

REFERENCES

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- ABERCROMBIE, DAVID (1965/1971). *Syllable Quantities and Enclitics in English: Studies in Phonetics and Linguistics*. 3rd edn. Oxford: Oxford University Press.
- (1967). *Elements of General Phonetics*. Edinburgh: Edinburgh University Press and Chicago, IL: Aldine.
- ABRAMSON, ARTHUR (1978). Static and dynamic acoustic cues in distinctive tones. *Language and Speech* 23: 19–325.
- (1979). The coarticulation of tones: An acoustic study of Thai, in T. L. Thongkum, P. Kullavanijaya, V. Panupong, and K. Tingsabadh (eds.), *Studies in Tai and Mon-Khmer Phonetics and Phonology in honour of Eugenie J. A. Henderson*. Bangkok: Indigenous Languages of Thailand Research Project, 127–34.
- (2004). The plausibility of phonetic explanations of tonogenesis, in G. Fant, H. Fujisaki, J. Cao, and Y. Xu (eds.), *From Traditional Phonology to Modern Speech Processing. Festschrift for Prof. Wu Zongji*. Beijing: Foreign Language Teaching and Research Press, 17–29.
- and LISKER, LEIGH (1985). Relative power of cues: F0 shift versus voice timing, in Victoria Fromkin (ed.), *Linguistic Phonetics: Essays in Honor of Peter Ladefoged*. New York: Academic Press, 25–31.
- NYE, PATRICK, and LUANGTHONGKUM, THERAPHAN (2007). Voice register in Khmu: Experiments in production and perception. *Phonetica* 64: 80–104.
- ADANK, PATTI and JANSE, ESTHER (2009). Perceptual learning of time-compressed and natural fast speech. *Journal of the Acoustical Society of America* 126: 2649–59.
- SMITS, ROEL, and VAN HOUT, ROELAND (2004). A comparison of vowel normalization procedures for language variation research. *Journal of the Acoustical Society of America* 116(5): 3099–107.
- AGWUELE, AUGUSTINE (2007). Tonal coarticulation in Yoruba: Locus equation analysis. *Journal of the Acoustical Society of America* 122: 3028.
- AHN, MEE-JIN (2000). Phonetic and functional bases of syllable weight for stress assignment. Ph.D. dissertation, University of Illinois, Urbana-Champaign.
- AKAMATSU, TSUTOMU (1997). *Japanese Phonetics: Theory and Practice*. Munich: LINCOM Europa.
- AKINLABI, AKIN and LIBERMAN, MARK (1995). On the phonetic interpretation of the Yoruba tonal system. *Proceedings of the 13th International Congress of Phonetic Sciences*, August 13–19, 1995. Stockholm, 42–5.
- ALAM, FARHANA (2009). Language and identity among Scottish urban Pakistanis. Paper presented at 1st Sociolinguistics Summer School, University of Edinburgh, June 15, 2009.
- ALBAREDA-CASTELLO, BARBARA, PONS, FERRAN, and SEBASTIÁN-GALLÉS, NURIA (2011). The acquisition of phonetic categories in bilingual infants: New data from a new paradigm. *Developmental Science* 14: 395–401.

- ALBRIGHT, ADAM. (2002a). Islands of reliability for regular morphology: Evidence from Italian. *Language* 78: 684–709.
- (2002b). The identification of bases in morphological paradigms. Ph.D. dissertation, UCLA.
- (2009). Modeling analogy as probabilistic grammar, in J. P. Blevins and J. Blevins (eds.), *Analogy in Grammar*. Oxford: Oxford University Press, 185–213.
- ANDRADE, ARGELIA E., and HAYES, BRUCE (2001). Segmental environments of Spanish diphthongization, in A. Albright and T. Cho (eds.), *UCLA Working Papers in Linguistics 7: Papers in Phonology* 5: 117–51.
- and HAYES, BRUCE (2003). Rules versus analogy in English past tenses: A computational-experimental study. *Cognition* 90: 119–61.
- ALEGRE, MARÍA and GORDON, PETER (1999). Rule-based versus associate processes in derivational morphology. *Brain and Language* 68: 347–54.
- ALEXANDER, JOSHUA M. and KLUENDER, KEITH (2008). Spectral tilt change in stop consonant perception. *Journal of the Acoustical Society of America* 123(1): 386–96.
- ALLEN, GEORGE D. (1985). How the young French child avoids the pre-voicing problem for word-initial voiced stops. *Journal of Child Language* 12: 37–46.
- ALLEN, JONT B. (1994). How do humans process and recognize speech? *IEEE Transactions on Speech and Audio Processing* 2(4): 567–77.
- ALLEN, J. SEAN and MILLER, JOANNE L. (1999). Effects of syllable-initial voicing and speaking rate on the temporal characteristics of monosyllabic words. *Journal of the Acoustical Society of America* 106: 2031–9.
- (2001). Contextual influences on the internal structure of phonetic categories: A distinction between lexical status and speaking rate. *Perception and Psychophysics* 63: 798–810.
- (2004). Listener sensitivity to individual talker differences in voice-onset-time. *Journal of the Acoustical Society of America* 115: 3171–83.
- and DESTENO, DAVID (2003). Individual talker differences in Voice-Onset-Time. *Journal of the Acoustical Society of America* 113(1): 544–52.
- ALLOPENNA, PAUL, MAGNUSON, JAMES S., and TANENHAUS, MICHAEL K. (1998). Tracking the time course of spoken word recognition using eye-movements: Evidence for continuous mapping models. *Journal of Memory and Language* 38(4): 419–39.
- VAN ALPHEN, PETRA and MCQUEEN, JAMES M. (2006). The effect of voice onset time differences on lexical access in Dutch. *Journal of Experimental Psychology: Human Perception and Performance* 32: 178–96.
- ALTMANN, EDUARDO G., PIERREHUMBERT, JANET B., and MOTTER, ADILSON E. (2009). Beyond word frequency: Bursts, lulls, and scaling in the temporal distribution of words. *PLoS One* 4(11), e7678. doi:10.1371/journal.pone.0007678.
- (2011). Niche as a determinant of word fate in online groups. *PLoS One* 6(5), e19009 doi:10.1371/journal.pone.0019009.
- ALTMANN, GERRY T. M. (1997). *The Ascent of Babel: An Exploration of Language, Mind, and Understanding*. Oxford: Oxford University Press.
- (2004). Language-mediated eye movements in the absence of a visual world: The blank screen paradigm. *Cognition* 93: 79–87.
- and KAMIDE, YUKI (1999). Incremental interpretation at verbs: restricting the domain of subsequent reference. *Cognition* 73: 247–64.
- (2004). Now you see it, now you don't: Mediating the mapping between language and the visual world, in J. M. Henderson and F. Ferreira (eds.), *The Interface of Language,*

- Vision and Action: Eye Movements and the Visual World*. New York: Psychology Press, 347–85.
- (2007). The real-time mediation of visual attention by language and world knowledge: Linking anticipatory (and other) eye movements to linguistic processing. *Journal of Memory and Language* 57: 502–18.
- ALWAN, ABEER, BANGAYAN, PHILBERT, GERRATT, BRUCE R., KREIMAN, JODY, and LONG, CHRISTOPHER (1999). Analysis by synthesis of pathological voices using the Klatt synthesizer, in R. Kent (ed.), *Voice Quality Measurement*. San Francisco: Singular, 307–35.
- ANANTHAKRISHNAN, SANKARANARAYANAN and NARAYANAN, SHRIKANTH (2008). Automatic prosody labeling using acoustic, lexical, and syntactic evidence. *IEEE Transactions on Speech, Audio and Language Processing* 16(1): 216–28.
- ANDERSON, ANNE H., BADER, MILES, BARD, ELLEN G., BOYLE, ELIZABETH, DOHERTY, GWYNETH, GARROD, SIMON, ISARD, STEPHEN, KOWTKO, JACQUELINE, McALLISTER, JAN, MILLER, JIM, SOTILLO, CATHERINE, THOMPSON, HENRY S., and WEINERT, REGINA (1991). The HCRC Map Task Corpus. *Language and Speech* 34: 351–66.
- ANDERSON, JENNIFER, MORGAN, JAMES L., and WHITE, KATHERINE S. (2003). A statistical basis for speech sound discrimination. *Language and Speech* 46(2–3): 155–82.
- ANDERSON, STEPHEN R. (1978). Tone features, in V. Fromkin (ed.), *Tone: A Linguistic Survey*. New York: Academic Press, 133–73.
- (1981). Why phonology isn't "natural." *Linguistic Inquiry* 12: 493–539.
- ANDRUSKI, JEAN E. (2006). Tone clarity in mixed pitch/phonation-type tones. *Journal of Phonetics* 34: 388–404.
- BLUMSTEIN, SHEILA E., and BURTON, MARTHA W. (1994). The effect of subphonetic differences on lexical access. *Cognition* 52: 163–87.
- and RATLIFF, MARTHA (2000). Phonation types in production of phonological tone: The case of Green Mong. *Journal of the International Phonetic Association* 30: 37–61.
- ANGERMEYER, PHILIP (2003). Copying contiguous gestures: An articulatory account of Bella Coola reduplication, in E. Kaiser and S. Arunachalam (eds.), *Proceedings of the 26th Annual Penn Linguistics Colloquium*, University of Pennsylvania Working Papers in Linguistics 9.1. Philadelphia: Penn Linguistics Club, 17–30.
- ANTTILA, ARTO (1997). Deriving variation from grammar, in F. Hinskens, R. van Hout, and L. Wetzels (eds.), *Variation, Change and Phonological Theory*. Amsterdam: John Benjamins, 35–68.
- (2002a). Morphologically conditioned phonological alternations. *Natural Language and Linguistic Theory* 20: 1–42.
- (2002b). Variation and phonological theory, in J. Chambers, P. Trudgill, and N. Schilling-Estes (eds.), *Handbook of Language Variation and Change*. Malden, MA and Oxford: Blackwell, 206–43.
- (2007a). Variation and optionality, in Paul de Lacy (ed.), *The Cambridge Handbook of Phonology*. Cambridge: Cambridge University Press, 519–36.
- (2007b). Word stress in Finnish. Handout of a talk given at the Linguistic Society of America Annual Meeting, Anaheim, California, January 7, 2007.
- (2008a). Gradient phonotactics and the complexity hypothesis. *Natural Language and Linguistic Theory* 26(4): 695–729.
- (2008b). Word stress in Finnish. MS, Stanford University, Stanford, California.
- and ANDRUS, CURTIS (2006). T-order generator [computer program], Stanford University. <<http://www.stanford.edu/~anttila/research/software.html>. [ROA-873]>.

- ANTTILA, ARTO and CHO, YOUNG-MEE YU (1998). Variation and change in Optimality Theory. *Lingua* 104: 31–56. Special issue on Conflicting Constraints.
- ADAMS, MATTHEW, and SPERIOSU, MICHAEL (2010). The role of prosody in the English dative alternation. *Language and Cognitive Processes* 25(7/8/9): 946–81.
- FONG, VIVIENNE, BENUS, STEFAN, and NYCZ, JENNIFER (2008). Variation and opacity in Singapore English consonant clusters. *Phonology* 25(2), 181–216. [ROA-981].
- AOYAMA, KATSURA, FLEGE, JAMES EMIL, GUION, SUSAN G., AKAHANE-YAMADA, REIKO, and YAMADA, TSUNEO (2004). Perceived phonetic distance and L2 learning: The case of Japanese /r/ and English /l/ and /r/. *Journal of Phonetics* 32: 233–50.
- and GUION, SUSAN (2007). Prosody in second-language acquisition: Acoustic analyses of duration and F0 change, in O.-S. Bohn and M. Munro (eds.), *Language Experience in Second-language Speech Learning: In honor of James Emil Flege*. Amsterdam: John Benjamins, 281–97.
- APFELBAUM, KEITH and McMURRAY, BOB (2011). Successes and failures in early word learning: An emergent property of basic learning principles. *Cognitive Science* 35(6): 1105–1137.
- ARAI, TAKAYUKI. (1999). A case study of spontaneous speech in Japanese. *Proceedings of the 14th International Congress of Phonetic Sciences (ICPhS)*, San Francisco, 1: 615–18.
- ARBIB, MICHAEL A. (ed.) (2006). *Action to Language via the Mirror Neuron System*. Cambridge: Cambridge University Press.
- ARCHANGELI, DIANA (1988). Aspects of underspecification theory. *Phonology* 5: 183–207.
- and PULLEYBLANK, DOUGLAS (1994). *Grounded Phonology*. Cambridge, MA: MIT Press.
- — (2007). Harmony, in Paul de Lacy (ed.), *The Cambridge Handbook of Phonology*. Cambridge: Cambridge University Press, 353–78.
- ARVANITI, AMALIA (1998). Phrase accents revisited: Comparative evidence from Standard and Cypriot Greek, in *Proceedings of the 5th International Conference on Spoken Language Processing*, 7, 2883–6.
- (2007a). On the relationship between phonology and phonetics (Or why phonetics is not phonology), in *Proceedings of the 16th International Congress of Phonetic Sciences (Special Session: Between Meaning and Speech: On the Role of Communicative Functions, Representations and Articulations)*, 19–24.
- (2007b). Greek phonetics: The state of the art. *Journal of Greek Linguistics* 8: 97–208.
- (2007c). On the presence of final lowering in British and American English, in T. Riad and C. Gussenhoven (eds.), *Tones and Tunes*, vol. 2. Berlin: Mouton de Gruyter, 317–47.
- (2011). Levels versus configuration and the representation of intonation, in M. van Oostendorp, C. J. Ewen, E. Hume, and K. Rice (eds.), *The Blackwell Companion to Phonology*. Malden, MA & Oxford: Wiley-Blackwell, 757–80.
- and BALTAZINI, MARY (2005). Intonational analysis and prosodic annotation of Greek spoken corpora, in Sun-Ah Jun (ed.), *Prosodic Typology. The Phonology of Intonation and Phrasing*. Oxford: Oxford University Press, 84–117.
- and GARDING, GINA (2007). Dialectal variation in the rising accents of American English, in J. Cole and J. H. Hualde (eds.), *Laboratory Phonology* 9. Berlin and New York: Mouton de Gruyter, 547–76.
- and GODJEVAC, SVETLANA (2003). The origins and scope of final lowering in English and Greek, in M. J. Solé, D. Recasens, and J. Romero (eds.), *Proceedings of the 15th International Congress of Phonetic Sciences*. Barcelona: UAB, 1077–80.
- and LADD, D. ROBERT (1995). Tonal alignment and the representation of accentual targets, in *Proceedings of the 13th International Congress of Phonetic Sciences*, 4, 220–3.

