

Mary E. Beckman

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Curriculum Vitae

Education and employment:

Professor, Linguistics, Ohio State University, Columbus, OH (hired September, 1985; current rank as of October, 1993; appointed to be a Humanities Distinguished Professor in September 2003); courtesy appointment in the Department of Speech & Hearing Science (as of October, 1999); faculty for the Interdisciplinary Master of Arts, East Asian Studies Center (since the founding of this program in 2005).
Postdoctoral Member Technical Staff, Dept. Linguistics & Artificial Intelligence Research, AT&T Bell Laboratories, Murray Hill, NJ (February 1984-September 1985).
Ph.D., Linguistics, Cornell University, Ithaca, NY (January, 1984). Dissertation: *Toward phonetic criteria for a typology of lexical accent*. (M.A., Linguistics, January, 1982).
M.A., Oriental Languages, University of California, Berkeley, CA (June, 1979). Thesis: *Kungana evidence for the number of phonemically distinct syllables in Old Japanese*.
A.B., Oriental Languages & Comparative Literature, U. California, Berkeley, CA (June 1976). Thesis: *Epic qualities in the Heike Monogatari*.

Dissertations and theses advised, Ohio State University:

Keith Johnson (Ph.D., 1988). *Processes of speaker normalization in vowel perception*.
Kenneth de Jong (Ph.D., 1991). *The oral articulation of English stress accent*.
Maria G. Swora (B.A., 1990). *The intonation of "Okay" as a discourse marker*.
Sun-Ah Jun (Ph.D., 1993). *The phonetics and phonology of Korean prosody*.
Sook-hyang Lee (Ph.D., 1994). *The role of the jaw in consonant articulation*.
Shu-hui Peng (Ph.D., 1996). *Phonetic implementation and perception of segmental coarticulation and tone sandhi*.
Gayle Ayers Elam (Ph.D., 1996). *Nuclear accent types and prominence: Some psycholinguistic experiments*.
Kevin Bretonel Cohen (M.A., 1996). *Vowel production and vocal tract evolution*.
Rebecca Herman (Ph.D., 1998). *Intonation and discourse structure in English: Phonological and phonetic markers of local and global discourse structure*.
Jennifer Venditti (Ph.D., 2000). *Discourse structure and attentional salience effects in Japanese intonation*.
Mariapaola D'Imperio (Ph.D., 2000, co-advised with Keith Johnson). *Perceptual considerations on tone targets and their alignment*.
Amanda Miller-Ockhuizen (Ph.D., 2001). *Grounding Ju|'hoansi phonotactics: The phonetics of the Guttural OCP and other acoustic modulations*.
Stefanie Jannedy (M.A., 1994). *Prosodic and segmental influences on high vowel devoicing in Turkish*. (Ph.D., 2002). *Hat patterns and double peaks: The phonetics and psycholinguistics of broad versus late narrow versus double focus intonations*.
Pauline Welby (Ph.D., 2003). *The slaying of Lady Mondagreen, being a study of French tonal association and alignment and their role in speech segmentation*.
Giorgos Tserdanelis (Ph.D., 2005, co-advised with Brian Joseph). *The role of segmental sandhi in the parsing of speech: Evidence from Greek*.
Kyuchul Yoon (Ph.D., 2005). *Building a prosodically sensitive diphone database for a Korean text-to-speech synthesis system*.

Wai-Yi Peggy Wong (Ph.D., 2006, co-advised with Marjorie Chan). *Syllable fusion in Hong Kong Cantonese connected speech*.

Katherine Woznicki (B.A., 2006). *An acoustic analysis of Slovene prosody*.

Grant McGuire (Ph.D., 2007, co-advised with Keith Johnson). *Phonetic category learning*.

Helena Riha (Ph.D., 2008). *Lettered words and roman letter characters in Chinese writing: A study of alphabetic writing in Chinese newswires*.

Fangfang Li (Ph.D., 2008). *The phonetic development of voiceless sibilant fricatives in English, Japanese, and Mandarin Chinese*.

Eunjong Kong (Ph.D., 2009). *The development of phonation-type contrasts in plosives: Cross-linguistic perspectives*.

Extramural research and teaching:

Adjunct Professor, Macquarie Centre for Cognitive Science, Macquarie University, Sydney, Australia (appointed at the founding of this Australian Research Council Special Research Centre in 2000).

Visiting Faculty at: Linguistic Society of America (LSA) Summer Institute, University of California, Berkeley (6-23 July 2005); LSA Summer Institute, Harvard/MIT (27 June-15 July 2005); LOT Summer School, University of Tilburg (19-23 June 2000); LSA Summer Institute, University of Illinois, Champaign-Urbana (19-29 July 1999); Australian Linguistics Institute, University of Queensland (6-16 July 1998); Dept. Linguistics, University of California, Los Angeles (12-16 February 1996).

Partner Investigator, *A kinematic and electropalatographic investigation of prosody in Australian English*, Australian Research Council Large Grant to J. Harrington, Macquarie University, Sydney, Australia (A\$180,000, 1997-1999).

Visiting Researcher, ATR Interpreting Telecommunications Research Laboratories, Kyoto, Japan (Sep-Dec 1994, Mar-May 1995); Visiting Research Scholar, Speech, Hearing and Language Research Centre, Macquarie University, Sydney, Australia (Jan-Feb, 1995).

Consultant, AT&T Bell Laboratories, Murray Hill, NJ [analysis of Japanese duration patterns] (1981-1982); [analysis and synthesis of Japanese intonation] (1985-1989; 1993-1994).

Consultant, Eloquent Technology, Inc., Ithaca, NY [documentation of Japanese formant-based speech synthesis system], (1984).

