use of prosody by infants detecting dependency relations in an artificial grammar* (working title) with Gomez, R. (University of Arizona), Golinkoff, R. (University of Delaware), & Morgan, J.L. (Brown University)
- *Acoustic cues to disfluency are strongest in infant-directed speech* (working title) with Morgan, J.L. (Brown University)
- *Infants' segmentation of words familiarized in ID and AD speech* (working title) with Golinkoff, R. (University of Delaware), & Morgan, J.L. (Brown University)

TEACHING INTERESTS

Introductory and lecture classes:

- Introductory Psychology
- Introductory Linguistics
- Cognitive Psychology
- Language Development/Infant Speech Perception
- Cognitive Development

Graduate and undergraduate seminar topics

- Perception and Production in Language Development
- Maternal and Paternal Language Behavior
- Neural Network and Statistical Models of Language Development

TEACHING EXPERIENCE

Introductory and lecture classes:

Cognition

Northeastern University, fall 2007

Northeastern University, spring 2008

Speech and Language Development

Rhode Island College, fall 2006

Children's Thinking: The Nature of Cognitive Development

Brown University, summer 2003

Graduate and undergraduate seminars

Seminar in Cognition

Beyond Babytalk: Parental Speech and Speech Input to the Infant

Northeastern University, spring 2008

Topics in Cognitive Science Section 1: Psycholinguistics

The Speech Input Environment of Infants

Brown University, spring 2005

Topics in Language Acquisition

Syntax Acquisition in the Receptive Domain

Brown University, spring 2004

Co-taught with Dr. James Morgan

PROFESSIONAL MEMBERSHIP AND ACTIVITIES

- Society for Language Development (2004-present)
- International Society on Infant Studies (2002-present)
- American Psychological Association (2000 – present)
- Cognitive Science Society (2000 – present)
- Johns Hopkins University Department of Psychological and Brain Sciences Steering Committee (1999-2001)