- (2009). Greek wh-questions and the phonology of intonation, *Phonology* 26: 43–74.
- and MENNEN, INEKE (1998). Stability of tonal alignment: The case of Greek prenuclear accents, *Journal of Phonetics* 26: 3–25.
- (2000). What is a starred tone? Evidence from Greek, in M. Broe and J. Pierrehumbert (eds.), *Papers in Laboratory Phonology V: Acquisition and the Lexicon*. Cambridge: Cambridge University Press, 119–31.
- (2006a). Phonetic effects of focus and “tonal crowding” in intonation: Evidence from Greek polar questions. *Speech Communication* 48: 667–96.
- (2006b). Tonal association and tonal alignment: Evidence from Greek polar questions and contrastive statements. *Language and Speech* 49: 421–50.
- ASH, SHARON and MYHILL, JOHN (1986). Linguistic correlates of inter-ethnic contact, in D. Sankoff (ed.), *Diversity and Diachrony*. Amsterdam: John Benjamins, 33–44.
- ASTRUC, LLUÏSA, PRIETO, PILAR, PAYNE, ELINOR, POST, BRECHTJE, and VANRELL, MARIA DEL MAR (under review). Tonal targets in early child Catalan, Spanish, and English. *Language and Speech*.
- ASU, EVA LIINA. (2004). The phonetics and phonology of Estonian intonation. Ph.D. dissertation, University of Cambridge.
- ATAL, B. S., CHANG, J. J., MATHEWS, M. V., and TUKEY, J. W. (1978). Inversion of articulatory-to-acoustic transformations in the vocal tract by a computer-sorting technique. *Journal of the Acoustical Society of America* 64: 1535–55.
- ATKINS, JOSEPH E., JACOBS, ROBERT A., and KNILL, DAVID C. (2003). Experience-dependent visual cue recalibration based on discrepancies between visual and haptic percepts. *Vision Research* 43: 2603–13.
- ATTERER, MICHAELA and LADD, D. ROBERT (2004). On the phonetics and phonology of “segmental anchoring” of Fo: Evidence from German. *Journal of Phonetics* 32: 177–97.
- AUGER, JULIE (2001). Phonological variation and Optimality Theory: Evidence from word-initial vowel epenthesis in Picard. *Language Variation and Change* 13: 253–303.
- and VILLENEUVE, A.-J. (2008). Ne deletion in Picard and in regional French: Evidence for distinct grammars, in M. Meyerhoff and N. Nagy (eds.), *Social Lives in Language: Sociolinguistics and Multilingual Speech Communities* [Celebrating the work of Gillian Sankoff]. Amsterdam: Benjamins, 223–47.
- AVERY, PETER and RICE, KEREN (1989). Segment structure and coronal underspecification. *Phonology* 6: 179–200.
- AYLETT, MATTHEW (2000). Stochastic suprasegmentals: Relationships between redundancy, prosodic structure and care of articulation in spontaneous speech. Ph.D. dissertation, University of Edinburgh.
- and TURK, ALICE (2004). The smooth signal redundancy hypothesis: A functional explanation for relationships between redundancy, prosodic prominence, and duration in spontaneous speech. *Language and Speech* 47(1): 31–56.
- BAARS, BERNARD J., MOTLEY, MICHAEL T., and MACKAY, DONALD G. (1975). Output editing for lexical status in artificially elicited slips of the tongue. *Journal of Verbal Learning and Verbal Behavior* 14: 382–91.
- BAAYEN, R. HARALD (2002). *Word Frequency Distributions*. Dordrecht: Kluwer Academic Publishers.
- (2008). *Analyzing Linguistic Data: A Practical Introduction to Statistics Using R*. Cambridge: Cambridge University Press.

- BAAYEN, R. HARALD (2009). languageR: Data sets and functions with *Analyzing Linguistic Data: A Practical Introduction to Statistics*, <<http://CRAN.R-project.org/package=languageR>>. R package version 0.955.
- DAVIDSON, DOUG J., and BATES, DOUG (2008). Mixed-effects modeling with crossed random effects for subjects and items, *Journal of Memory and Language* 59: 390–412.
- and MILIN, PETAR (2010). Analyzing reaction times. *International Journal of Psychological Research* 3: 12–28.
- PIEPENBROCK, RICHARD, and GULIKERS, LEON (1995). The CELEX Lexical Database (CD-ROM). Philadelphia, PA: Linguistic Data Consortium.
- WURM, LEE H., and AYCOCK, JOANNA (2007). Lexical dynamics for low-frequency complex words: A regression study across tasks and modalities. *The Mental Lexicon* 2: 419–63.
- BABEL, MOLLY E. (2009). Phonetic and social selectivity in speech accommodation. Ph.D. dissertation, Department of Linguistics, University of California, Berkeley, CA.
- BACH, EMMON and HARMS, ROBERT T. (1972). How do languages get crazy rules?, in R. P. Stockwell and R. K. S. Macauley (eds.), *Linguistic Change and Generative Theory*. Bloomington, IN: Indiana University Press, 1–21.
- BACHOROWSKI, JO-ANNE and OWREN, MICHAEL J. (1999). Acoustic correlates of talker sex and individual talker identity are present in a short vowel segment produced in running speech. *Journal of the Acoustical Society of America* 106: 1054–63.
- BADIN, PIERRE (1989). Acoustics of voiceless fricatives: Production theory and data. *STL-QPSR* 30(3): 33–55.
- BEAUTEUPS, DENIS, LABOISSIÈRE, RAFAEL, and SCHWARTZ, JEAN-LUC (1995). Recovery of vocal tract geometry from formants for vowels and fricative consonants using a midsagittal-to-area function conversion model. *Journal of Phonetics* 23: 221–9.
- HERTEGÅRD, STELLAN, and KARLSSON, INGER (1990). Notes on the Rothenberg mask. *STL-QPSR* 31(1): 1–7.
- PERRIER, PASCAL, BOE, LOUIS-JEAN, and ABRY, CHRISTIAN (1991). Vocalic nomograms: Acoustic and articulatory considerations upon formant convergences. *Journal of the Acoustical Society of America* 87: 1290–300.
- SHADLE, CHRISTINE H., PHAM THI NGOC, Y., CARTER, J N., CHIU, WILSON S. C., SCULLY, CELIA, and STROMBERG, KAREN (1994). Frication and aspiration noise sources: Contribution of experimental data to articulatory synthesis. *Proceedings of ICSLP* 94, vol. 1. Yokohama, 163–6.
- BAER, TOM, GORE, JOHN C., GRACCO, L. CAROL, and NYE, PATRICK W. (1991). Analysis of vocal-tract shape and dimensions using magnetic-resonance imaging: Vowels. *Journal of the Acoustical Society of America* 90: 799–828.
- LÖFQVIST, ANDERS, and MCGARR, NANCY S. (1983). Laryngeal vibrations: a comparison between high-speed filming and glottographic techniques. Haskins Laboratories Status Report on Speech Research SR-73: 283–91.
- BAGSHAW, ANDREW P., KOBAYASHI, ELIANE, and DUBEAU, FRANÇOIS (2006). Correspondence between EEG-fMRI and EEG dipole localisation of interictal discharges in focal epilepsy. *Neuroimage* 30: 417–25.
- BAILEY, GUY and THOMAS, ERIK (1998). Some aspects of African-American vernacular phonology, in S. S. Mufwene, J. R. Rickford, G. Bailey, and J. Baugh (eds.), *African-American English*. London: Routledge, 85–109.
- WIKLE, TOM, TILLERY, JAN, and SAND, LORI (1991). The apparent time construct. *Language Variation and Change* 3: 241–64.

- BAILEY, TODD M. and HAHN, ULRIKE (2001). Determinants of wordlikeness: Phonotactics or lexical neighborhoods? *Journal of Memory and Language* 44: 568–91.
- (2005). Phoneme similarity and confusability. *Journal of Memory and Language* 52: 347–70.
- BAILLY, G., LABOISSIÈRE, R., and SCHWARTZ, J. L. (1991). Formant trajectories as audible gestures: An alternative for speech synthesis. *Journal of Phonetics* 19: 9–23.
- BAKEN, RONALD J. (1996). *Clinical Measurement of Speech and Voice*. San Diego: Singular.
- BAKER, CARL L. and BRAME, MICHAEL K. (1972). Global rules: A rejoinder. *Language* 48: 51–75.
- BALLING, LAURA and BAAYEN, R. HARALD (2008). Morphological effects in auditory word recognition: Evidence from Danish. *Language and Cognitive Processes* 23: 1159–90.
- BALTAZANI, MARY (2006a). Intonation and pragmatic interpretation of negation in Greek. *Journal of Pragmatics* 38: 1658–76.
- (2006b). Focusing, prosodic phrasing, and hiatus resolution in Greek, in L. Goldstein, D. Whalen, and C. Best (eds.), *Laboratory Phonology* 8. Berlin: Mouton de Gruyter, 473–94.
- BANGAYAN, P., ALWAN, ABEER, and NARAYANAN, S. (1996). From MRI and acoustic data to articulatory synthesis: A case study of the lateral approximants in American English. *Proceedings of the Fourth International Conference on Spoken Language Processing, Philadelphia (ICSLP 96)* 2, 793–6.
- BARAN, JANE A., LAUFER, MARSHA Z., and DANILOFF, RAY (1977). Phonological contrastivity in conversation: A comparative study of Voice Onset Time. *Journal of Phonetics* 5: 339–50.
- BARD, ELLEN G., ANDERSON, ANNE, SOTILLO, CATHERINE, AYLETT, MATTHEW, DOHERTY-SNEDDON, GWYNETH, and NEWLANDS, ALISON (2000). Controlling the intelligibility of referring expressions in dialogue. *Journal of Memory and Language* 42: 1–22.
- ROBERTSON, DAN, and SORACE, ANTONELLA (1996). Magnitude estimation of linguistic acceptability. *Language* 72: 32–68.
- SOTILLO, CATHERINE, KELLY, M. LOUISE, and AYLETT, MATTHEW P. (2001). Taking the hit: Leaving some lexical competition to be resolved post-lexically. *Language and Cognitive Processes* 16: 731–7.
- BARNES, JONATHAN, SHATTUCK-HUFNAGEL, STEFANIE, BRUGOS, ALEJNA, and VEILLEUX, NANETTE (2006). The domain of realization of the L-Phrase Tone in American English, in *Speech Prosody 2006*, <http://aune.lpl.univ-aix.fr/~sprosig/sp2006/contents/papers/PS3-11_0163.pdf>.
- VEILLEUX, NANETTE, BRUGOS, ALEJNA, and SHATTUCK-HUFNAGEL, STEFANIE (2008). Alternatives to F0 turning points in American English intonation. *Journal of the Acoustical Society of America* 124: 2497.
- BARR, DALE J. (2008). Analyzing “visual world” eye-tracking data using multilevel logistic regression. *Journal of Memory and Language: Special issue on emerging data analysis techniques* 59: 457–74.
- BARRIE, MICHAEL. (2007). Contour tones and contrast in Chinese languages. *Journal of East Asian Linguistics* 16: 337–62.
- BARRY, MORGAN. (1991). Temporal modeling of gestures in articulatory assimilation, in *Proceedings of the 12th International Congress of Phonetic Sciences*. Aix-en-Provence: University of Provence, 14–17.
- (1992). Palatalisation, assimilation and gestural weakening in connected speech. *Speech Communication* 11: 393–400.

- BARRY, WILLIAM and ANDREEVA, BISTRA (2001). Cross-language similarities and differences in spontaneous speech patterns. *Journal of the International Phonetic Association* 31: 51–66.
- KLEIN, CORDULA, and KÖSER, STEPHANIE (1999). Speech production evidence for ambisyllabicity in German. *Phonus* 4: 87–102 (Institute of Phonetics, University of the Saarland).
- BARTELS, CHRISTINE and KINGSTON, JOHN (1994). Salient pitch cues in the perception of contrastive focus, in P. Bosch and R. van der Sandt (eds.), *Focus and Natural Language Processing*. IBM Working Papers on Logic and Linguistics 6. Heidelberg, 1–10.
- BATES, DOUG and MAECHLER, MARTIN (2009). lme4: Linear mixed-effects models using S4 classes. <<http://CRAN.R-project.org/package=lme4>>. R package version 0.999375-32.
- (2010). lme4: Linear mixed-effects models using S4 classes. <<http://CRAN.R-project.org/package=lme4>>. R package version 0.999375-33.
- BATES, ELIZABETH, BURANI, CRISTINA, D'AMICO, SIMONA, and BARCA, LAURA (2001). Word reading and picture naming in Italian. *Memory and Cognition* 29: 986–99.
- BAUDOIN DE COURTENAY, JAN. (1972/1910). *A Baudouin de Courtenay Anthology: The Beginnings of Structural Linguistics*. Indiana University Studies in the History and Theory of Linguistics. Bloomington: Indiana University Press.
- BAUM, SHARI and McNUTT, JAMES (1990). An acoustic analysis of frontal misarticulation of /s/ in children. *Journal of Phonetics* 18: 51–63.
- BAUMANN, STEFAN, BECKER, JOHANNES, GRICE, MARTINE, and MÜCKE, DORIS (2007). Tonal and articulatory marking of focus in German, in J. Trouvain and W. J. Barry (eds.), *Proceedings of the 16th International Congress of Phonetic Sciences*. Saarbrücken: Universität des Saarlandes, 1029–32.
- GRICE, MARTINE, and STEINDAMM, SUSANNE (2006). Prosodic marking of focus domains: Categorical or gradient?, in *Speech Prosody 2006*, <http://aune.lpl.univ-aix.fr/~sprogisp2006/contents/papers/PS3-09_0065.pdf>.
- BAXTER, G. J., BLYTHE, RICHARD A., CROFT, WILLIAM, and MCKANE, ALAN J. (2009). Modeling language change: An evaluation of Trudgill's theory of the emergence of New Zealand English. *Language Variation and Change* 21: 257–96.
- BAYLEY, ROBERT (1994). Consonant cluster reduction in Tejano English. *Language Variation and Change* 6: 303–26.
- (2002). The Quantitative Paradigm, in J. K. Chambers, P. Trudgill, and N. Schilling-Estes (eds.), *The Handbook of Language Variation and Change*. Oxford: Blackwell, 117–41.
- BEAVER, DAVID., CLARK, BRADY Z., FLEMMING, EDWARD, JAEGER, FLORIAN T., and WOLTERS, MARIA (2007). When semantics meets phonetics: Acoustical studies of second-occurrence focus. *Language* 83: 245–76.
- BECKER, FRANK and REINVANG, IVAR (2007). Mismatch negativity elicited by tones and speech sounds: Changed topographical distribution in aphasia. *Brain and Language* 100: 69–78.
- BECKER, MICHAEL (2009). Phonological trends in the lexicon: The role of constraints. Ph.D. dissertation, University of Massachusetts, Amherst.
- KETREZ, NIHAN F., and NEVINS, ANDREW (2011). The surfeit of the stimulus: Analytical biases filter lexical statistics in Turkish laryngeal alternations. *Language* 87(1): 84–125.
- BECKMAN, MARY E. and EDWARDS, JAN (1990). Lengthenings and shortenings and the nature of prosodic constituency, in J. Kingston and M. Beckman (eds.), *Papers in Laboratory Phonology I: Between the Grammar and Physics of Speech*. Cambridge: Cambridge University Press, 179–200.