Other professional activities:

Member of: Acoustical Society of America (elected Fellow, October 1993; served on Communication Technical Committee, 1994-2000); Acoustical Society of Japan; Linguistic Society of America; the Phonetic Society of Japan; International Phonetic Association (member of IPA Council, 2003-2011).

Editor, *Journal of Phonetics*, Vols. 18-22 (1990-1994); Editorial Board, *Language and Speech* (1994-2000), *Onsei Kenkyuu* (2000-present), *Journal of Phonetics* (1995-present), *Speech Communication* (2005-present); Ad hoc Associate Editor for special issue of *IEEE Transaction on Speech and Audio Processing* on spontaneous speech processing and recognition (2003-2004).

Cyberling2009 workshop, Berkeley, CA (17-19 July 2009); invited participant and co-chair, Working Group on Annotation Standards.

NSF Linguistics Program Review Panel (2004-2007); NSF CDI 2008 Type II Pre-Proposal Panel (2008).

NIH Special Study Section, LCOM (July 2007, February 2008, July 2009).

Advisory Committee, Terascale Linguistics Initiative; presentation on "Some methods and salient results in large-scale phonology" at NSF Workshop on Terascale Linguistics, 25-26

- October, 2003; presentation on “Terascale resources for research in prosody-discourse-syntax” at LSA Town Meeting, 8 January 2004.
- Symposium Organizer, “Intonation and Processing,” International Congress of Phonetic Sciences, 3-9 August 2003, Barcelona.
- External Advisory Committee for *Spontaneous Speech: Corpus and Processing Technology*, a Japanese Science and Technology Agency Priority Program inter-institutional large grant to the Tokyo Institute of Technology, the National Institute for Japanese Language, and the Communication Research Laboratory (1999-2004).
- International Advisory Board, LOT [Netherlands Graduate School of Linguistics], a federation of research institutes at the Universities of Amsterdam, Leyden, Nijmegen, Tilburg, and Utrecht (appointed May, 1999).
- Conference organizer (with J. Kingston), First Conference in Laboratory Phonology, Ohio State University, Columbus (13-15 June 1987); Series editor (with J. Kingston), *Papers in Laboratory Phonology* (volumes 1-6), Cambridge University Press (1987-2004).
- Invited Participant at: NSF Workshop for Discussing Research Priorities and Evaluation Strategies in Speech Synthesis, Washington, DC (6-7 August 1998); NSF Workshop on Spoken Language Understanding, Washington, D.C. (10-11 February 1992).
- Member, International Scientific Committee, for: Third TIE Conference, Lisbon, Portugal (15-17 September 2008), ICPHS2007, Saarbrücken, Germany (6-11 August 2007), LabPhon10, Paris, France (29 June – 1 July 2006), Speech Prosody 2006, Dresden, Germany (2-5 May 2006), Speech Prosody 2004, Nara, Japan (22-26 March 2004), ESCA Workshop on Intonation, Athens, Greece (18-20 September 1997); Concept to Speech Generation Systems Workshop, 35th Annual Meeting of the Association for Computational Linguistics, Madrid, Spain (11 July 1997); 1st ESCA Tutorial and Research Workshop on Speech Production (4th Speech Production Seminar), Autrans, France (21-24 May 1996); ESCA Workshop on Prosody, Lund University Department of Linguistics and Phonetics, Lund, Sweden (27-29 September 1993).
- Member, Organizing Committee for: *WAVEip*, Victoria University of Wellington (12-14 December 2000); Intonation: Models and ToBI Labeling, a satellite meeting to ICPHS 99, San Francisco, CA (1 August 1999); ATR Workshop on Issues in Temporal Organization for Speech, Turtle Bay, Oahu, HI (7-9 December 1996).
- Invited participant, Prosodic Transcription Workshop, MIT Lab for Computer Science, Cambridge, MA (1-2 August, 1991); Second Prosodic Transcription Workshop, NYNEX Science and Technology, Inc., White Plains, NY (5-6 April 1992); Fourth Prosodic Transcription Workshop, Department of Electrical, Computing, and Systems Engineering, Boston University, Boston, MA (5-6 August 1994);
- Organizer, Workshop on Prosodically Transcribed Data and Transcription Tools for Linguistics Research, Ohio State University (17-21 June 1993);
- Co-author (with J. Hirschberg), *The ToBI Annotation Conventions*.
- Co-author (with G. Ayers Elam), *Guide to ToBI Labelling (A Tutorial Introduction, with Accompanying Example Utterances)*.

Awards:

- National Science Foundation, *DHB/Collaborative Research: Using machine learning to model the interplay of production dynamics and perception dynamics in phonological acquisition*, lead institution of a multi-site grant with Eric Fosler-Lussier (co-PI, OSU), Jan Edwards (University of Wisconsin, Madison), Benjamin Munson (University of Minnesota) (\$700,000 over the three institutions), 2008-2010.