- (1992). Intonational categories and the articulatory control of duration, in E. Vatikiotis-Bateson, Y. Tohkura, and Y. Sagisaka (eds.), *Speech Perception, Production, and Linguistic Structure*. Tokyo: OHM Publishing, 356–75.
- (1994). Articulatory evidence for differentiating stress categories, in P. A. Keating (ed.), *Phonological Structure and Phonetic Form: Papers in Laboratory Phonology III*. Cambridge: Cambridge University Press, 7–33.
- (2000a). The ontogeny of phonological categories and the primacy of lexical learning in linguistic development. *Child Development* 71: 240–9.
- (2000b). Lexical frequency effects on young children’s imitative productions, in M. Broe and J. B. Pierrehumbert (eds.), *Papers in Laboratory Phonology V: Acquisition and the Lexicon*. Cambridge: Cambridge University Press, 208–17.
- (2010). Generalizing over lexicons to predict consonant mastery. *Laboratory Phonology* 1(2): 319–43.
- and FLETCHER, JANET (1992). Prosodic structure and tempo in a sonority model of articulatory dynamics, in G. J. Docherty and D. R. Ladd (eds.), *Papers in Laboratory Phonology II: Gesture, Segment, Prosody*. Cambridge: Cambridge University Press, 68–86.
- HIRSCHBERG, JULIA and SHATTUCK-HUFNAGEL, STEFANIE (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*. Oxford: Oxford University Press, 9–54.
- DE JONG, KENNETH, JUN, SUN-AH, and LEE, SOOK-HYANG (1992). The interaction of coarticulation and prosody in sound change. *Language and Speech* 35: 45–8. Cambridge: Cambridge University Press.
- and KINGSTON, JOHN (1990). Introduction, in J. Kingston and M. Beckman (eds.), *Papers in Laboratory Phonology I: Between the Grammar and Physics of Speech*. Cambridge: Cambridge University Press, 1–16.
- MUNSON, BENJAMIN, and EDWARDS, JAN (2007). The influence of vocabulary growth on developmental changes in types of phonological knowledge, in J. Cole and J. Hualde (eds.), *Laboratory Phonology 9*. New York: Mouton de Gruyter, 241–64.
- and PIERREHUMBERT, JANET B. (1986). Intonational structure in Japanese and English. *Phonology Yearbook* 3: 255–310.
- (2003). Interpreting “phonetic interpretation” over the lexicon, in J. Local, R. Ogden, and R. Temple (eds.), *Phonology and Phonetic Evidence: Papers in Laboratory Phonology VI*. Cambridge: Cambridge University Press, 13–37.
- YONEYAMA, KIYOKO, and EDWARDS, JAN (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.
- BEDDOR, PATRICE S. (2007). Nasals and nasalization: The relationship between segmental and coarticulatory timing, in *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, Germany, 249–54.
- BRASHER, ANTHONY, and NARAYAN, CHANDAN (2007). Applying perceptual methods to the study of phonetic variation and sound change, in M.-J. Solé, P. Beddor, and M. Ohala (eds.), *Experimental Approaches to Phonology*. Oxford: Oxford University Press, 127–43.
- HARNSBERGER, JAMES D., and LINDEMANN, STEPHANIE (2002). Language-specific patterns of vowel-to-vowel coarticulation: Acoustic structures and their perceptual correlates. *Journal of Phonetics* 30: 591–627.
- KRAKOW, RENA, and GOLDSTEIN, LOUIS (1986). Perceptual constraints and phonological change: A study of nasal vowel height. *Phonology Yearbook* 3: 197–217.

- BEDDOR and LINDEMANN, STEPHANIE (2001). Patterns of perceptual compensation and their phonological consequences, in E. Hume and K. Johnson (eds.), *The Role of Speech Perception in Phonology*. San Diego: Academic Press, 55–78.
- BELL, ALAN (1984). Language style as audience design. *Language in Society* 13: 145–204.
- BRENIER, JASON, GREGORY, MICHELLE, GIRAND, CYNTHIA, and JURAFSKY, DAN (2009). Predictability effects on durations of content and function words in conversational English. *Journal of Memory and Language* 60: 92–111.
- and HOOPER, JOAN B. (eds.) (1978). *Syllables and segments*. Amsterdam: North-Holland.
- JURAFSKY, DANIEL, FOSLER-LUSSIER, ERIC, GIRAND, CYNTHIA, GREGORY, MICHELLE, and GILDEA, DANIEL (2003). Effects of disfluencies, predictability, and utterance position on word form variation in English conversation. *Journal of the Acoustical Society of America* 113: 1001–24.
- BELL-BERTI, FEDERICA (1980). Velopharyngeal function: A spatio-temporal model, in N. J. Lass (ed.), *Speech and Language: Advances in Basic Research and Practice*, vol. IV. New York: Academic Press, 291–316.
- BENKÍ, JOSÉ (1998). Evidence for phonological categories from speech perception. Ph.D. dissertation, University of Massachusetts, Amherst.
- BENNETT, CLINTON W. and INGLE, BOBBIE H. (1984). Production of /s/ as a function of word frequency, phonetic environment, and phoneme position. *Journal of Communication Disorders* 17: 361–9.
- BENUS, STEFAN (2005). Dynamics and transparency in vowel harmony. Ph.D. dissertation, New York University.
- and GAFOS, ADAMANTIOS (2005). Qualitative and quantitative aspects of vowel harmony: A dynamics model, in B. G. Bara, L. Barsalou, and M. Bucciarelli (eds.), *CogSci2005, XXVII Annual Conference of the Cognitive Science Society*, Stresa, Italy, 2005. New Jersey: Lawrence Erlbaum, 226–31.
- (2007). Articulatory characteristics of Hungarian “transparent” vowels. *Journal of Phonetics* 35: 271–300.
- and GOLDSTEIN, LOUIS (2004). Phonetics and phonology of transparent vowels in Hungarian, in P. M. Nowak, C. Yoquelet, and D. Mortensen (eds.), *Proceedings of the 29th Annual Meeting of the Berkeley Linguistic Society*. Berkeley Linguistic Society, 485–97.
- SMORODINSKY, IRIS, and GAFOS, ADAMANTIOS (2004). Gestural coordination and the distribution of English “geminate,” in S. Arunachalam and T. Scheffler (eds.), *Proceedings of the 27th Annual Penn Linguistic Colloquium*. University of Pennsylvania Working Papers in Linguistics 10.1. Philadelphia: Penn Linguistics Club, 33–46.
- BERANEK, LEO (1954). *Acoustics*. New York: McGraw-Hill.
- (1988). *Acoustical Measurements*, rev. edn. Published for the Acoustical Society of America. New York: American Institute of Physics.
- BERENT, IRIS, LENNERTZ, TRACY, SMOLENSKY, PAUL, and VAKNIN-NUSBAUM, VERED (2009). Listeners’ knowledge of phonological universals: Evidence from nasal clusters. *Phonology* 26: 75–108.
- VAN DEN BERG, JANWILLEM (1956). Direct and indirect determination of the mean subglottic pressure. *Folia Phoniatrica et Logopaedica* 8: 1–24.
- VAN DEN BERG, R. (1986). The effect of varying voice and noise parameters on the perception of voicing in Dutch two-obstruent sequences. *Speech Communication* 5: 355–67.

- VAN BERGEM, DICK R. (1993). Acoustic vowel reduction as a function of sentence accent, word stress and vowel class. *Speech Communication* 12: 1–23.
- BERGEN, BENJAMIN K. (2004). The psychological reality of phonaesthemes. *Language* 80: 290–311.
- BERINSTEIN, AVA E. (1979). A cross-linguistic study on the perception and production of stress. *UCLA Working Papers in Phonetics* 47: 1–59.
- BERKO, JEAN (1958). The child's learning of English morphology. Reprinted 2004 in B. Lust and C. Foley (eds), *First Language Acquisition: The Essential Readings*. Oxford: Blackwell, 253–73.
- BERKOVITS, ROCHELE (1994). Durational effects in final lengthening, gapping, and contrastive stress. *Language and Speech* 37(3): 237–50.
- BERLIN, BRENT, and KAY, PAUL (1991). *Basic color terms: their universality and evolution*. Berkeley, CA: University of California Press.
- BERMÚDEZ-OTERO, RICARDO (2006). Phonological change in optimality theory, in K. BROWN (ed.), *Encyclopedia of Language and Linguistics*, 2nd edn, vol. 9. Oxford: Elsevier, 497–505.
- BERNHARDT, BARBARA, GICK, BRYAN, BACSFALVI, PENELOPE, and ADLER-BOCK, MARCY (2005). Ultrasound in speech therapy with adolescents and adults. *Clinical Linguistics and Phonetics* 19: 605–16.
- and ASHDOWN, JULIE (2003). Speech habilitation of hard of hearing adolescents using electropalatography and ultrasound as evaluated by trained listeners. *Clinical Linguistics and Phonetics* 17(3): 199–216.
- BERNSTEIN, NIKOLAI (1967). *Coordination and Regulation of Movement*. New York: Pergamon Press.
- BERNSTEIN-RATNER, NAN (1982). Acoustic study of mothers' speech to language-learning children: An analysis of vowel articulatory characteristics. Doctoral dissertation, Boston University.
- (1987). The phonology of parent-child speech, in K. E. Nelson and A. van Kleeck (eds.), *Children's Language*, vol. 6. Hillsdale, NJ: Erlbaum, 159–74.
- BERTINETTO, PIER MARCO (1999). Psycholinguistic evidence for syllable geometry: Italian and beyond, in J. Rennison and K. Kühnhammer (eds.), *Phonologica 1996. Syllables!?* The Hague: Holland Academic Graphics, 1–28.
- (2001). The syllable: Fragments of a puzzle, in C. Schaner-Wolles, J. R. Rennison, and F. Neubarth (eds.), *Naturally! Linguistic Studies in Honour of Wolfgang Ulrich Dressler Presented at the Occasion of his 60th Birthday*. Torino: Rosenberg & Sellier, 35–45.
- BERTRAND, ROXANE, BLACHE, PHILIPPE, ESPESSE, ROBERT, FERRE, GAËLLE, MEUNIER, CHRISTINE, PRIEGO-VALVERDE, BÉATRICE, and RAUZY, STÉPHANE (2008). *Le CID—Corpus of Interactional Data—Annotation et Exploitation Multimodale de Parole Conversationnelle*. *Traitement Automatique des Langues*, vol. 49, no. 3.
- BESLE, JULIEN, FISCHER, CATHERINE, BIDET-CAULET, AURÉLIE, LECAIGNARD, FRANCOISE, BERTRAND, OLIVIER, and GIARD, MARIE-HÉLÈNE (2008). Visual activation and audiovisual interactions in the auditory cortex during speech perception: Intracranial recordings in humans. *Journal of Neuroscience* 28: 14301–10.
- BEST, CATHERINE T. (1993). Emergence of language-specific constraints in perception of non-native speech: A window on early phonological development, in B. de Boysson-Bardies, S. de Schonen, P. Jusczyk, P. MacNeilage, and J. Morton (eds.), *Developmental Neurocognition: Speech and Face Processing in the First Year*. Dordrecht: Kluwer Academic, 289–304.

- BEST, CATHERINE T. (1994). The emergence of native-language phonological influences in infants: A perceptual assimilation model, in J. Goodman and H. Nusbaum (eds.), *The Development of Speech Perception: The Transition from Speech Sounds to Spoken Words*. Cambridge, MA: MIT Press, 167–224.
- (1995). A direct realist view of cross-language speech perception, in W. Strange (ed.), *Speech Perception and Linguistic Experience: Issues in Cross-language Research*. Timonium, MD: York Press, 171–204.
- HALLE, PIERRE A., BOHN, OCKE-SCHWEN, and FABER, ALICE (2003). Cross-language perception of non-native vowels: Phonological and phonetic effects of listeners' native languages, in M. J. Sole, D. Recsencs, and J. Romero (eds.), *Proceedings of the 15th International Congress of Phonetic Sciences*. Barcelona: Causal Productions, 2889–92.
- and JONES, CATHLEEN (1998). Stimulus-alternation preference procedure to test infant speech discrimination. *Infant Behavior and Development* 21: 295.
- MACKAIN, KRISTINE, and STRANGE, WINIFRED (1982). A cross-language study of categorical perception for semivowels and liquid contrasts. *Journal of the Acoustical Society of America*, Suppl. I 71, S76.
- MCROBERTS, GERALD. W., and GOODELL, ELIZABETH (2001). Discrimination of non-native consonant contrasts varying in perceptual assimilation to the listener's native phonological system. *Journal of the Acoustical Society of America* 109: 775–94.
- LAFLEUR, ROSEMARIE, and SILVER-ISENSTADT, JEAN (1995). Divergent developmental patterns for infants' perception of two nonnative speech contrasts. *Infant Behavior and Development* 18: 339–50.
- — and SITHOLE, NOMATHEMBA M. (1988). Examination of perceptual reorganization for nonnative speech contrasts: Zulu click discrimination by English-speaking adults and infants. *Journal of Experimental Psychology: Human Perception and Performance* 14: 345–60.
- and TYLER, MICHAEL (2007). Nonnative and second-language speech perception: Commonalities and complementarities, in O.-S. Bohn and M. Munro (eds.), *Language Experience in Second-Language Speech Learning. In honor of James Emil Flege*. Amsterdam: John Benjamins, 13–34.
- VAN BEZOOIJEN, RENÉE and VAN HOUT, ROELAND (1985). Accentedness ratings and phonological variables as measures of variation in pronunciation. *Language and Speech* 28: 129–42.
- BHARUCHA, JAMSHED J. (1987). Music cognition and perceptual facilitation: A connectionist framework. *Music Perception* 5: 1–30.
- BIALYSTOK, ELLEN and HAKUTA, K. (1999). Confounded age: Linguistic and cognitive factors in Click for Articleage differences for second language acquisition, in D. Birdsong (ed.), *Second Language Acquisition and the Critical Period Hypothesis*. Mahwah, NJ: Lawrence Erlbaum Associates.
- BIBER, DOUGLAS (2004). Representativeness in corpus design, in G. Sampson and D. McCarthy (eds.), *Corpus Linguistics: Readings in a Widening Discipline*. London and New York: Continuum International, 174–97.
- CONRAD, SUSAN, and REPPEN, RANDI (1998). *Corpus Linguistics: Investigating Language Structure and Use*. Cambridge Approaches to Linguistics. Cambridge: Cambridge University Press.
- BICKERTON, DEREK (1971). Inherent variability and variable rules. *Foundations of Language* 7: 457–92.

- BICKMORE, LEE (1995). Tone and stress in Lamba. *Phonology* 12: 307–41.
- BIKHCHANDANI, SUSHIL, HIRSHLEIFER, DAVID, and WELCH, IVO (1998). Learning from the behavior of others: Conformity, fads, and informational cascades. *Journal of Economic Perspectives* 12(3): 151–70.
- BIRD, STEVEN (1995). *Computational phonology: a constraint-based approach*. Cambridge: Cambridge University Press.
- (2001). Linguistic annotation, <<http://www ldc.upenn.edu/annotation>>, accessed March 13, 2009.
- and KLEIN, EWAN (1990). Phonological events. *Journal of Linguistics* 26: 33–56.
- and LIBERMAN, MARK (1999). Annotation graphs as a framework for multidimensional linguistic data analysis, in *Proceedings, Towards Standards and Tools for Discourse Tagging Workshop*, Association for Computational Linguistics.
- BIRDSOONG, DAVID (1992). Ultimate attainment in second language acquisition. *Language* 68: 706–55.
- (2007). Nativelike pronunciation among late learners of French as a second language, in O.-S. Bohn and M. Munro (eds.), *Language Experience in Second-language Speech Learning: In honor of James Emil Flege*. Amsterdam: John Benjamins, 99–116.
- BISHOP, DOROTHY V. M. and HAYIOU-THOMAS, MARIANNA E. (2008). Heritability of specific language impairment depends on diagnostic criteria. *Genes, Brain and Behavior* 7: 365–72.
- BLACKLOCK, OLIVER. S. (2004). Characteristics of variation in production of normal and disordered fricatives, using reduced-variance spectral methods. Ph.D. dissertation, School of Electronics and Computer Science, University of Southampton, UK.
- BLADON, ANTHONY (1986). Phonetics for hearers, in Graham McGregor (ed.), *Language for Hearers*. Oxford: Pergamon Press, 1–24.
- BLESES, DOROTHE (2008). The struggle of Danish word-learning babies: The role of sound structure in word learning in a cross-linguistic framework. Presentation at the First Nijmegen Speech Reduction Workshop, MPI, Nijmegen, The Netherlands.
- BLEVINS, JULIETTE (1995). The syllable in phonological theory, in J. A. Goldsmith (ed.), *The Handbook of Phonological Theory*. Cambridge, MA: Blackwell, 206–44.
- (2003). The independent nature of phonotactic constraints: An alternative to syllable-based approaches, in C. Féry and R. van de Vijver (eds.), *The Syllable in Optimality Theory*. Cambridge: Cambridge University Press, 375–403.
- (2004). *Evolutionary Phonology: The Emergence of Sound Patterns*. Cambridge: Cambridge University Press.
- and GARRETT, ANDREW (1998) The origins of consonant-vowel metathesis. *Language* 74: 508–56.
- — (2004). The evolution of metathesis, in B. Hayes, R. Kirchner, and D. Steriade (eds.), *Phonetically based Phonology*. Cambridge: Cambridge University Press, 117–56.
- and WEDEL, ANDREW (2009). Inhibited sound change: An evolutionary approach to lexical competition. *Diachronica* 26: 143–83.
- BLICHER, DEBORAH, DIEHL, RANDY, and COHEN, LESLIE (1990). Effects of syllable duration on the perception of the Mandarin tone 2/tone 3 distinction: Evidence of auditory enhancement, *Journal of Phonetics* 18: 37–49.
- BLUMSTEIN, SHEILA E. (1973). *A Phonological Investigation of Aphasic Speech*. The Hague: Mouton.
- and STEVENS, KENNETH N. (1979). Acoustic invariance in speech production: Evidence from measurements of the spectral characteristics of stop consonants. *Journal of the Acoustical Society of America* 66: 1001–17.

- BOATMAN, DANA (2004). Cortical bases of speech perception: Evidence from functional lesion studies. *Cognition* 92: 47–65.
- DE BOER, BART (2000). Self-organization in vowel systems. *Journal of Phonetics* 28(4): 441–65.
- (2001). *The Origins of Vowel Systems*. Oxford: Oxford University Press.
- BOERSMA, PAUL (1997). How we learn variation, optionality, and probability. *Proceedings of the Institute of Phonetic Sciences* 21. University of Amsterdam, 43–58.
- (1998). *Functional Phonology*. The Hague: Holland Academic Graphics. Doctoral dissertation, University of Amsterdam.
- (2003). The odds of eternal optimization in Optimality Theory, in D. Eric Holt (ed.), *Optimality Theory and Language Change*, Studies in Natural Language and Linguistic Theory 56. Dordrecht: Kluwer Academic Publishers, 31–65.
- (2007). Some listener-oriented accounts of h-aspiré in French. *Lingua* 117: 1989–2054.
- (2008). Emergent ranking of faithfulness explains markedness and licensing by cue. Rutgers Optimality Archive 954, <<http://roa.rutgers.edu>>.
- (2009). Cue constraints and their interactions in phonological perception and production, in P. Boersma and S. Hamann (eds.), *Phonology in Perception*. Berlin: Mouton De Gruyter, 55–110.
- (forthcoming). A programme for bidirectional phonology and phonetics and their acquisition and evolution, in A. Benz and J. Mattausch (eds.), *Bidirectional Optimality Theory*.
- and ESCUDERO, PAOLA (2008). Learning to perceive a smaller L2 vowel inventory: An Optimality Theory account, in P. Avery, E. Dresher, and K. Rice (eds.), *Contrast in Phonology: Theory, Perception, Acquisition*. Berlin: Mouton de Gruyter, 271–301.
- — and HAYES, RACHEL (2003). Learning abstract phonological from auditory phonetic categories: An integrated model for the acquisition of language-specific sound categories. *Proceedings of the 15th International Congress of Phonetic Sciences*, 1013–16.
- and HAMANN, SILKE (2008). The evolution of auditory dispersion in bidirectional constraint grammars. *Phonology* 25: 217–70.
- — (2009a). Loanword adaptation as first-language phonological perception, in A. Calabrese and W. L. Wetzels (eds.), *Loanword Phonology*. Amsterdam: John Benjamins, 11–58.
- — (2009b). Introduction: Models of phonology in perception, in P. Boersma and S. Hamann (eds.), *Phonology in Perception*. Berlin: Mouton de Gruyter, 1–24.
- and HAYES, BRUCE (2001). Empirical tests of the Gradual Learning Algorithm. *Linguistic Inquiry* 32: 45–86.
- and WEENINK, DAVID (2009). Praat: Doing Phonetics by Computer (Version 5.1.01) [computer program], <<http://www.praat.org/>>, accessed February 26, 2009.
- BOHN, OCKE-SCHWEN (1995). Cross language speech production in adults: First language transfer doesn't tell it all, in W. Strange (ed.), *Speech Perception and Linguistic Experience: Issues in Crosslanguage Research*. Baltimore: York Press, 279–304.
- and FLEGE, JAMES E. (1992). The production of new and similar vowels by adult German learners of English. *Studies in Second Language Acquisition* 14: 131–58.
- — (1997). Perception and production of a new vowel category by adult second language learners, in A. James and J. Leather (eds.), *Second-language Speech: Structure and Process*. Berlin and New York: Mouton de Gruyter, 53–73.

- and STEINLEN, ANJA K. (2003). Consonantal context affects cross-language perception of vowels, in M. J. Sole, D. Recsens, and J. Romero (eds.), *Proceedings of the 15th International Congress of Phonetic Sciences*. Barcelona: Causal Productions, 2289–92.
- BOLINGER, DWIGHT (1989). *Intonation and Its Uses: Melody in Grammar and Discourse*. Stanford, CA: Stanford University Press.
- BONGAERTS, THEO (1999). Ultimate attainment in L2 pronunciation: The case of very advanced late L2 learners, in D. Birdsong (ed.), *Second Language Acquisition and the Critical Period Hypothesis*. Mahwah, NJ: Lawrence Erlbaum Associates, 133–60.
- MENNEN, SUSAN, and VAN DER SLIK, FRANS (2000). Authenticity of pronunciation in naturalistic second language acquisition: The case of very advanced late learners of Dutch as a second language, *Studia Linguistica* 54: 298–308.
- BOOIJ, GEERT (1995). *The Phonology of Dutch*. Oxford: Clarendon Press.
- (1996). Cliticization as prosodic integration: The case of Dutch. *Linguistic Review* 13: 219–42.
- BOOTHROYD, ARTHUR and NITTROUER, SUSAN (1988). Mathematical treatment of context effects in phoneme and word recognition. *Journal of the Acoustical Society of America* 84(1): 101–14.
- BOSCH, LAURA and SEBASTIÁN-GALLÉS, NURIA (1997). Native-language recognition abilities in 4-month-old infants from monolingual and bilingual environments. *Cognition* 65: 33–69.
- (2003). Simultaneous bilingualism and the perception of a language specific vowel contrast in the first year of life. *Language and Speech* 46: 217–44.
- BOSSHARDT, HANS-GEORG, SAPPOK, C., KNIPSCHILD, M., and HÖLSCHER, C. (1997). Spontaneous imitation of fundamental frequency and speech rate by nonstutterers and stutterers. *Journal of Psycholinguistic Research* 26: 425–48.
- BOUCHHIOUA, NADIA (2008). The acoustic correlates of stress and accent in Tunisian Arabic: A comparative study with English. Ph.D. dissertation, Université de 7 Novembre, Carthage, Tunisia.
- BOURNE, LYLE E. and RESTLE, FRANK (1959). Mathematical theory of concept identification. *Psychological Review* 66, 278–96.
- BOWEN, CAROLINE (2008). Minimal pairs, listening lists, and more. <<http://www.speech-language-therapy.com/wordlists.html>>, accessed March 13, 2009.
- BOWERS, JEFFREY S. (2009). On the biological plausibility of grandmother cells: Implications for neural network theories in psychology and neuroscience. *Psychological Review* 116: 220–51.
- BOYCE, SUZANNE E. (1988). The influence of phonological structure on articulatory organization in Turkish and in English: Vowel harmony and coarticulation. Ph.D. dissertation, Yale University, New Haven, CT.
- (1990). Coarticulatory organization for lip rounding in Turkish and English. *Journal of the Acoustical Society of America* 88: 2584–95.
- KRAKOW, RENA A., BELL-BERTI, FEDERICA, and GELFER, C. (1990). Converging sources of evidence for dissecting articulatory movements into core gestures. *Journal of Phonetics* 18: 173–88.
- DE BOYSSON-BARDIES, BENEDICTE, HALLÉ, PIERRE, SAGART, LAURENT, and DURAND, CATHERINE (1989). A cross-linguistic investigation of vowel formants in babbling. *Journal of Child Language* 16: 1–17.

- DE BOYSSON-BARDIES and VIHMAN, MARILYN M. (1991). Adaptation to language: Evidence from babbling and first words in four languages. *Language* 67: 297–319.
- BRADLEY, CORNELIUS (1911). Graphic analysis of the tone-accents of the Siamese language. *Journal of the American Oriental Society* 31: 282–9.
- BRADLEY, TRAVIS G. (2002). Gestural timing and derived environment effects in Norwegian clusters, in L. Mikkelsen and C. Potts (eds.), *WCCFL 21 Proceedings*. Somerville, MA: Cascadilla Press, 43–56.
- (2006). Spanish rhotics and Dominican hypercorrect /s/. *Probus* 18: 1–33.
- BRADLOW, ANN R. (1995). A comparative acoustic study of English and Spanish vowels. *Journal of the Acoustical Society of America* 97: 1916–24.
- AKAHANE-YAMADA, REIKO, PISONI, DAVID B., and TOHKURA, YOH'ICHI (1999). Training Japanese listeners to identify English /r/ and /l/: Long-term retention of learning in speech perception and production. *Perception and Psychophysics* 61: 977–85.
- and ALEXANDER, JENNIFER A. (2007). Semantic-contextual and acoustic-phonetic enhancements for English sentence-in-noise recognition by native and non-native listeners. *Journal of the Acoustical Society of America* 121(4): 2339–49.
- BAKER, RACHEL E., CHOI, ARIM, KIM, MIDAM, and VAN ENGEN, KRISTIN J. (2007). The Wildcat Corpus of Native and Foreign-Accented English. *Journal of the Acoustical Society of America* 121(5): 3072.
- and BENT, TESSA (2002). The clear speech effect for non-native listeners. *Journal of the Acoustical Society of America* 112: 272–84.
- (2008). Perceptual adaptation to non-native speech. *Cognition* 106: 707–29.
- CLOPPER, CYNTHIA, and SMILJANIC, RAJKA (2007). A perceptual similarity space for languages, in *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, Germany.
- — — and WALTER, MARY ANN (2010). A perceptual similarity space for languages. *Speech Communication* 52 (11–12): 930–42.
- NYGAARD, LYNNE C., and PISONI, DAVID B. (1999). Effects of talker, rate, and amplitude variation on recognition memory for spoken words. *Perception and Psychophysics* 61: 206–19.
- PISONI, DAVID, AKAHANE-YAMADA, REIKO, and TOHKURA, YOH'ICHI (1997). Training Japanese listeners to identify English /r/ and /l/: IV. Some effects of perceptual learning on speech production. *Journal of the Acoustical Society of America* 101: 2299–310.
- BRAINE, MARTIN D. S. (1992). What sort of innate structure is needed to “bootstrap” into syntax? *Cognition* 45: 77–100.
- BRAME, MICHAEL K. and BORDELOIS, IVONNE (1973). Vocalic alternations in Spanish. *Linguistic Inquiry* 4: 111–68.
- BRÉA-SPAHN, MARÍA ROSA (2009). Spanish-specific patterns and nonword repetition performance in English-language learners. Ph.D. dissertation, University of South Florida.
- BREEN, GAVAN and PENSALFINI, ROBERT (1999). Arrernte: A language with no syllable onsets. *Linguistic Inquiry* 30: 1–25.
- BRENT, MICHAEL R. and SISKIND, JEFFREY M. (2001). The role of exposure to isolated words in early vocabulary. *Cognition* 81: B33–B44.
- BRESCH, ERIK, KIM, YOON-CHUL, NAYAK, KRISHNA, BYRD, DANI, and NARAYANAN, SHRIKANTH (2008). Seeing speech: Capturing vocal tract shaping using real-time magnetic resonance imaging. *IEEE Signal Processing Magazine* 25(3): 123–32.

- BRESSMANN, TIM. (2008). Quantitative assessment of tongue shape and movement using ultrasound imaging, in L. Colantoni and J. Steele (eds.), *Selected Proceedings of the 3rd Conference on Laboratory Approaches to Spanish Phonology*. Somerville, MA: Cascadilla Proceedings Project, 101–6.
- THIND, PARVEEN, UY, CATHERINE, BOLLIG, CATHERINE, GILBERT, RALPH, and IRISH, JONATHAN (2005). Quantitative three-dimensional ultrasound analysis of tongue protrusion, grooving, and symmetry: Data from 12 normal speakers and a partial glossectomee. *Clinical Linguistics and Phonetics* 19(6/7): 573–88.
- UY, CATHERINE, and IRISH, JONATHAN (2005). Analysing normal and partial glossectomee tongues using ultrasound. *Clinical Linguistics and Phonetics* 19: 35–52.
- BRITAIN, DAVID and TRUDGILL, PETER (1999). Migration, new-dialect formation and sociolinguistic refunctionalisation: Reallocation as an outcome of dialect contact. *Transactions of the Philological Society* 97: 245–56.
- BROE, MICHAEL (1993). Specification theory: The treatment of redundancy in generative phonology. Ph.D. dissertation, University of Edinburgh.
- BROKX, JAN and NOOTEBOOM, SIEB (1982). Intonation and the perceptual separation of simultaneous voices. *Journal of Phonetics* 10: 23–36.
- BROMBERGER, SYLVAIN and HALLE, MORRIS (1992). The ontology of phonology, in S. Bromberger (ed.), *On What We Know We Don't Know*. Chicago: University of Chicago Press, CSLI Publications, 209–28.
- BROSELOW, ELLEN, CHEN, SU-I, and HUFFMAN, MARIE (1997). Syllable weight: Convergence of phonology and phonetics. *Phonology* 14: 47–82.
- BROUWER, SUSANNE, MITTERER, HOLGER, and HUETTIG, FALK (forthcoming). Discourse context and the recognition of reduced and canonical spoken words. *Applied Psycholinguistics*.
- BROWMAN, CATHERINE P. and GOLDSTEIN, LOUIS (1986). Towards an articulatory phonology. *Phonology Yearbook* 3: 219–52.
- (1988). Some notes on syllable structure in Articulatory Phonology. *Phonetica* 45: 140–55.
- (1989). Articulatory gestures as phonological units. *Phonology* 6: 201–51.
- (1990a). Tiers in articulatory phonology, with some implications for casual speech, in J. Kingston and M. Beckman (eds.), *Papers in Laboratory Phonology I: Between the Grammar and the Physics of Speech*. Cambridge: Cambridge University Press, 341–97.
- (1990b). Representation and reality: Physical systems and phonological structure. *Journal of Phonetics* 18: 411–24.
- (1991). Gestural structures: Distinctiveness, phonological processes, and historical change, in I. G. Mattingly and M. Studdert-Kennedy (eds.), *Modularity and the Motor Theory of Speech Perception. Proceedings of a Conference to honor Alvin M. Liberman*. Haskins Laboratories, New Haven, CT: Lawrence Erlbaum Associates, 313–38.
- (1992). Articulatory Phonology: An overview. *Phonetica* 49: 155–80.
- (1995). Gestural syllable position effects in American English, in F. Bell-Berti and L. Raphael (eds.), *Producing Speech: Contemporary Issues for Katherine Safford Harris*. New York: American Institute of Physics, 19–33.
- (2000). Competing constraints on intergestural coordination and self-organization of phonological structures. *Les Cahiers de l'ICP, Bulletin de la Communication Parlée* 5, 25–34.