- National Institute of Deafness and Communication Disorders, DC02932, *A cross-linguistic investigation of phonological development*, with Jan Edwards (\$1,568,486), 2003-2008. [Grant transferred to University of Wisconsin, Madison, in 2005 and subsequent support of technical staff and graduate student researchers at Ohio State University continued as a subcontract.]
- SBC/Ameritech Faculty Research Fellowship, *Building Systems to Teach Speech Synthesis*, with Chris Brew (\$24,774), 2001-2002.
- Lucent Speech Solutions, *Transcription Services — Phonetic Labelling* (\$50,000), 2000-2001.
- Ohio State University, Interdisciplinary Seed Grant, *Establishing a Repository of Linguistically Varied, Prosodically Transcribed Spoken Language Data*. (\$104,222; 1999-2000).
- National Institute of Deafness and Communication Disorders, *Assessing phonetic skills in children with articulation disorders of unknown origin*, with J. Edwards, M. Fourakis, & R. Fox (Ohio State University, Speech & Hearing Sciences), (\$546,090), 1998-2000.
- Motorola Corporation, *Labelling/Transcription Services* (\$82,800; 1998-1999).
- AT&T Corporation, *Transcribing/Labelling Services* (\$181,750), 1997-2000.
- Ohio State University Distinguished Scholar Award (\$20,000), 1995.
- National Science Foundation, *Prosodically Transcribed Data and Transcription Tools for Linguistics Research* (\$60,000), 1993.
- Motorola University Partnership in Research award, *Speech Recognition Based on Acoustic and Auditory Dynamics*, with S. Ahalt (Electrical Engineering) (\$42,924) 1992-1994.
- Ohio State University Center for Cognitive Science, Interdisciplinary Seed Grant, *Speech Recognition and Auditory Processing*, with L. Feth & R. Fox (Dept. Speech & Hearing), & S. Ahalt & A. Krishnamurthy (Electrical Engineering) (\$23,228), 1990-1991.
- Digital Equipment Corporation grant #1030, *Speech Timing Models in Speech Synthesis by Rule* (\$47,155 toward new equipment, 1990) and equipment award (\$38,328), 1989.
- National Science Foundation, grant no. IRI-8902142, *Pilot Project on Speech Recognition using Layered Abduction and Explicit Representation of Speech and Linguistic Knowledge*, with J. Josephson & T. Patten (Computer Science), L. Feth & R. Fox (Speech & Hearing), & A. Krishnamurthy (Electrical Engineering) (\$50,000), 1989.
- National Science Foundation, grant no. IRI-8858109, Presidential Young Investigator Award (\$252,537), 1988-1994.
- National Science Foundation, grant no. IRI-8617852, *The Organization of Informational Structure in Articulator Movement and Acoustic Duration Patterns* (\$119,257 plus \$4000 supplement awarded under Research Experience for Undergraduates program), 1987-1990.

Publications

Books:

- Kingston, J., & Beckman, M. E., eds. (1990). *Papers in Laboratory Phonology I: Between the Grammar and the Physics of Speech*. Cambridge University Press.
- Pierrehumbert, J. B., & Beckman, M. E. (1988). *Japanese Tone Structure (Linguistic Inquiry Monograph Series No. 15)*. MIT Press.
- Beckman, M. E. (1986). *Stress and Non-Stress Accent (Netherlands Phonetic Archives No. 7)*. Foris. (Second printing, 1992, by Walter de Gruyter.)

Articles in journals and other peer-reviewed archival series:

- Beckman, M. E., & Edwards, J. (accepted with revisions). Generalizing over lexicons to predict consonant mastery. To appear in *Laboratory Phonology*, 1(1).

- Gooden, S., Drayton, K.-A., & Beckman, M. E. (2009). Tone inventories and tune-text alignments: Prosodic variation in 'hybrid' prosodic systems. *Studies in Language*, 33(2), 354-394.
- Li, F., Edwards, J., & Beckman, M. E. (2009). Contrast and covert contrast: The phonetic development of voiceless sibilant fricatives in English and Japanese toddlers. *Journal of Phonetics*, 37(1), 111-124.
- Edwards, J., & Beckman, M. E. (2008). Methodological questions in studying consonant acquisition. *Clinical Linguistics and Phonetics*, 22(12), 937-956.
- Edwards, J., & Beckman, M. E. (2008). Some cross-linguistic evidence for modulation of implicational universals by language-specific frequency effects in the acquisition of consonant phonemes. *Language Learning and Development*, 4, 122-156.
- Beckman, M. E., Munson, B., & Edwards, J. (2007). Vocabulary growth and the developmental expansion of types of phonological knowledge. *Laboratory Phonology* 9, 241-264.
- Munson, B., Edwards, J., & Beckman, M. E. (2005). Phonological knowledge in typical and atypical speech sound development. *Topics in Language Disorders*, 25, 190-206.
- Munson, B., Edwards, J., & Beckman, M. E. (2005). Relationships between nonword repetition accuracy and other measures of linguistic development in children with phonological disorders. *Journal of Speech, Language, and Hearing Research*, 48, 61-78.
- Edwards, J., Beckman, M. E., & Munson, B. (2004). The interaction between vocabulary size and phonotactic probability effects on children's production accuracy and fluency in novel word repetition. *Journal of Speech, Language, and Hearing Research*, 47, 421-436.
- Furui, S., Beckman, M., Hirschberg, J. B., Itahashi, S., Kawahara, T., Nakamura, S., & Narayanan, S. (2004). Introduction to the special issue on spontaneous speech processing. *IEEE Transactions on Speech and Audio Processing*, 12, 394-350.
- Hay, J., Pierrehumbert, J., & Beckman, M. (2003). Speech perception, well-formedness and the statistics of the lexicon. In J. Local, R. Ogden, & R. Temple, eds., *Phonetic Interpretation: Papers in Laboratory Phonology VI*, pp. 58-74. Cambridge: Cambridge University Press.
- Beckman, M. E., & Pierrehumbert, J. (2003). Interpreting 'phonetic interpretation' over the lexicon. In J. Local, R. Ogden, & R. Temple, eds., *Phonetic Interpretation: Papers in Laboratory Phonology VI*, pp. 13-37. Cambridge University Press.
- Beckman, M. E., Yoneyama, K., & Edwards, J. (2003). Language-specific and language-universal aspects of lingual obstruent productions in Japanese-acquiring children. *Journal of the Phonetic Society of Japan*, 7, 18-28.
- Beckman, M. E., Díaz-Campos, M., McGory, J. T., & Morgan, T. A. (2002). Intonation across Spanish, in the Tones and Break Indices framework. *Probus*, 14, 9-36.
- Syrdal, A. K., Hirschberg, J., McGory, J. T., & Beckman, M. E. (2001). Automatic ToBI Prediction and Alignment to Speed Manual Labeling of Prosody. *Speech Communication* 33, 135-151.
- Beckman, M. E., & Edwards, J. (2000). The ontogeny of phonological categories and the primacy of lexical learning in linguistic development. *Child Development*, 71, 240-249.
- Harrington, J., Fletcher, J., & Beckman, M. E. (2000). Manner and place conflicts in the articulation of accent in Australian English. In M. Broe & J. Pierrehumbert, eds., *Papers in Laboratory Phonology V: Language Acquisition and the Lexicon*, pp. 40-51. Cambridge, UK: Cambridge University Press.
- Beckman, Mary E., & Edwards, Jan (2000). Lexical frequency effects on young children's imitative productions. M. Broe & J. Pierrehumbert, eds., *Papers in Laboratory Phonology V: Language Acquisition and the Lexicon*, pp. 208-217. Cambridge, UK: Cambridge University Press.