- BROWN, GILLIAN, CURRIE, KAREN L., and KENWORTHY, JOANNE (1980). *Questions of Intonation*. London: Croom Helm.
- BROWN, ROGER (1973). *A First Language: The Early Stages*. Cambridge, MA: Harvard University Press.
- BROWN-SCHMIDT, SARAH and TANENHAUS, MICHAEL K. (2008). Real-time investigation of referential domains in unscripted conversation: A targeted language game approach. *Cognitive Science* 32: 643–84.
- BRUCE, GÖSTA (1977). *Swedish Word Accents in Sentence Perspective*. Lund: Gleerup.
- (1987). How floating is focal accent?, in K. Gregersen and H. Basbøll (eds.), *Nordic Prosody IV*. Odense: Odense University Press, 41–9.
- (1990). Alignment and composition of tonal accents, in J. Kingston and M. E. Beckman (eds.), *Papers in Laboratory Phonology I: Between the Grammar and Physics of Speech*. Cambridge: Cambridge University Press, 107–15.
- BRUNELLE, MARC. (2005). Register in Eastern Cham: Phonological, phonetic and sociolinguistic approaches. Ph.D. dissertation, Cornell University.
- (2008). Speaker control in the phonetic implementation of Cham registers. Presentation at the Third Conference on Tone and Intonation in Europe, Lisbon, Portugal.
- (2009). Tone perception in Northern and Southern Vietnamese. *Journal of Phonetics* 37: 79–96.
- BUCHOLTZ, MARY (2003). Sociolinguistic nostalgia and the authentication of identity. *Journal of Sociolinguistics* 7(3): 398–416.
- BUCHWALD, ADAM, RAPP, BRENDA, and STONE, MAUREEN (2007). Insertion of discrete phonological units: An ultrasound investigation of aphasic speech. *Language and Cognitive Processes* 22(6): 910–48.
- BUCKLEY, EUGENE (2000). What should phonology explain? Handout from SUNY Buffalo Linguistics Colloquium.
- BUDER, EUGENE and STOEL-GAMMON, CAROL (1994). Cross-language differences in phonological acquisition: Swedish and American /t/. *Phonetica* 51: 146–58.
- BULLOCK, DANIEL, and GROSSBERG, STEVEN (1988). Neural dynamics of planned arm movements: emergent invariants and speed-accuracy properties during trajectory formation. *Psychological Review* 95: 49–90.
- BURDICK, CHARLES K. and MILLER, JOANNE D. (1975). Speech perception by the chinchilla: Discrimination of sustained /a/ and /i/. *Journal of the Acoustical Society of America* 58: 961–70.
- BURKARD, ROBERT (2009). The auditory steady-state response: Generation, recording, and clinical applications. *Ear and Hearing* 30: 384–5.
- BÛRKI, AUDREY, ERNESTUS, MIRJAM, and FRAUENFELDER, ULI (2010). One or two phonological representations for words with two phonological variants? Evidence from French schwa.
- BURNHAM, DENIS (2003). Language-specific speech perception and the onset of reading. *Reading and Writing: An Interdisciplinary Journal* 16: 573–609.
- and MATTOCK, KAREN (2007). The perception of tones and phones, in O.-S. Bohn and M. Munro (eds.), *Language Experience in Second-language Speech Learning: In honor of James Emil Flege*. Amsterdam: John Benjamins, 258–80.
- BURNS, TRACEY C., WERKER, J. F., and McVIE, KAREN (2003). Development of phonetic categories in infants raised in bilingual and monolingual environments, in B. Beachley,

- A. Brown, and F. Conlin (eds.), *Proceedings of the 27th Annual Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press, 173–84.
- YOSHIDA, KATHERINE A., HILL, KAREN, and WERKER, JANET F. (2007). Bilingual and monolingual infant phonetic development. *Applied Psycholinguistics* 28: 455–74.
- BURTON-ROBERTS, NOEL (2000). Where and what is phonology?, in N. Burton-Roberts, P. Carr, and G. Docherty (eds.), *Phonological Knowledge: Conceptual and Empirical Issues*. Oxford: Oxford University Press, 39–66.
- CARR, PHILIP, and DOCHERTY, GERARD (eds.) (2000). *Phonological Knowledge: Conceptual and Empirical Issues*. Oxford: Oxford University Press.
- BURZIO, LUIGI (1994). Metrical consistency, in E. Ristad (ed.), *Proceedings of the DIMACS Workshop on Human Language*. Providence, RI: American Mathematical Society.
- BUSÀ, MARIA GRAZIA (2003). Vowel nasalization and nasal loss in Italian, in M.-J. Solé, D. Recasens, and J. Romero (eds.), *Proceedings of the 15th International Congress of Phonetic Sciences*. Barcelona, Spain, August 2003, 711–14.
- BUSH, ROBERT R. and MOSTELLER, FREDERICK (1951). A model for stimulus generalization and discrimination. *Psychological Review* 58(6): 413–23.
- BUZSAKI, GYORGY (2006). *Rhythms of the Brain*. Oxford: Oxford University Press.
- BYBEE, JOAN (1985). *Morphology: A Study of the Relation between Meaning and Form*. Amsterdam: John Benjamins.
- (2000). The phonology of the lexicon: Evidence from lexical diffusion, in M. Barlow and S. Kemmer (eds.), *Usage-Based Models of Language*. Stanford, CA: CSLI, 65–85.
- (2001). *Phonology and Language Use*. Cambridge: Cambridge University Press.
- (2002). Word frequency and context of use in the lexical diffusion of phonetically conditioned sound change. *Language Variation and Change* 14: 261–90.
- (2006). From usage to grammar: The mind's response to repetition. *Language* 82: 711–33.
- (2007). *Frequency of Use and the Organization of Language*. Oxford: Oxford University Press.
- (2008) Formal universals as emergent phenomena: The origins of structure preservation, in J. Good (ed.), *Linguistic Universals and Language Change*. Oxford: Oxford University Press, 108–21.
- and McCLELLAND, JAMES L. (2005). Alternatives to the combinatorial paradigm of linguistic theory based on domain general principles of human cognition. *Linguistic Review* 22: 381–410.
- and PARDO, ELLY (1981). On lexical and morphological conditioning of alternations: A nonce-probe experiment with Spanish verbs. *Linguistics* 19: 937–68.
- and SCHEIBMAN, JOANNE (1999). The effect of usage on degrees of constituency: The reduction of *don't* in English. *Linguistics* 37: 575–96.
- BYRD, DANI (1995). C-centers revisited. *Phonetica* 52: 263–82.
- (1996a). A phase window framework for articulatory timing. *Phonology* 13: 139–69.
- (1996b). Influences on articulatory timing in consonant sequences. *Journal of Phonetics* 24: 209–44.
- KAUN, ABIGAIL, NARAYANAN, SHRIKANTH, and SALTZMAN, ELLIOT (2000). Phrasal signatures in articulation, in M. B. Broe and J. B. Pierrehumbert (eds.), *Papers in Laboratory Phonology V: Acquisition and the Lexicon*. Cambridge: Cambridge University Press, 70–87.

- BYRD, DANI, KRIVOKAPIC, JELENA, and LEE, SUNGBOK (2006). How far, how long: On the temporal scope of prosodic boundary effects. *Journal of the Acoustical Society of America* 120(3): 1589–99.
- and SALTZMAN, ELLIOT L. (1998). Intragestural dynamics of multiple phrasal boundaries. *Journal of Phonetics* 26: 173–99.
- (2003). The elastic phrase: Modeling the dynamics of boundary-adjacent lengthening. *Journal of Phonetics* 31(2): 149–80.
- TOBIN, STEPHEN, BRESCH, ERIK, and NARAYANAN, SHRIKANTH (2009). Timing effects of syllable structure and stress on nasals: A real-time MRI examination. *Journal of Phonetics* 37: 97–110.
- CACOULLOS, RENA T. and WALKER, JAMES A. (2009). The present of the English future: Grammatical variation and collocations in discourse. *Language* 85: 321–54.
- CALHOUN, SASHA. (2006). Information structure and the prosodic structure of English: A probabilistic relationship. Ph.D. dissertation, University of Edinburgh.
- (2010). The centrality of metrical structure in signaling information structure: A probabilistic perspective. *Language* 86(1): 1–42.
- CAMBIER-LANGEVELD, TINA (1997). The domain of final lengthening in the production of Dutch, in H. de Hoop and J. Coerts (eds.), *Linguistics in the Netherlands*. Amsterdam: John Benjamins, 13–24.
- (2000). Temporal marking of accents and boundaries. Ph.D. dissertation, University of Amsterdam. LOT Dissertation Series, 32.
- and TURK, ALICE (1999). A cross-linguistic study of accentual lengthening: Dutch vs. English. *Journal of Phonetics* 27: 171–206.
- CAMPBELL, DONALD T. and FISKE, DONALD W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin* 56: 81–105.
- CAMPBELL, FIONA, GICK, BRYAN, WILSON, IAN, and VATIKIOTIS-BATESON, ERIC (2010). Spatial and temporal properties of gestures in North American English /r/. *Language and Speech* 53(1): 49–69.
- CAMPBELL, NICK (1992). Segmental elasticity and timing in Japanese speech, in Y. Tohkura, E. Vatikiotis-Bateson, and Y. Sagisaka (eds.), *Speech Perception, Production, and Linguistic Structure*. Tokyo: Ohmsha, 403–18.
- (1999). Data-driven speech synthesis. *Journal of the Acoustical Society of America* 105: 1029–30.
- and BECKMAN, MARY E. (1997). Stress, prominence, and spectral tilt, in A. Botinis, G. Kouroupetroglou, and G. Carayannis (eds.), *Intonation: Theory, Models and Applications* (Proceedings of the ESCA Workshop on Intonation), Athens, Greece, 67–70.
- CAMPBELL-KIBLER, KATHRYN (2006). Listener perceptions of sociolinguistic variables: the case of (ING). Ph.D. dissertation, Stanford University.
- (2007). Accent, (ING), and the social logic of listener perceptions. *American Speech* 82(1): 32–64.
- (2008). I'll be the judge of that: Diversity in social perceptions of (ING). *Language in Society* 37: 637–59.
- CANAVAN, ALEXANDRA and ZIPPERLEN, GEORGE (1996). CALLHOME Japanese Speech. Philadelphia: Linguistic Data Consortium.
- GRAFF, DAVID, and ZIPPERLEN, GEORGE (1997). CALLHOME American English Speech. Philadelphia: Linguistic Data Consortium.
- CAO, YANG, ZHANG, SHUWU, HUANG, TAIYI, and XU, BO (2004). Tone modeling for continuous Mandarin speech recognition. *International Journal of Speech Technology* 7: 115–28.

- CARAMAZZA, ALFONSO and YENI-KOMSHIAN, GRACE H. (1974). Voice onset time in two French dialects. *Journal of Phonetics* 2: 239–245.
- ZURIF, EDGAR B., and CARBONE, ETTORE (1973). The acquisition of a new phonological contrast: The case of stop consonants in French-English bilinguals. *Journal of the Acoustical Society of America* 54: 421–6.
- CARDOSO, WALCIR (2001). Variation patterns in regressive assimilation in Picard. *Language Variation and Change* 13(3): 305–42.
- CARNEY, ARLENE E., WIDIN, GREGORY P., and VIEMEISTER, NEAL F. (1977). Noncategorical Perception of Stop Consonants Differing in VOT. *Journal of the Acoustical Society of America* 62: 961–70.
- CARPENTER, GAIL and GROSSBERG, STEPHEN (1987). ART 2: Self-organization of stable category recognition codes for analog input patterns. *Applied Optics* 26: 4919–30.
- CARRÉ, RENÉ (2004). From acoustic tube to speech production. *Speech Communication* 42: 227–40.
- BOURDEAU, MARC, and TUBACH, JEAN-PIERRE (1995). Vowel-vowel production: the distinctive region model (DRM) and vocalic harmony. *Phonetica* 52: 205–14.
- and MRAYATI, MOHAMAD (1990). Articulatory–acoustic–phonetic relations and modeling, regions and modes, in A. Marchal and W. J. Hardcastle (eds.), *Speech Production and Speech Modelling*. NATO ASI Series. Dordrecht: Kluwer Academic Publishers, 211–40.
- CARROLL, J. DOUGLAS and CHANG, JIH-JIE (1970). Analysis of individual differences in multidimensional scaling via an n-way generalization of “Eckart-Young” decomposition. *Psychometrika* 35: 283–319.
- CARTER, ALLYSON and GERKEN, LOUANN (2004). Do children’s omissions leave traces? *Journal of Child Language* 31: 561–86.
- CASPERS, JOANNEKE and VAN HEUVEN, VINCENT (1993). Effects of time pressure on the phonetic realization of the Dutch accent-lending pitch rise and fall. *Phonetica* 50: 161–71.
- CASTELHANO, MONICA S. and RAYNER, KEITH (forthcoming). Eye movements during reading, visual search, scene perception: An overview, in K. Rayner, D. Shem, X. Bai, and G. Yan (eds.), *Cognitive and Cultural Influences on Eye Movements*. Tianjin: Tianjin People’s Press/Psychology Press.
- CATTUTO, CIRO, BARRAT, ALAIN, BALDASSARRI, ANDREA, and SCHEHR, GREGORY (2009). Collective dynamics of social annotation. *Proceedings of the National Academy of Sciences, USA* 106: 10511–15.
- CAVÉ, CHRISTIAN, GUAITELLA, ISABELLE, BERTRAND, ROXANE, SANTI, SERGE, HARLAY, FRANÇOISE, and ESPESSER, ROBERT (1996). About the relationship between eyebrow movements and F0 variations. *Proceedings of ICSLP 1996*, Philadelphia, 2175–9.
- CEBRIAN, JULI (2006). Experience and the use of duration in the categorization of L2 vowels. *Journal of Phonetics* 34: 372–87.
- CEDERGREN, HENRIETTA (1973). Interplay of social and linguistic factors in Panama. Ph.D. dissertation, Cornell University.
- and SANKOFF, DAVID (1974). Variable rules: performance as a statistical reflection of competence. *Language* 50: 333–55.
- CENA, RICHARD M. (1978). *When is a Phonological Generalization Psychologically Real?* Bloomington, IN: Indiana University Linguistics Club.
- CENOZ, JASONE, HUFEISEN, BRITTA, and JESSNER, ULRIKE (2001). Introduction, in J. Cenoz, B. Hufeisen, and U. Jessner (eds.), *Crosslinguistic Influences in Third Language Acquisition: Psycholinguistic Perspectives*. Clevedon: Multilingual Matters, 1–7.

- CHAHAL, DANA and HELLMUTH, SAM (forthcoming). The intonation of Lebanese and Egyptian Arabic, in S.-A. Jun (ed.), *Prosodic Typology II*. Oxford: Oxford University Press.
- CHAMBERS, JACK K. (1995). *Sociolinguistic Theory. Linguistic Variation and its Social Significance*. Oxford: Blackwell.
- TRUDGILL, PETER, and SCHILLING-ESTES, NATALIE (eds.) (2002). *The Handbook of Language Variation and Change*. Oxford: Blackwell.
- CHAMBERS, KYLE, ONISHI, KRISTINE, and FISHER, CYNTHIA (2003). Infants learn phonotactic regularities from brief auditory experience. *Cognition* 87: B69–B77.
- CHAO, YUANREN (1930). A system of “tone letters.” *Le Maître Phonétique* 45: 24–7.
- CHARLES-LUCE, JAN and LUCE, PAUL A. (1990). Similarity neighbourhoods of words in young children’s lexicons. *Journal of Child Language* 17: 205–15.
- CHEN, AOJU (2003). Reaction time as an indicator of discrete intonational contrasts in English. *Proceedings of Eurospeech*, 97–100.
- DEN OS, ELS, AND DE RUITER, JAN P. (2007). Pitch accent type matters for online processing of information status: Evidence from natural and synthetic speech. *Linguistic Review* 24(2): 317–44.
- CHEN, JENN-YEU, CHEN, TRAIN-MIN, and DELL, GARY S. (2002). Word form encoding in Mandarin Chinese as assessed by the implicit priming paradigm. *Journal of Memory and Language* 46: 751–81.
- CHEN, KEN, HASEGAWA-JOHNSON, MARK, and COHEN, AARON (2004). An automatic prosody labeling system using ANN-based syntactic-prosodic model and GMM-based acoustic-prosodic model. *Proceedings of the International Conference on Acoustics, Speech, Signal Processing*, 1: 509–12.
- — — — — BORYS, SARAH, KIM, SUNG-SUK, COLE, JENNIFER, and CHOI, JEUNG-YOON (2006). Prosody-dependent speech recognition on Radio News corpus of American English. *IEEE Transactions in Speech and Audio Processing* 14(1): 232–45.
- CHEN, MARILYN (1995). Acoustic parameters of nasalized vowels in hearing-impaired and normal-hearing speakers. *Journal of the Acoustical Society of America* 98: 2443–53.
- (1997). Acoustic correlates of English and French nasalized vowels. *Journal of the Acoustical Society of America* 102: 2360–70.
- CHEN, MATTHEW. (1970). Vowel length variation as a function of the voicing of the consonant environment. *Phonetica* 22: 129–59.
- (1987). The syntax of Xiamen tone sandhi. *Phonology Yearbook* 4: 109–49.
- (2000). *Tone Sandhi*. Cambridge: Cambridge University Press.
- CHEN, YIYA (2003). The phonetics and phonology of contrastive focus in Standard Chinese. Ph.D. dissertation, Stony Brook University.
- (2006). Durational adjustment under corrective focus in Standard Chinese. *Journal of Phonetics* 34: 176–201.
- (2008). The acoustic realization of Shanghai vowels. *Journal of Phonetics* 36: 629–48.
- (2009). Prosodic marking of topic and focus in Shanghai Chinese. *Chinese Journal of Phonetics* 2: 123–33.
- (2010). Post-focus suppression: Now you see it, now you don’t. *Journal of Phonetics* 38: 517–25.
- and BRAUN, BETTINA (2006). The prosodic categories of information structure, in *Speech Prosody 2006*. Dresden, Germany.
- CHEN, YIYA and GUSSENHOVEN, CARLOS (2008). Emphasis and tonal implementation in Standard Chinese. *Journal of Phonetics* 36: 724–46.