- Herman, R., Beckman, M., & Honda, K. (1999). Linguistic models of F0 use, physiological models of F0 control, and the issue of 'Mean Response Time'. *Language and Speech* 42, 373-399.
- Edwards, J., Fourakis, M., Beckman, M. E., & Fox, R. A. (1999). Characterizing knowledge deficits in phonological disorders. *Journal of Speech, Language, and Hearing Research* 42, 169-186.
- Jun, Sun-Ah, Beckman, Mary E., Niimi, Seiji, & Tiede, Mark (1997). "Electromyographic evidence for a gestural-overlap analysis of vowel devoicing in Korean," *The Journal of Speech Sciences (The Korean Association of Speech Sciences)*, 1, 153-200.
- Beckman, M. E. (1996). The parsing of prosody. *Language and Cognitive Processes*, 11, 17-67.
- Jung, T.-P., Krishnamurthy, A. K., Ahalt, S. C., Beckman, M. E., & Lee, S. (1996). Deriving gestural scores from articulator-movement records using weighted temporal decomposition. *IEEE Transactions on Speech and Audio Processing*, 4(1), 2-18.
- Beckman, M. E. (1995). On blending and the mora: comments on Kubozono. In B. Connell & A. Arvaniti, eds., *Phonology and Phonetic Evidence: Papers in Laboratory Phonology IV*, pp. 157-167. Cambridge University Press.
- Erickson, E., Honda, K., Hirai, H., & Beckman, M. E. (1995). The production of low tones in English intonation. *Journal of Phonetics*, 23(1/2), 179-188.
- Beckman, M. E., Jung, T.-P., Lee, S., de Jong, K., Krishnamurthy, A. K., Ahalt, S. C., Cohen, K. B. & Collins, M. (1995). Variability in the production of quantal vowels revisited. *Journal of the Acoustical Society of America*, 97(1), 471-490.
- Cole, R., Hirschman, L., Atlas, L., Beckman, M., et al. (1995). The Challenge of Spoken Language Systems: Research Directions for the Nineties. *IEEE Transactions on Speech and Audio Processing*, 3(1), 1-21.
- Beckman, M. E., & Edwards, J. (1994). Articulatory evidence for differentiating stress categories. In P.A. Keating, ed., *Phonological Structure and Phonetic Form: Papers in Laboratory Phonology III*, pp. 7-33. Cambridge University Press.
- de Jong, K., Beckman, M. E., & Edwards, J. (1993). The interplay between prosodic structure and coarticulation. *Language and Speech*, 36, 197-212
- Beckman, M. E., de Jong, K., Jun, S.-A., & Lee, S. (1992). The interaction of coarticulation and prosody in sound change. *Language and Speech*, 35, 45-58.
- Beckman, M. E., Edwards, J., & Fletcher, J. (1992). Prosodic structure and tempo in a sonority model of articulatory dynamics. In G. J. Docherty & D. R. Ladd, eds., *Papers in Laboratory Phonology II: Segment, Gesture, Prosody*, pp. 68-86. Cambridge University Press.
- Beckman, M. E., & Pierrehumbert, J. (1992). Comments on chapters 13 and 14. [original title: Strategies and tactics for thinking about F0 variation]. In G. Docherty & D. R. Ladd, eds., *Papers in Laboratory Phonology II: Segment, Gesture, Prosody*, pp. 387-397. Cambridge University Press.
- Edwards, J., Beckman, M. E., & Fletcher, J. (1991). Articulatory kinematics of final lengthening. *Journal of the Acoustical Society of America*, 89., 369-382.
- Edwards, J., & Beckman, M. E. (1988). Articulatory timing and the prosodic interpretation of syllable duration. *Phonetica*, 45, 156-174.
- Beckman, M. E., & Pierrehumbert, J. B (1986). Intonational structure in Japanese and English. *Phonology Yearbook*, 3, 255-309.
- Beckman, M. E., & Pierrehumbert, J. B. (1987). Tookyoo-go no ontyoo kozoo. [Tone structure in Tokyo Japanese.] *Onsei Gengo*, 2, 1-22.
- Beckman, M. E., & Shoji, A. (1984). Spectral and perceptual evidence for CV coarticulation in devoiced /si/ and /syu/ in Japanese. *Phonetica*, 41, 61-71.

Beckman, M. E. (1982). Segment duration and the ‘mora’ in Japanese. *Phonetica*, 39, 113-135. [Reprinted in Natsuko Tsujimura, ed. (2005). *Japanese linguistics: Critical concepts*. Vol. 1, *Phonology and morphology*. Routledge.]

Book chapters:

- Munson, B., Edwards, J., & Beckman, M. E. (in press). Phonological representations in language acquisition: Climbing the ladder of abstraction. In A. C. Cohn, C. Fougeron, M. K. Huffman, eds., *Handbook of Laboratory Phonology*. Oxford University Press.
- Beckman, M. E., & Venditti, J. J. (in press). Intonation. In J. Goldsmith, J. Riggle, & A. Yu, eds., *Handbook of Phonological Theory*, 2nd ed., Blackwell.
- Beckman, M. E., & Venditti, J. J. (2010). Tone and intonation. In W. J. Hardcastle, F. Gibbon, & J. Laver, eds., *Handbook of Phonetic Sciences*, 2nd ed., pp. 603-652. Blackwell.
- Arbisi-Kelm, T., & Beckman, M. E. (2009). Prosodic structure and consonant development across languages. In Marina Vigário, Sónia Frota, & Maria João Freitas (eds.) *Interactions in phonetics and phonology*, pp. 109-136. John Benjamins.
- Venditti, J. J., Maekawa, K., & Beckman, M. E. (2008). Prominence marking in the Japanese intonation system. In S. Miyagawa & M. Saito, eds., *Handbook of Japanese Linguistics*, pp. 458-514. Oxford University Press.
- Beckman, M. E., Hirschberg, J., & Shattuck-Hufnagel, S. (2005). The original ToBI system and the evolution of the ToBI framework. In S.-A. Jun, ed., *Prosodic Typology: The Phonology of Intonation and Phrasing*, pp. 9-54. Oxford University Press.
- Peng, S., Chan, M. K. M., Tseng, C., Huang, T., Lee, O. J., & Beckman, M. E. (2005). Towards a Pan-Mandarin prosodic annotation system. In S.-A. Jun, ed., *Prosodic Typology: The Phonology of Intonation and Phrasing*, pp. 230-270. Oxford University Press.
- Wong, W. Y. P., Chan, M. K. M., & Beckman, M. E. (2005). An Autosegmental-Metrical analysis and prosodic annotation conventions for Cantonese. In S.-A. Jun, ed., *Prosodic Typology: The Phonology of Intonation and Phrasing*, pp. 271-300. Oxford University Press.
- Beckman, M. E. (2003). Input representations (inside the mind and out). In G. Garding & M. Tsujimura, eds., *WCCFL22*, pp. 70-94. Somerville, MA: Cascadilla Press.
- Pierrehumbert, J., Beckman, M. E., & Ladd, D. R. (2000). Conceptual foundations of phonology as a laboratory science. In Noel Burton-Roberts, Philip Carr, & Gerard Docherty, eds., *Phonological Knowledge: Its Nature and Status*, pp. 273-303. Oxford University Press. [To be reprinted in A. C. Cohn, C. Fougeron, M. K. Huffman, eds., (2010). *Handbook of Laboratory Phonology*. Oxford University Press.]
- Beckman, M. E., & Cohen, K. B. (2000). Modeling the articulatory dynamics of two levels of stress contrast. In M. Horne, ed., *Prosody: Theory and Experiment. Studies Presented to Gösta Bruce*, pp.169-200. Kluwer.
- Beckman, M. (1999). Phonological Implications. In W. J. Hardcastle & N. Hewlett, eds., *Coarticulation: Theory, Data, and Techniques*, pp. 199-225. Cambridge: Cambridge University Press.
- Beckman, M. E. (1997). A typology of spontaneous speech. In Y. Sagisaka, W. N. Campbell & N. Higuchi, eds., *Computing Prosody*, pp. 7-26 . New York: Springer-Verlag.
- Beckman, M. E. (1997). Speech models and speech synthesis. In J. P. H. van Santen, R. Sproat, J. Olive, & J. Hirschberg, eds., *Progress in Speech Synthesis*, pp. 185-209. New York: Springer-Verlag.
- Pierrehumbert, J., Beckman, M., & Ladd, D.R. (1996). Laboratory phonology. In J. Durand & B. Laks, eds., *Current Trends in Phonology: Models and Methods*, pp. 535-548. Salford: University of Salford Publications.

- Beckman, M. E. (1996). When is a syllable not a syllable? In Takashi Otake & Anne Cutler, eds., *Phonological Structure and Language Processing: Cross-Linguistic Studies*, pp. 95-123. Berlin: Mouton de Gruyter.
- Venditti, J. J., Jun, S.-A., & Beckman, M. E. (1996). Prosodic cues to syntactic and other linguistic structures in Japanese, Korean, and English. In J. Morgan & K. Demuth, eds., *Signal to Syntax: Bootstrapping from Speech to Grammar in Early Acquisition*, pp. 287-311. Mahwah, NJ: Lawrence Erlbaum.
- Beckman, M. E. (1994). Suprasegmentals. In R. E. Asher, ed., *The Encyclopedia of Language and Linguistics*, Vol. 8, pp. 4412-4418. Oxford: Pergamon Press.
- Beckman, M. E., & Edwards, J. (1992). Intonational categories and the articulatory control of duration. In Y. Tohkura, E. Vatikiotis-Bateson, & Y. Sagisaka, eds., *Speech Perception, Production and Linguistic Structure*, pp. 356-375. Tokyo: OHM Publishing Co.
- Beckman, M. E. (1992). Evidence for speech rhythms across languages. In Y. Tohkura, E. Vatikiotis-Bateson, & Y. Sagisaka, eds., *Speech Perception, Production and Linguistic Structure*, pp. 457-463. Tokyo: OHM Publishing Co.
- Beckman, M. E., & Kingston, J. (1990). Introduction. In J. Kingston & M.E. Beckman, eds., *Papers in Laboratory Phonology I: Between the Grammar and the Physics of Speech*, pp. 1-16. Cambridge University Press. [Abridged version (without the references to specific chapters) to be reprinted in A. C. Cohn, C. Fougeron, M. K. Huffman, eds., (2010). *Handbook of Laboratory Phonology*. Oxford University Press.]
- Beckman, M. E., & Edwards, J. (1990). Lengthenings and shortenings and the nature of prosodic constituency. In J. Kingston & M.E. Beckman, eds., *Papers in Laboratory Phonology I: Between the Grammar and the Physics of Speech*, pp. 152-178. Cambridge University Press.
- Beckman, M. E. (1988). Phonetic theory. In F. Newmeyer, ed., *Linguistics: The Cambridge Survey*, Vol. I, pp. 216-238. Cambridge University Press.