- and XU, YI (2006). Production of weak elements in speech: Evidence from f0 patterns of neutral tone in Standard Chinese. *Phonetica* 63: 47–75.
- CHESHIRE, JENNIFER, FOX, SUE, KERSWILL, PAUL, and TORGENSEN, EIVIND (2008). Ethnicity, friendship network and social practices as the motor of dialect change: Linguistic innovation in London, in U. Ammon, J. Darquennes, and S. Wright (eds.), *Sociolinguistica: International Yearbook of European Sociolinguistics*, vol. 22. Max Niemeyer Verlag, 1–23.
- CHIBA, TSUTOMU, and KAJIYAMA, MASATO (1941). *The Vowel: Its Nature and Structure*. Tokyo: Phonetic Society of Japan.
- CHILDERS, D. G., HICKS, D. M., MOORE, G. P., ESKENAZI, L., and LALWANI, A. L. (1990). Electroglottography and vocal fold physiology, *Journal of Speech and Hearing Research* 33: 245–54.
- CHISTOVICH, LUDMILLA, SHEIKIN, R. L., and LUBLINSKAYA, V. V. (1979). Centers of gravity and the spectral peaks as the determinants of vowel quality, in B. Lindblom and S. Ohman (eds.), *Frontiers of Speech Communication Research*. London: Academic Press, 143–58.
- CHITORAN, IOANA and HUALDE, JOSÉ IGNACIO (2007). From hiatus to diphthong: The evolution of vowel sequences in Romance. *Phonology* 24: 37–75.
- CHO, TAEHONG (2002). *The Effects of Prosody on Articulation in English*. New York: Routledge.
- (2004). Prosodically conditioned strengthening and vowel-to-vowel coarticulation in English. *Journal of Phonetics* 32: 141–76.
- (2005). Prosodic strengthening and featural enhancement: Evidence from acoustic and articulatory realizations of /a,i/ in English. *Journal of the Acoustical Society of America* 117(6): 3867–78.
- (2006). Manifestation of prosodic structure in articulation: Evidence from lip kinematics in English, in L. M. Goldstein, D. H. Whalen, and C. T. Best (eds.), *Laboratory Phonology* 8. Berlin: Mouton de Gruyter, 519–48.
- JUN, SUN-AH, and LADEFOGED, PETER (2002). Acoustic and aerodynamic correlates of Korean stops and fricatives. *Journal of Phonetics* 30: 193–228.
- and LADEFOGED, PETER (1999). Variation and universals in VOT: Evidence from 18 languages. *Journal of Phonetics* 27: 207–29.
- and McQUEEN, JAMES (2005). Prosodic influences on consonant production in Dutch: Effects of prosodic boundaries, phrasal accent and lexical stress. *Journal of Phonetics* 33(2): 121–57.
- and COX, ETHAN A. (2007). Prosodically driven phonetic detail in speech processing: The case of domain-initial strengthening in English. *Journal of Phonetics* 35: 210–43.
- CHO, YOUNG-MEE Y. (1990). Syntax and phrasing in Korean. In S. Inkelas and D. Zec (eds.), *The Phonology-Syntax Connection*. Chicago: University of Chicago Press, 47–62.
- CHOI, JEUNG-YOON, HASEGAWA-JOHNSON, MARK, and COLE, JENNIFER (2005). Finding intonational boundaries using acoustic cues related to the voice source. *Journal of the Acoustical Society of America* 118(4): 2579–88.
- CHOI, JOHN D. (1995). An acoustic-phonetic underspecification account of Marshallese vowel allophony. *Journal of Phonetics* 23: 323–47.
- CHOLIN, JOANA and LEVELT, WILLEM J. M. (2009). Effects of syllable preparation and syllable frequency in speech production: Further evidence for syllabic units at a post-lexical level. *Language and Cognitive Processes* 24: 662–84.
- and SCHILLER, NIELS O. (2006). Effects of syllable frequency in speech production. *Cognition* 99: 205–35.

- CHOLIN, JOANA, SCHILLER, NIELS O., and LEVELT, WILLEM J. M. (2004). The preparation of syllables in speech production. *Journal of Memory and Language* 50: 47–61.
- CHOMSKY, NOAM. (1964). *The Logical Structure of Linguistic Theory*. The Hague: Mouton.
- (1977). On Wh-movement, in A. Akmajian, T. Wasow, and P. Culicover (eds.), *Formal Syntax*. Cambridge, MA: MIT Press, 71–133.
- (1993). A minimalist program for linguistic theory, in K. Hale and S. J. Keyser (eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*. Cambridge, MA: MIT Press, 53–109.
- (1995). *The Minimalist Program*. Cambridge, MA: MIT Press.
- (1998). Minimalist inquiries: The framework. MS, Massachusetts Institute of Technology.
- and HALLE, MORRIS (1968). *The Sound Pattern of English*. New York: Harper and Row.
- and LASNIK, HOWARD (1995). The theory of Principles and Parameters, in N. Chomsky (ed.), *The Minimalist Program*. Cambridge, MA: MIT Press, 13–128.
- CHRISTENSEN, RUNE H. B. (2010). ordinal. Regression models for ordinal data. R package version <<http://www.cran.r-project.org/package=ordinal/> 2010.03-04>.
- CHRISTOFFELS, INGRID K., FIRK, CHRISTINE, and SCHILLER, NIELS O. (2007). Bilingual language control: An event-related brain potentials study. *Brain Research* 1147: 192–208.
- CHRISTOPHE, ANNE, MILLOTTE, SÉVERINE, BERNAL, SAVITA, and LIDZ, JEFFREY (2008). Bootstrapping lexical and syntactic acquisition. *Language and Speech* 51(1–2): 61–75.
- PEPERKAMP, SHARON, PALLIER, CHRISTOPHE, BLOCK, ELISA, and MEHLER, JACQUES (2004). Phonological phrase boundaries constrain lexical access, I: Adult data. *Journal of Memory and Language* 51: 523–47.
- CHURCH, BARBARA A. and SCHACTER, DANIEL L. (1994). Perceptual specificity of auditory priming: implicit memory for voice, intonation, and fundamental frequency. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 20: 521–33.
- CHURCH, KENNETH W. and GALE, WILLIAM A. (1995). Poisson Mixtures. *Journal of Natural Language Engineering* 1: 163–90.
- CIERI, CHRISTOPHER, GRAFF, DAVID, KIMBALL, OWEN, MILLER, DAVE, and WALKER, KEVIN (2005). Fisher English Training Speech, Part 2 Transcripts. Philadelphia: Linguistic Data Consortium.
- MILLER, DAVID, and WALKER, KEVIN (2004). The Fisher Corpus: A resource for the next generations of speech-to-text. *Proceedings of the 4th International Conference on Language Resources and Evaluation (LREC)*, Lisbon, 69–71.
- CLARK, EVE V. (1987). The principle of contrast: A constraint on language acquisition, in B. MacWhinney (ed.), *Mechanisms of Language Acquisition*. Hillsdale, NJ: Lawrence Erlbaum Associates, 1–34.
- CLARK, HERBERT. (1996). *Using Language*. Cambridge: Cambridge University Press.
- (1973). The language-as-fixed-effect fallacy: A critique of language statistics in psychological research. *Journal of Verbal Learning and Verbal Behavior* 12: 335–59.
- CLARK, LYNN (2009). Variation, change and the usage-based approach. Doctoral dissertation, Edinburgh University.
- CLARK, MARY (1990). *The Tonal System of Igbo*. Dordrecht: Foris.
- CLAYARDS, MEGHAN, TANENHAUS, MICHAEL K., ASLIN, RICHARD N., and JACOBS, ROBERT A. (2008). Perception of speech reflects optimal use of probabilistic speech cues. *Cognition* 108(3): 804–9.
- CLÉMENT, PHILIPPE, HANS, STÉPHANE, HARTL, DANA M., MAEDA, SHINJI, VAISSIÈRE, JACQUELINE, and BRASNU, DANIEL (2007). Vocal tract area function for vowels using

- three-dimensional magnetic resonance imaging: A preliminary study. *Journal of Voice* 21: 522–30.
- CLEMENTS, G. N. (1976). Vowel harmony in nonlinear generative phonology: An autosegmental model. [Published in 1980 by Indiana University Linguistics Club, Bloomington, IN.]
- (1977). Neutral vowels in Hungarian vowel harmony: An autosegmental interpretation. *Proceedings of the North Eastern Linguistic Society* 7, 49–64.
- (1981). The hierarchical representation of tone features. *Harvard Studies in Phonology* 2: 50–115.
- (1984). Principles of tone assignment in Kikuyu, in G. N. Clements and J. Goldsmith (eds.), *Autosegmental Studies in Bantu Tone*. Dordrecht: Foris Publications, 281–339.
- (1985). The geometry of phonological features. *Phonology Yearbook* 2: 225–52.
- (1986). Compensatory lengthening and consonant gemination in Luganda, in L. Wetzels and E. Sezer (eds.), *Studies in Compensatory Lengthening*. Dordrecht: Foris Publications, 37–78.
- (2001). Representational economy in constraint-based phonology, in T. A. Hall (ed.), *Distinctive Feature Theory*. Phonology and Phonetics Series. Berlin: Mouton, 71–146.
- and HUME, ELIZABETH (1995). The internal organization of speech sounds, in J. Goldsmith (ed.), *The Handbook of Phonological Theory*. London: Blackwell, 245–306.
- and RIDOUANE, RACHID (2006). Quantal phonetics and distinctive features: A review, in A. Botinis (ed.), *Proceedings of the ISCA Tutorial and Research Workshop on Experimental Linguistics*, August 28–30, 2006. Athens: University of Athens, 17–24.
- CLIFF, EMILY and KIRCHNER, ROBERT (in progress). An exemplar-based account of type-frequency effects in pattern generalization. MS, University of Alberta.
- CLIFTON, RACHEL, FREYMAN, RICHARD, and MEO, JENNIFER (2002). What the precedence effect tells us about room acoustics. *Perception and Psychophysics* 64: 180–8.
- CLOPPER, CYNTHIA G. and BRADLOW, ANN R. (2008). Perception of dialect variation in noise: Intelligibility and classification. *Language and Speech* 51(3): 175–98.
- (2009). Free classification of American English dialects by native and non-native listeners. *Journal of Phonetics* 37: 436–51.
- and PAOLILLO, JOHN C. (2006). North American English vowels: A factor-analytic perspective. *Literary and Linguistic Computing* 21: 445–62.
- and PISONI, DAVID. B. (2007). Free classification of regional dialects of American English. *Journal of Phonetics* 35: 421–38.
- COADY, JEFFRY A., EVANS, JULIA L., MAINELA-ARNOLD, ELINA, and KLUENDER, KEITH R. (2007). Children with specific language impairments perceive speech most categorically when tokens are natural and meaningful. *Journal of Speech, Language, and Hearing Research* 50: 41–57.
- KLUENDER, KEITH R., and EVANS, JULIA L. (2005). Categorical perception of speech by children with specific language impairments. *Journal of Speech, Language, and Hearing Research* 48: 944–59.
- COATES, JENNIFER (1993). *Women, Men, and Language: A Sociolinguistic Account of Gender Differences in Language*. London: Longman.
- COENEN, ELSE, ZWITSERLOOD, PIENIE, and BÖLTE, JENS (2001). Variation and assimilation in German: Consequences of assimilation for word recognition and lexical representation. *Language and Cognitive Processes* 16: 535–64.
- COETZEE, ANDRIES W. (2004). What it means to be a loser: Non-optimal candidates in Optimality Theory. Ph.D. dissertation, University of Massachusetts, Amherst.

- COETZEE, ANDRIES W. (2006). Variation as accessing non-grammatical candidates. *Phonology* 23: 337–85.
- (2009a). An integrated grammatical/non-grammatical model of phonological variation, in Y.-S. Kang, J.-Y. Yoon, H. Yoo, S.-W. Tang, Y.-S. Kang, Y. Jang, C. Kim, K.-A. Kim, and H.-K. Kang (eds.), *Current Issues in Linguistic Interfaces*, vol. 2. Seoul: Hankookmunhwasa, 267–94.
- (2009b). Phonological variation and lexical frequency, in A. Schardl, M. Walkow, and M. Abdurrahman (eds.), *NELS* 38, vol. 1, Amherst: GLSA, 189–202.
- (2011). Allophonic cues to syllable structure, in C. Cairns and E. Raimy (eds.), *Handbook of the Syllable*. Leiden: Brill, 295–328.
- and KAWAHARA, SHIGETO (forthcoming). Frequency and other biases in phonological variation. *Natural Language and Linguistic Theory*.
- and PATER, JOE (2008). Weighted constraints and gradient restrictions on place co-occurrence in Muna and Arabic. *Natural Language and Linguistic Theory* 26: 289–337.
- (forthcoming). The place of variation in Phonological Theory, in J. Goldsmith, J. Riggle, and A. Yu (eds.), *Handbook of Phonological Theory*, 2nd edn. Oxford: Blackwell. [ROA-946]
- and KAGER, RENÉ (2009). Introduction: Phonological models and experimental data. *Phonology* 26: 1–8.
- and PRETORIUS, RIGARDT (2010). Phonetically grounded phonology and sound change: The case of Tswana labial plosives. *Journal of Phonetics* 38(3): 404–21.
- COHEN, JACOB (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement* 20(1): 37–46.
- COHN, ABIGAIL C. (1990). Phonetic and phonological rules of nasalization. Ph.D. dissertation, UCLA. Distributed as UCLA Working Papers in Phonetics 76.
- (1993a). Nasalisation in English: Phonology or phonetics. *Phonology* 10: 43–81.
- (1993b). The status of nasalized continuants, in M. Huffman and R. Krakow (eds.), *Nasals, Nasalization, and the Velum*. San Diego: Academic Press, 329–67.
- (2005). Levels of abstractness in phonology and the lexicon: Evidence from English homophones. Paper presented at the 79th Meeting of the LSA, Oakland, CA, January 2005, and the 13th Manchester Phonology Meeting, May 2005. <<http://ling.cornell.edu/docs/CohnhomophonesHO.pdf>>.
- (2006). Is there gradient phonology? in G. Fanselow, C. Féry, M. Schlesewsky, and R. Vogel (eds.), *Gradience in Grammar: Generative Perspectives*. Oxford: Oxford University Press, 25–44.
- (2010). Laboratory Phonology: Past successes and current questions, challenges, and goals, in C. Fougeron, B. Kühnert, M. D’Imperio, and N. Vallée (eds.), *Papers in Laboratory Phonology* 10. Berlin: Mouton, 3–29.
- COLE, DESMOND T. (1955). *An Introduction to Tswana Grammar*. Cape Town: Longmans, Green & Co.
- COLE, JENNIFER (2009). Emergent feature structures: Harmony systems in exemplar models of phonology. *Language Sciences* 31: 144–60.
- COLE, JENNIFER and HUALDE, JOSÉ IGNACIO (eds.) (2007). *Change in Phonology (labphon 9)*. Berlin and New York: Mouton de Gruyter.
- KIM, HEEJIN, CHOI, HANSOOK, and HASEGAWA-JOHNSON, MARK (2007). Prosodic effects on acoustic cues to stop voicing and place of articulation: Evidence from Radio News speech. *Journal of Phonetics* 35: 180–209.