Book reviews:

- Beckman, Mary E. (2008). Review of Carlos Gussenhoven, *The Phonology of Tone and Intonation*. *Language*, 84(3), 641-643. [Also, Letter to the Editor: Beckman replies (to Carlos Gussenhoven, 2009, Response to Beckman's review), *Language*, 85(1), 2.]
- Beckman, Mary E. (1996). Review of John Archibald, ed., *Phonological Acquisition and Phonological Theory*. *The Modern Language Journal* 80(2), 254.
- Beckman, Mary E. (1996). Review of Haruo Kubozono, *The Organization of Japanese Prosody*. *Phonology* 13, pp. 127-131.
- Beckman, Mary E. (1994). Review of Haruo Kubozono, *The Organization of Japanese Prosody*. *The Journal of Asian Studies*, May 1994, pp. 560-561.
- Beckman, Mary E. (1987b). Review of Timothy J. Vance, *Introduction to Japanese Phonology*. *Journal of Phonetics* 15, 389-392.
- Beckman, Mary E. (1987a). Review of Catherine Johns-Lewis (ed.) *Intonation and Discourse*. *Journal of Applied Psycholinguistics* 8, 96-100.

Papers in refereed conference proceedings:

- Heintz, I., Beckman, M. E., Fosler-Lussier, E., & Ménard, L. (2009). Evaluating parameters for mapping adult vowels to imitative babbling. *InterSpeech2009*, 6-10 September 2009, Brighton.
- Kong, E., Beckman, M. E., & Edwards, J. (2007). Fine-grained phonetics and acquisition of Greek voiced stops. *Proceedings of the XVIth International Congress of Phonetic Sciences*, 6-10 August 2007, Saarbruecken.

- Li, F., Edwards, J., & Beckman, M. E. (2007). Spectral measures for sibilant fricatives of English, Japanese, and Mandarin Chinese. *Proceedings of the XVIth International Congress of Phonetic Sciences*, 6-10 August 2007, Saarbruecken.
- Monnin, J., Loevenbruck, H., & Beckman, M. E. (2007). The influence of frequency on word-initial obstruent acquisition in Hexagonal French. *Proceedings of the XVIth International Congress of Phonetic Sciences*, 6-10 August 2007, Saarbruecken.
- Ito, K., Speer, S., Beckman, M. E. (2004). Informational status and pitch accent distribution in spontaneous dialogues in English. *Proceedings of Speech Prosody 2004*.
- Beckman, M. E. (2003). The meaning of intonational structure. *Proceedings of the 15th International Congress of Phonetic Sciences*, p. 63. Universitat Autònoma de Barcelona.
- Nicolaidis, K., Edwards, J., Beckman, M., & Tserdanelis, G. (2003). Acquisition of lingual obstruents in Greek. *Proceedings of the 6th International Conference of Greek Linguistics*, Rethymno, Crete, September 18-21, 2003.
- Peng, S., & Beckman, M. E. (2003). Annotation conventions and corpus design in the investigation of spontaneous speech prosody in Taiwanese. *Proceedings of the Spontaneous Speech Processing and Recognition Workshop*.
- Wong, W. Y. P., Brew, B., Beckman, M. E., & Chan, S-d. (2002). Using the Segmentation Corpus to define an inventory of concatenative units for Cantonese speech synthesis. *Proceedings of the First SIGHAN Workshop on Chinese Language Processing*, pp. 119-123.
- Yoon, K., Brew, B., & Beckman, M. (2002). Letter-to-sound rules for Korean. *Proceedings of the IEEE 2002 Workshop on Speech Synthesis*.
- Beckman, M. E., & Pierrehumbert, J. (2000). Positions, probabilities, and levels of categorisation. *Proceedings of the 8th Australian International Conference on Speech Science and Technology*, pp. 1-18.
- Cassidy, S., Welby, P., McGory, J., & Beckman, M. (2000). "Testing the adequacy of query languages against annotated spoken dialog." *Proceedings of the 8th Australian International Conference on Speech Science and Technology*, pp. 428-433.
- Beckman, M. E., & Venditti, J. (2000). "Tagging prosody and discourse structure in elicited spontaneous speech." *Proceedings of the International Symposium Toward the Realization of Spontaneous Speech Engineering*, pp. 87-98.
- Loevenbruck, H., Collins, M. J., Beckman, M. E., Krishnamurthy, A. K., & Ahalt, S. C. (1999). "An investigation of the temporal coordination of articulatory gestures in consonant clusters and sequences of consonants," In O. Fujimura, B. D. Joseph, & B. Palek, eds., *Proceedings of LP'98*, pp. 547-73. Prague: The Karolinum Press.
- Palethorpe, S., Beckman, M. E., Fletcher, J., & Harrington, J. (1999). "The contribution of schwa vowels to the prosodic accent contrast in Australian English." *Proceedings of the 14th International Congress of Phonetic Sciences*, pp. 695-698.
- Harrington, J., Beckman, M. E., Fletcher, J., & Palethorpe, S. (1998). "An electropalatographic, kinematic, and acoustic analysis of supralaryngeal correlates of word and utterance-level prominence contrasts in English." *Proceedings of the 1998 International Conference on Spoken Language Processing*, pp. 1851-1854.
- Campbell, N., & Beckman, M. E. (1997). "Stress, prominence, and spectral tilt." In A. Botinis, G. Kouroupetroglou, & G. Carayannis, eds., *Intonation: Theory, Models and Applications (Proceedings of the ESCA Workshop on Intonation)*, pp. 67-70.
- Fletcher, J., Beckman, M. E., & Harrington, J. (1996). "Accentual-prominence-enhancing strategies in Australian English," *Proceedings of the 6th Australian International Conference on Speech Science and Technology Conference*, pp. 577-580.