- LINEBAUGH, GARY, MUNSON, CHEYENNE, and McMURRAY, BOB (2010). Unmasking the acoustic effects of vowel-to-vowel coarticulation: A statistical modeling approach. *Journal of Phonetics* 38(2): 167–84.
- COLEMAN, JOHN S. (1992). York Talk: “Synthesis-by-rule” without segments or rewrite rules, in G. Bailly, C. Benoit, and T. R. Sawallis (eds.), *Talking Machines: Theories, Models, and Designs*. Amsterdam: Elsevier, 211–24.
- (1994). Polysyllabic words in the York Talk synthesis system, in P. A. Keating (ed.), *Phonological Structure and Phonetic Form: Papers in Laboratory Phonology III*. Cambridge: Cambridge University Press, 293–324.
- (1998). *Phonological representations—their names, forms, and powers*. Cambridge: Cambridge University Press.
- (2002). Phonetic representations in the mental lexicon, in J. Durand and B. Laks (eds.), *Phonetics, Phonology, and Cognition*. Oxford: Oxford University Press, 96–130.
- and LOCAL, JOHN K. (1992). Monostratal phonology and speech synthesis, in P. Tench (ed.), *Studies in Systemic Phonology*. London: Pinter Publishers, 183–93.
- and PIERREHUMBERT, JANET B. (1997). Stochastic phonological grammars and acceptability, in *Computational Phonology. Third Meeting of the ACL Special Interest Group*, Association for Computational Linguistics, 49–56.
- COLLIER, RENÉ, LISKER, LEIGH, HIROSE, HAJIME, and USHIJIMA, TATSUJIRO (1979). Voicing in intervocalic stops and fricatives in Dutch. *Journal of Phonetics* 7: 357–73.
- COLTHEART, MAX, RASTLE, KATHLEEN, PERRY, CONRAD, LANGDON, ROBYN, and ZIEGLER, JOHANNES (2001). DRC: A dual route cascaded model of visual word recognition and reading aloud. *Psychological Review* 108: 204–56.
- CONNELL, BRUCE (2000). The perception of lexical tone in Mambila. *Language and Speech* 43: 163–82.
- (2002). Tone languages and the universality of intrinsic F₀: Evidence from Africa. *Journal of Phonetics* 30: 101–29.
- and LADD, D. ROBERT (1990). Aspects of pitch realisation in Yoruba. *Phonology* 7: 1–29.
- CONNINE, CYNTHIA M. (2004). It’s not what you hear but how often you hear it: On the neglected role of phonological variant frequency in auditory word recognition. *Psychonomic Bulletin & Review* 11(6): 1084–9.
- and PINNOW, ELENI (2006). Phonological variation in spoken word recognition: Episodes and abstractions. *Linguistic Review* 23: 235–45.
- RANBOM, LARISSA J., and PATTERSON, DAVID J. (2008). Processing variant forms in spoken word recognition: The role of variant frequency. *Perception and Psychophysics* 70(3): 403–11.
- CONTENT, ALAIN, MEUNIER, CHRISTINE, KEARNS, RUTH K., and FRAUENFELDER, ULI H. (2001). Sequence detection in pseudowords in French: Where is the syllable effect? *Language and Cognitive Processes* 16: 609–36.
- COOPER, NICOLE, CUTLER, ANNE, and WALES, ROGER (2002). Constraints of lexical stress on lexical access in English: Evidence from native and non-native listeners. *Language and Speech* 45(3): 207–28.
- COOPER, ROGER M. (1974). The control of eye fixation by the meaning of spoken language: A new methodology for the real-time investigation of speech perception, memory, and language processing. *Cognitive Psychology* 6: 84–107.
- COOPER, WILLIAM E. and PACCIA-COOPER, JEANNE (1980). *Syntax and Speech*. Cambridge, MA: Harvard University Press.

- COOPER, WILLIAM E. and EADY, STEPHEN (1986). Metrical phonology in speech production. *Journal of Memory and Language* 25: 369–84.
- and MUELLER, PAMELA (1985). Acoustical aspects of contrastive stress in question-answer contexts. *Journal of the Acoustical Society of America* 77: 2142–56.
- and SORENSEN, JOHN (1981). *Fundamental Frequency in Sentence Production*. Heidelberg: Springer.
- CORTER, JAMES E. (1982). ADDTREE/P: A PASCAL program for fitting additive trees based on Sattath and Tversky's ADDTREE algorithm. *Behavior Research Methods and Instrumentation* 14: 353–4.
- COSTA, ALBERT and SEBASTIÁN-GALLÉS, NÚRIA (1998). Abstract phonological structure in language production: Evidence from Spanish. *Journal of Experimental Psychology: Learning, Memory and Cognition* 24: 886–903.
- CÔTÉ, MARIE-HÉLÈNE (2000). Consonant cluster phonotactics: A perceptual approach. Ph.D. dissertation, MIT, Cambridge, MA.
- and KHARLAMOV, VIKTOR (2011). The impact of experimental tasks on syllabification judgments: A case study of Russian, in C. Cairns and E. Raimy (eds.), *Handbook of the Syllable*. Leiden: Brill, 271–94.
- COUPER-KUHLEN, ELIZABETH and FORD, CECILIA E. (eds.) (2004). *Sound Patterns in Interaction. Cross-linguistic Studies from Conversation*. Amsterdam: John Benjamins.
- SELTING, MARGRET (1996). *Prosody in Conversation: Interactional Studies*. Cambridge: Cambridge University Press.
- COUPLAND, NIKOLAS (1980). Style-shifting in a Cardiff work setting. *Language in Society* 9(1): 1–12.
- (2007). *Style: Language Variation and Identity*. Cambridge: Cambridge University Press.
- CRANE, RILEY and SORNETTE, DIDIER (2008). Robust dynamic classes revealed by measuring the response function of a social system, in *Proceedings of the National Academy of Sciences* 105, 15649–53.
- CRANEN, BERT and BOVES, LOUIS (1985). Pressure measurements during speech production using semiconductor miniature pressure transducers: Impact on models for speech production. *Journal of the Acoustical Society of America* 77(4): 1543–51.
- (1988). On the measurement of glottal flow. *Journal of the Acoustical Society of America* 84(3): 888–900.
- CRAWFORD, CLIFFORD J. (2009). Adaptation and transmission in Japanese loanword phonology. Ph.D. dissertation, Cornell University.
- CREATIVE COMMONS (2009). Attribution-Share Alike 3.0, <<http://creativecommons.org/licenses/by-sa/3.0/>>, accessed April 20, 2009.
- CREEL, SARAH C., ASLIN, RICHARD N., and TANENHAUS, MICHAEL K. (2008). Heeding the voice of experience: The role of talker variation in lexical access. *Cognition* 106(2): 633–64.
- CRISTIÀ, ALEJANDRINA (2009). Individual variation in infant speech processing: Implications for language acquisition theories. Doctoral dissertation, Purdue University.
- and SEIDL, AMANDA (2008). Is infants' learning of sound patterns constrained by phonological features? *Language Learning and Development* 4: 203–27.
- CROCKER, LAURA and MUNSON, BENJAMIN (2006). Speech characteristics of gender-nonconforming boys. Oral presentation given at the Conference on New Ways of Analyzing Variation in Language, Columbus, OH <http://www.tc.umn.edu/~munso005/Crocker&Munson_NWAV2006_PostConference.pdf>, accessed March 2, 2011.

- CROOT, KAREN (2010). The emergent paradigm in Laboratory Phonology: Phonological categories and statistical generalisation in Cutler, Beckman and Edwards, Frisch and Bréa-Spahn, Kapatsinski, and Walter. *Laboratory Phonology* 1: 415–24.
- CROSSWHITE, KATHERINE (2004). Vowel reduction, in B. Hayes, R. Kirchner, and D. Steriade (eds.), *Phonetically based Phonology*. Cambridge: Cambridge University Press, 191–231.
- CROTHERS, JOHN (1978). Typology and universals of vowel systems, in J. H. Greenberg, C. A. Ferguson, and E. A. Moravcsik (eds.), *Universals of Human Language, vol. 2, Phonology*. Stanford: Stanford University Press, 93–152.
- CROWHURST, MEGAN J. and MICHAEL, LEV (2005). Iterative footing and prominence-driven stress in Nanti (Kampa). *Language* 81: 47–95.
- CUMMINS, FRED (2003). Practice and performance in speech produced synchronously. *Journal of Phonetics* 31(2): 139–48.
- CURTIN, SUZANNE, FENNELL, CHRISTOPHER. T., and ESCUDERO, PAOLA (2009). Weighting of vowel cues explains patterns of word-object associative learning. *Developmental Science* 12: 725–31.
- GOAD, HEATHER, and PATER, JOE (1998). Phonological transfer and levels of representation: The perceptual acquisition of Thai voice and aspiration by English and French speakers. *Second Language Research* 14: 389–405.
- CUTILLAS-ESPINOSA, JUAN ANTONIO (2004). Meaningful variability: A sociolinguistically-grounded approach to variation in Optimality Theory. *International Journal of English Studies* 4(2): 165–84.
- CUTLER, ANNE (1997). The syllable's role in the segmentation of stress languages. *Language and Cognitive Processes* 12: 839–45.
- (2008). The abstract representations in speech processing. *Quarterly Journal of Experimental Psychology* 61: 1601–19.
- and BUTTERFIELD, SALLY (1992). Rhythmic cues to speech segmentation: Evidence from juncture misperception. *Journal of Memory and Language* 31: 218–36.
- and CARTER, DAVID M. (1987). The predominance of strong initial syllables in the English vocabulary. *Computer, Speech and Language* 2: 133–42.
- EISNER, FRANK, MCQUEEN, JAMES M., and NORRIS, DENNIS (2010). How abstract phonemic categories are necessary for coping with speaker-related variation, in C. Fougeron, B. Kühnert, M. D'Imperio, and N. Vallée (eds.), *Laboratory Phonology 10*. Berlin: Mouton, 91–111.
- and OTAKE, TAKASHI (2004). Pseudo-homophony in non-native listening. *Journal of the Acoustical Society of America* 115: 2392.
- WEBBER, ANDREA, SMITS, ROEL, and COOPER, NICOLE (2004). Patterns of English phoneme confusions by native and non-native listeners. *Journal of the Acoustical Society of America* 116: 3668–78.
- WEBER, ANDRE, and OTAKE, TAKASHI (2006). Asymmetric mapping from phonetic to lexical representations in second-language listening. *Journal of Phonetics* 34: 269–84.
- DAHAN, DELPHINE, DRUCKER, SARAH J., and SCARBOROUGH, REBECCA A. (2008). Talker adaptation in speech perception: Adjusting the signal or the representations? *Cognition* 108(3): 710–18.
- and GASKELL, M. GARETH (2007). The temporal dynamics of ambiguity resolution: Evidence from spoken-word recognition. *Journal of Memory and Language* 57: 483–501.
- MAGNUSON, JAMES S., and TANENHAUS, MICHAEL K. (2001). Time course of frequency effects in spoken-word recognition: Evidence from eye movements. *Cognitive Psychology* 42(4): 317–67.

- DAHAN, DELPHINE, DRUCKER, SARAH J., and HOGAN, E. M. (2001). Subcategorical mismatches and the time course of lexical access: Evidence for lexical competition. *Language and Cognitive Processes* 16: 507–34.
- TANENHAUS, MICHAEL K., and CHAMBERS, CRAIG G. (2002). Accent and reference resolution in spoken-language comprehension. *Journal of Memory and Language* 47: 292–314.
- — and SALVERDA, ANNE PIER (2007). How visual information influences phonetically-driven saccades to pictures: Effects of preview and position in display, in R. P. G. van Gompel, M. H. Fischer, W. S. Murray, and R. L. Hill (eds.), *Eye Movements: A Window on Mind and Brain*. Oxford: Elsevier.
- DAINORA, AUDRA. (2001). An empirically based probabilistic model of intonation in English. Ph.D. dissertation, University of Chicago.
- (2006). Modelling intonation in English, in L. Goldstein, D. H. Whalen, and C. T. Best (eds.), *Laboratory Phonology* 8. Berlin: Mouton de Gruyter, 107–32.
- DALAND, ROBERT, PIERREHUMBERT, JANET B., and SIMS, ANDREA D. (2007). Much ado about nothing: A social network model of Russian paradigmatic gaps. *Proceedings of the 45th Annual Meeting of the Association for Computational Linguistics*, 936–43.
- DALBY, JONATHAN (1984). Phonetic structure of fast speech in American English. Ph.D. dissertation, Indiana University.
- DALGAARD, PETER (2002). *Introductory Statistics with R*. New York: Springer.
- DALTON, MARTHA and NÍ CHASAIDE, AILBHE (2006). Tonal alignment in Irish dialects. *Language and Speech* 43: 441–64.
- DALY, JOHN and HYMAN, LARRY (2007). On the representation of tone in Peñoles Mixtec. *International Journal of American Linguistics* 73: 165–207.
- DALY, NICOLA and WARREN, PAUL (2001). Pitching it differently in New Zealand English: Speaker sex and intonation patterns. *Journal of Sociolinguistics* 5(1): 85–96.
- DAMIAN, MARKUS F. and BOWERS, JEFFREY S. (2003). Effects of orthography on speech production in a form-preparation paradigm. *Journal of Memory and Language* 49: 119–32.
- DAMPER, R. I. (1998). The role of the auditory periphery in the categorization of stop consonants. *Proceedings of the Joint Meeting of the International Conference Acoustics and the Acoustical Society of America*: 1973–74.
- and HARNAD, S. R. (2000). Neural network models of categorical perception. *Perception and Psychophysics* 62: 843–67.
- DARCY, ISABELLE (2003). Assimilation phonologique et reconnaissance des mots. Ph.D. dissertation, École des hautes études en sciences sociales, Paris.
- DAVIDSON, LISA (2003). The atoms of phonological representation: Gestures, coordination, and perceptual features in consonant cluster phonotactics. Ph.D. dissertation, Department of Cognitive Science, Johns Hopkins University.
- (2005). Addressing phonological questions with ultrasound. *Clinical Linguistics and Phonetics* 19(6/7): 619–33.
- (2006a). Comparing tongue shapes from ultrasound imaging using smoothing spline analysis of variance. *Journal of the Acoustical Society of America* 120(1): 407–15.
- (2006b). Phonology, phonetics, or frequency: Influences on the production of non-native sequences. *Journal of Phonetics* 34(1): 104–37.
- (2006c). Schwa elision in fast speech: Segmental deletion or gestural overlap? *Phonetica* 63: 79–112.