- Herman, R., Beckman, M. E., & Honda, K. (1996). "Subglottal pressure and final lowering in English," *Proceedings of the 1996 International Conference on Spoken Language Processing*, pp. 145-148.
- Beckman, M. E. (1995). "Local shapes and global trends," *Proceedings of the 13th International Congress of Phonetics Sciences*, Vol. 2, pp. 100-107.
- Beckman, M. E. (1995). "Problems of intonation," *Proceedings of the 13th International Congress of Phonetics Sciences*, Vol. 1, pp. 450-457. Reprinted in Gerrit Bloothoof, Valerie Hazan, Dieter Huber, & Joaquim Llisterrri, eds., *European Studies in Phonetics and Speech Communication*, pp. 148-158.
- Beckman, M. E., Erickson, D., Honda, K., Hirai, H., & Niimi, S. (1995). "Physiological correlates of global and local pitch range variation in the production of high tones in English," *Proceedings of the 13th International Congress of Phonetics Sciences*, Vol. 2, pp. 638-641.
- Beckman, M. E. (1995). "A typology of spontaneous speech," *Proceedings of the 1995 ATR International Workshop on Computational Modeling of Prosody for Spontaneous Speech Processing*, pp. 2.23-2.34.
- Campbell, N., & Beckman, M. (1995). "Stress, loudness, and spectral tilt," *Proceedings of the Spring, 1995, Meeting of the Acoustical Society of Japan*, pp. 279-280.
- Lee, S., Beckman, M., & Jackson, M. (1994) "Jaw targets for strident fricatives," *Proceedings of the 1994 International Conference on Spoken Language Processing*, Vol. 1, pp. 37-40.
- Pitrelli, J. F., Beckman, M. E., & Hirschberg, J. (1994) "Evaluation of prosodic transcription labelling reliability in the ToBI framework," *Proceedings of the 1994 International Conference on Spoken Language Processing*, Vol. 1, pp. 123-126.
- Jun, S-A., & Beckman, M. E. (1994) "Distribution of devoiced high vowels in Korean," *Proceedings of the 1994 International Conference on Spoken Language Processing*, Vol. 2, pp. 479-482.
- Erickson, D., Honda, K., Hirai, H., Beckman, M. E., & Niimi, S. (1994). "Global pitch range and the production of low tones in English intonation," *Proceedings of the 1994 International Conference on Spoken Language Processing*, Vol. 2, pp. 651-654.
- Beckman, M. E. (1993). "Modeling the production of prosody," In D. House & P. Touati, eds., *Proceedings of an ESCA Workshop on Prosody (Working Papers, Lund University Department of Linguistics, 41)*, 258-263.
- Beckman, M.E. (1992) "Intonational form and intonational function in Japanese and English," *Proceedings of the International Symposium on Japanese Prosody*, pp. 187-196.
- Silverman, K., Beckman, M., Pitrelli, J., Ostendorf, M., Wightman, C., Price, P., Pierrehumbert, J., & Hirschberg, J. (1992). "TOBI: a standard for labeling English prosody," *Proceedings of the 1992 International Conference on Spoken Language Processing*, pp. 867-870.
- Beckman, Mary E. (1991). "Metrical structure versus autosegmental content in phonetic interpretation." *Proceedings of the 12th International Congress of Phonetic Sciences*, Vol. 1, pp. 374-378.
- Beckman, Mary E., Swora, Maria G., Rauschenberg, Jane, & de Jong, Kenneth (1990). "Stress shift, stress clash, and polysyllabic shortening in a prosodically annotated discourse." *Proceedings of the 1990 International Conference on Spoken Language Processing*, Vol. 1, pp. 5-8.
- Beckman, Mary E. (1989) "Timing models for prosody and cross-word coarticulation in connected speech." *Proceedings of the Second DARPA Speech and Natural Language Workshop*, pp. 12-21. Morgan-Kaufman.

- Beckman, Mary E., & Pierrehumbert, Janet B. (1986a). "Japanese prosodic phrasing and intonation synthesis." *Proceedings of the 24th Annual Meeting of the Association for Computational Linguistics*, pp. 173-180.
- Hertz, Susan R., & Beckman, Mary (1983). "A look at the SRS synthesis rules for Japanese." *Proceedings of the 1983 International Conference on Acoustics, Speech and Signal Processing*, pp. 1336-1339.

Reports in working papers (only those not superceded by subsequent publication in other lists above):

- Beckman, Mary E., & Jennifer Venditti (2000). "Tagging prosody and discourse structure in elicited spontaneous speech." In C. Roberts, T. Huang, & J. Muller, eds., *Ohio State University Working Papers in Linguistics*, Vol. 54, pp. 1-24.
- Jun, Sun-Ah, Beckman, Mary E., and Hyuck-Joon Lee (1998) "Fiberscopic evidence for the influence on vowel devoicing of the glottal configurations for Korean obstruents," *UCLA Working Papers in Phonetics* No. 96, pp. 43-68.
- Johnson, Keith, & Beckman, Mary E. (1997). "Production and perception of individual speaking styles," In K. Ainsworth-Darnell & M. D'Imperio, eds., *Papers from the Linguistics Laboratory (Ohio State University Working Papers in Linguistics 50)*, pp. 115-125.
- Beckman, Mary E., Hertz, Susan R., & Fujimura, Osamu (1983). "SRS pitch rules for Japanese." *Working Papers of the Cornell Phonetics Laboratory* 1, 1-16.
- Davis, Katharine, & Beckman, Mary (1983). "Production and perception of the voicing contrast in Indian and American English." *Working Papers of the Cornell Phonetics Laboratory* 1, 77-90.

Recent invited talks:

- "Growing structure, changing structures: Reflections on duality of patterning, and mechanisms for the emergence of paradigmatic and syntagmatic structure." Invited commentary on papers by Ann Senghas; Becky H. Huang; Brian D. Joseph; and Matthew T. Carlson & Chip Gerfen at Multiple Perspectives on the Critical Period for Language, Spring Symposium, Linguistics, Ohio State University, 5-6 June 2009.
- "Preliminaries to child speech analysis." Plenary talk, annual meeting of the Linguistic Society of America, Chicago, IL (3-6 January 2008).
- "Language-universal and language-specific sources of variability in phonological acquisition." Linguistics Department Colloquium Series, University of California, Berkeley (22 October 2007).
- "Could there be a Pan-Spanish (or even a Pan-Iberian) ToBI-framework system?" Commentary on papers at Workshop on Tonal Transcription, Satellite to PaPI, University of Minho, Braga, Portugal (27 June 2007).
- (in collaboration with Tim Arbisi-Kelm) "Prosodic structure and consonant development across languages." Keynote address, Phonetics and Phonology in Iberia, University of Minho, Braga, Portugal (25-26 June 2007).
- "Getting beyond nurture vs nature — the case of phonological acquisition." Cogfest, Ohio State University, Columbus, OH (18 May 2007).
- "Markedness, faithfulness, and the sources of variability in phonological acquisition." Department of Linguistics, University of California, Los Angeles (4 May 2007).
- "Numerical methods for probing phonological representations and their phonetic interpretations in young children." International Workshop on Grammar and Evidence, National Chung Cheng University, Chiayi, Taiwan (13-15 April 2007).
- and Department of Linguistics, National Taiwan University, Taipei (20 April 2007).

- “Contact-related variation in tone and tone-alignment patterns.” Colloquium on Language Contact, University of Hamburg (6-8 July 2006).
- “Duality of patterning in language.” Mini-symposium on A Key Property of Humans: Knowledge of a Human Language, the La Jolla Project on the Origin of Humans, La Jolla, CA (4 March 2006).
- “The nature of constraints on lingual obstruent mastery (and why can’t Satoko say her own name?).” Laboratory for Language Development, RIKEN Brain Science Institute, Saitama (15 February 2006).
- “Tone inventories and tune-text alignments.” Special session on Prosodic Descriptions of Creole Languages, Annual Conference of the Society for Pidgin and Creole Linguistics, Albuquerque, NM 6-(7 January 2006). [A substantially different talk from the talk with the same title in April 2004.]
- “Stumbling around in the lingual obstruent constriction space.” Linguistics Department, Northwestern University, Evanston, IL (15 April 2005).
- and Department of Linguistics, McGill University, Montreal, Quebec (29 April 2005).
- “Vocalic frame and input frequency effects in children’s consonant acquisition.” Phonology Workshop co-sponsored by the Phonetic Society of Japan and the Phonology Association in the Kinki, Kobe University (19 December 2004).
- “Tricks for learning the rhythm of a second language.” Daito Bunka University, Tokyo (17 December 2004).
- “The ontogeny of types of phonological representation.” Cornell Linguistics Circle, Ithaca, NY (15 April 2004).
- “Tone inventories and tune-text alignments.” European Science Foundation Workshop on the Typology of Tone and Intonation, Cascais, Portugal (1-4 April 2004).
- “Terascale resources for research in prosody- discourse- syntax.” Town Meeting: An Opportunity for New NSF Funding for Linguistics, LSA Annual Meeting (8 January 2004).
- “Language-specific and context-specific markedness in lingual consonant acquisition.” Phonology Workshop, Stanford University (27 October 2003).
- and Department of Linguistics, Indiana University (21 November 2003).
- “Some methods and salient results in large- scale phonology.” Workshop on Terascale Linguistics (25-26 October 2003).
- “Why ‘titi’ and ‘okaasan’? CV interactions in phonological acquisition.” Phonetic Society of Japan and National Institute for Japanese Language, Tokyo (17 April 2003).
- (with Shu-hui Peng). “Annotation conventions and corpus design in the investigation of spontaneous speech prosody in Taiwanese.” Invited speaker for the International Workshop on Spontaneous Speech Processing and Recognition, Tokyo Institute of Technology (14-16 April, 2003).
- and invited talk at National Chiao Tung University, Hsinchu, Taiwan (10 April 2003).
- “Input representations (inside the mind and out).” Invited speaker for special session on “Experimental methods in theoretical linguistics”, West Coast Conference on Formal Linguistics 22, University of California, San Diego (21-23 March 2003).
- “Where’s the phonology in phonological development?” Keynote address, 2002 Linguistics Colloquium, University of North Carolina at Chapel Hill (27 April 2002).
- “Pattern frequency and the production of contrast.” Keynote address, International Conference on Speech Processing, ETRI, Daejeon, Korea (22-24 August 2001).
- “Effects of sublexical pattern frequency on production accuracy in young children.” Johns Hopkins, Baltimore, 24 April 2001.

- “ToBI update.” Workshop on the Analysis of Varieties of English — Intonation and Prosody, Victoria University of Wellington, Wellington, New Zealand, 12-14 December 2000.
- “Centroid calculation in stop burst spectra.” Research Methods in Speech Perception and Production, Macarthur Auditory Research Centre, University of West Sydney, 8-9 December 2000.