- (2007a). Coarticulation in contrastive Russian stop sequences. *Proceedings of the 16th International Congress of Phonetic Sciences*. Saarbrücken, Germany: University of the Saarland, 417–20.
- (2007b). The relationship between the perception of non-native phonotactics and loanword adaptation. *Phonology* 24: 261–86.
- and DE DECKER, PAUL. (2005). Stabilization techniques for ultrasound imaging of speech articulations. *Journal of the Acoustical Society of America* 117(4/2): 2544.
- JUSCZYK, PETER, and SMOLENSKY, PAUL (2004). The initial and final states: Theoretical implications and experimental explorations of richness of the base, in R. Kager, W. Zonneveld, and J. Pater (eds.), *Fixing Priorities: Constraints in Phonological Acquisition*. Cambridge: Cambridge University Press, 321–68.
- KLEIN, HARRIET, and GRIGOS, MARIA (2007). Perceptual, kinematic, and ultrasound measurement of /r/ development in children with phonological delay. Talk presented at Ultrafest IV, New York University, September 28–9, 2007, <http://jerome.linguistics.fas.nyu.edu/presentations/Ultrafest_IV_DavKleGri.pdf>, accessed March 16, 2009.
- DAVIS, MATTHEW H., MARSLÉN-WILSON, WILLIAM D., and GASKELL, M. GARETH (2002). Leading up the lexical garden path: Segmentation and ambiguity in spoken word recognition. *Journal of Experimental Psychology: Human Perception and Performance* 28: 218–44.
- DE LACY, PAUL (2002a). The formal expression of markedness. Doctoral dissertation, University of Massachusetts, Amherst. [ROA-542].
- (2002b). The interaction of tone and stress in Optimality Theory. *Phonology* 19: 1–32.
- (2004). Markedness conflation in Optimality Theory. *Phonology* 21: 145–99.
- (2007). Quality of data in metrical stress theory. *Cambridge Extra* magazine, Issue 2.
- DE VAAN, LAURA, SCHREUDER, ROBERT, and BAAYEN, R. HARALD (2007). Regular morphologically complex neologisms leave detectable traces in the mental lexicon. *The Mental Lexicon* 2: 1–23.
- DE WACHTER, MATHIAS (2007). Example-based continuous speech recognition. Doctoral dissertation, Katholieke Universiteit Leuven.
- DECASPER, ANTHONY J. and FIFER, WILLIAM P. (1980). Of human bonding: Newborns prefer their mothers' voices. *Science* 208: 1174–6.
- DEHAENE-LAMBERTZ, GHISLAINE (1997). Electrophysiological correlates of categorical phoneme perception in adults. *NeuroReport* 8: 919–24.
- DUPOUX, E., and GOUT, A. (2000). Electrophysiological correlates of phonological processing: A cross-linguistic study. *Journal of Cognitive Neuroscience* 12: 635–47.
- and PENA, MARECELLA (2001). Electrophysiological evidence for automatic phonetic processing in neonates. *NeuroReport* 12: 3155–8.
- DELATTRE, PIERRE (1946). Stages of Old French phonetic changes observed in Modern Spanish. *Publications of the MLA* 61(1): 7–41.
- and FREEMAN, DONALD (1968). A dialect study of American r's by x-ray motion picture. *Linguistics: An International Review* 44: 29–68.
- LIBERMAN, ALVIN M., and COOPER, FRANKLIN S. (1955). Acoustic loci and transitional cues for consonants. *Journal of the Acoustical Society of America* 27: 769–73.
- DELGUTTE, BERTRAND (1997). Auditory neural processing of speech, in W. J. Hardcastle and J. Laver (eds.), *The Handbook of Phonetic Sciences*. Oxford: Blackwell, 507–38.
- DELL, FRANCOIS and ELMEDLAOUI, MOHAMED (2002). *Syllables in Tashlhiyt Berber and in Moroccan Arabic*. Dordrecht and Boston: Kluwer Academic Publishers.

- DELL, GARY S. (1986). A spreading activation theory of retrieval in sentence production. *Psychological Review* 93(3): 283–321.
- (1988). The retrieval of phonological forms in production: Tests of predictions from a connectionist model. *Journal of Memory and Language* 27: 124–42.
- (2000). Counting, connectionism and lexical representation, in M. Broe and J. Pierrehumbert (eds.), *Papers in laboratory phonology V: Acquisition and the Lexicon*. Cambridge: Cambridge University Press, 334–47.
- JULIANO, CORNELL, and GOVINDJEE, ANITA (1993). Structure and content in language production: A theory of frame constraints in phonological speech errors. *Cognitive Science* 17: 149–95.
- and REICH, PETER A. (1981). Stages in sentence production: An analysis of speech error data. *Journal of Verbal Learning and Verbal Behavior* 20: 611–29.
- SCHWARTZ, MYRNA F., MARTIN, NADINE, SAFFRAN, ELEANOR M., and GAGNON, DEBORAH A. (1997). Lexical access in aphasic and nonaphasic speakers. *Psychological Review* 104: 801–38.
- DELVAUX, VERONIQUE and SOQUET, ALAIN (2007). The influence of ambient speech on adult speech production through unintentional imitation. *Phonetica* 64: 145–73.
- DEMOLIN, DIDIER (2007). Phonological universals and the control and regulation of speech production, in M.-J. Solé, P. S. Beddor, and M. Ohala (eds.), *Experimental Approaches to Phonology*. Oxford: Oxford University Press, 75–92.
- DÉMONET, JEAN-FRANÇOIS, FIEZ, JULIE A., PAULESU, ERALDO, PETERSEN, STEVEN E., and ZATORRE, ROBERT J. (2002). PET studies of phonological processing: A critical reply to Poeppel. *Brain and Language* 55: 352–79.
- DEMUTH, KATHERINE (1993). Issues in the acquisition of the Sesotho tonal system. *Journal of Child Language* 20: 275–301.
- (1995a). The acquisition of tonal systems, in J. Archibald (ed.), *The Acquisition of Non-Linear Phonology*. Hillsdale, NJ: Lawrence Erlbaum.
- (1995b). Markedness and the development of prosodic structure, in J. Beckman (ed.), *Processings of the North Eastern Linguistic Society* 25. Amherst, MA: GLSA, University of MA, 13–25.
- (2003). The acquisition of Bantu languages, in D. Nurse and G. Phillipson (eds.), *The Bantu Languages*. Surrey, UK: Curzon Press.
- (2006). Crosslinguistic perspectives on the development of prosodic words. *Language and Speech* 49: 129–35.
- CULBERTSON, JENNIFER, and ALTER, JENNIFER (2006). Word-minimality, epenthesis, and coda licensing in the early acquisition of English. *Language and Speech* 49: 137–74.
- and McCULLOUGH, ELIZABETH (2009). The prosodic (re)organization of children's early English articles. *Journal of Child Language* 36: 173–200.
- SHATTUCK-HUFNAGEL, STEFANIE, SONG, JAE YUNG, EVANS, KAREN, KUHN, JEREMY, and SINNOTT-ARMSTRONG, MIRANDA (2009). Acoustic cues to stop coda voicing contrasts in 1-2-year olds' American English. *Journal of the Acoustical Society of America* 125(4): 2570.
- and TREMBLAY, ANNIE (2008). Prosodically-conditioned variability in children's production of French determiners. *Journal of Child Language* 35: 99–127.
- DEPAOLIS, RORY A. (2006). The influence of production on the perception of speech, in D. Bamman, T. Magnitskaia, and C. Zaller (eds.), *Proceedings of the 30th Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press, 142–53.

- DERWING, BRUCE (1992). A 'pause-break' task for eliciting syllable boundary judgments from literate and illiterate speakers: preliminary results from five diverse languages. *Language and Speech* 35: 219–35.
- (2007). What's in CVC-like things? Ways and means to look at phonological units across languages, in M.-J. Solé, P. S. Beddor, and M. Ohala (eds.), *Experimental Approaches to Phonology*. Oxford: Oxford University Press, 325–38.
- and BAKER, WILLIAM J. (1980). Rule learning and the English inflections (with special emphasis on the plural), in G. D. Prideaux, B. L. Derwing, and W. J. Baker (eds.), *Experimental linguistics: integration of theories and applications*. Ghent: E. Story-Scientia, 248–72.
- DEVILLE, GÉRARD (1891). Notes sur le developpement du langage II. *Revue de linguistics et de philology comparée* 24: 10–42, 128–43, 242–57, 300–20.
- DEVONISH, HUBERT (2007). Nationalism, the State, and Creole language identity. Paper presented at Creoles, Acts of Identity, and Education Workshop. Stanford University, July 15, 2007.
- DEWAELE, JEAN-MARC (1998). Lexical inventions: French interlanguage as L2 versus L3. *Applied Linguistics* 19: 471–90.
- DEWSON, JAMES H. (1964). Speech sound discrimination by cats. *Science* 144: 555–6.
- DI PAOLO, MARIANNA and FABER, ALICE (1990). Phonation differences and the phonetic content of the tense-lax contrast in Utah English. *Language Variation and Change* 2: 155–204.
- DIEHL, RANDY L. (1991). The role of phonetics within the study of language. *Phonetica* 48: 120–34.
- (2008). Acoustic and auditory phonetics: The adaptive design of speech sound systems. *Philosophical Transactions of the Royal Society B* 363: 965–78.
- WALSH, MARGARET A., and KLUENDER, KEITH (1991). Auditory discontinuities interact with categorization: Implications for speech perception. *Journal of the Acoustical Society of America* 89(6): 2905–9.
- DIESCH, EUGEN, EULITZ, CARSTEN, HAMPSON, SCOTT, and ROSS, BERNHARD (1996). The neurotopography of vowels as mirrored by evoked magnetic field measurements. *Brain and Language* 53: 143–68.
- DILLEY, LAURA C. (submitted). The role of F0 alignment in distinguishing categories in American English intonation. *Journal of Phonetics*.
- and MCAULEY, J. DEVIN (2008). Distal prosodic context affects word segmentation and lexical processing. *Journal of Memory and Language* 59: 294–311.
- and PITT, MARK (2007). A study of regressive place assimilation in spontaneous speech and its implications for spoken word recognition. *Journal of the Acoustical Society of America* 122: 2340–53.
- SHATTUCK-HUFNAGEL, STEFANIE, and OSTENDORF, MARI (1996). Glottalization of word-initial vowels as a function of prosodic structure. *Journal of Phonetics* 24: 423–44.
- DIMITROVA, SNEZHINA and TURK, ALICE (in preparation). Patterns of English phrasal-stress induced lengthening.
- D'IMPERIO, MARIAPAOLA (1995). Timing differences between prenuclear and nuclear pitch accents in Italian. *Journal of the Acoustical Society of America* 98(5): 2894.
- (1997). Narrow focus and focal accent in the Neapolitan variety of Italian. *Proceedings of ESCA Workshop on Intonation*, Athens, Greece, 87–90.

- D'IMPERIO, MARIAPAOLA (2000). The role of perception in defining tonal targets and their alignment. Ph.D. dissertation, Ohio State University.
- (2001). Focus and tonal structure in Neapolitan Italian. *Speech Communication* 33(4): 339–56.
- (2002a). Italian intonation: An overview and some questions. *Probus* (Special issue on intonation in Romance languages), 14(1), 37–69.
- (2002b). Language-specific and universal constraints on tonal alignment: The nature of targets and “anchors”, in B. Bel and I. Marlien (eds.), *Proceedings of Speech Prosody 2002*, Aix-en-Provence, France, April 11–13, 2002, 101–6.
- ELORDIETA, GORKA, FROTA, SÓNIA, PRIETO, PILAR, and VIGÁRIO, MARINA (2005). Intonational phrasing in Romance: the role of syntactic and prosodic structure, in S. Frota, M. Vigário, and M. J. Freitas (eds.), *Prosodies*. Berlin and New York: Mouton de Gruyter, 59–97.
- ESPESER, ROBERT, LOEVENBRUCK, HÉLÈNE, MENEZES, CAROLINE, NGUYEN, NOËL, and WELBY, PAULINE (2007). Are tones aligned with articulatory events? Evidence from Italian and French in J. Cole and J. I. Hualde (eds.), *Laboratory Phonology 9*. Berlin: Mouton de Gruyter, 577–608.
- and GILI FIVELA, BARBARA (2003). How many levels of phrasing? Evidence from two varieties of Italian, in J. Local, R. Ogden, and R. Temple (eds.), *Phonetic Interpretation: Papers in Laboratory Phonology VI*. Cambridge: CUP, 130–44.
- and NIEBUHR, OLIVER (2010). Alignment perception of high intonational plateaux in Italian and German. *Proceedings of Speech Prosody 2010*, Chigago, IL.
- and HOUSE, DAVID (1997). Perception of questions and statements in Neapolitan Italian, in G. Kokkinakis, N. Fakotakis, and E. Dermatas (eds.), *Proceedings of Eurospeech'97*, Rhodes, Greece, vol. 1, 251–4.
- NGUYEN, NOËL, and MUNHALL, KEVIN G. (2003). An articulatory hypothesis for the alignment of tonal targets in Italian. *Proceedings of the 15th International Congress of Phonetic Sciences*, Barcelona, Spain, August 3–9, 2003, 253–6.
- PETRONE, CATERINA, and NGUYEN, NOËL (2007). Effects of tonal alignment on lexical identification in Italian, in C. Gussenhoven and T. Riad (eds.), *Tones and Tunes*, vol. 2. Berlin: Mouton de Gruyter, 79–106.
- DINKIN, AARON (2008). The real effect of word frequency on phonetic variation. University of Pennsylvania Working Papers in Linguistics, 14.1, <<http://repository.upenn.edu/pwpl/vol14/issi/8/>>.
- DIXIT, PRAKASH R. and MACNEILAGE, PETER F. (1980). Cricothyroid activity and control of voicing in Hindi stops and affricates. *Phonetica* 37: 397–406.
- DMITRIEVA, OLGA and JONGMAN, ALLARD (2007). Phonological neutralization by native and non-native speakers: The case of Russian ?nal devoicing. MS, Stanford and KU, <http://www.stanford.edu/~dmitro/Dmitrieva_Jongman.pdf>, accessed March 23, 2010.
- DOCHERTY, GERARD (2007a). Speech in its natural habitat: Accounting for social factors in phonetic variability, in J. Cole and J. I. Hualde (eds), *Laboratory Phonology 9*. Berlin: Mouton de Gruyter, 1–35.
- (2007b). Prosodic factors and sociophonetic variation: Speech rate and glottal variants in Tyneside English. *Proceedings of the 17th International Congress of Phonetic Sciences*, Saarbrücken, Germany: 1517–20.
- and FOULKES, PAUL (1999). Instrumental phonetics and phonological variation: Case studies from Derby and Newcastle, in P. Foulkes and G. J. Docherty (eds.), *Urban Voices: Accent Studies in the British Isles*. London: Arnold, 47–71.

- (2000). Speaker, speech, and knowledge of sounds, in N. Burton-Roberts, P. Carr, and G. J. Docherty (eds.), *Phonological Knowledge: Conceptual and Empirical Issues*. Oxford, Oxford University Press, 105–29.
- (2005). Glottal variants of (t) in the Tyneside variety of English: An acoustic profiling study, in W. Hardcastle and J. M. Beck (eds.), *A Figure of Speech: A Festschrift for John Laver*. London: Lawrence Erlbaum, 173–99.
- (forthcoming). An evaluation of usage-based approaches to the modelling of sociophonetic variability. *Lingua*.
- MILROY, JAMES, MILROY, LESLEY, and WALSHAW, DAVID (1997). Descriptive adequacy in phonology: A variationist perspective. *Journal of Linguistics* 33: 275–310.
- TILLOTSON, JENNY, and WATT, DOMINIC J. L. (2006). On the scope of phonological learning: Issues arising from socially structured variation, in L. Goldstein, D. H. Whalen, and C. T. Best (eds.), *Laboratory Phonology* 8. Berlin: Mouton de Gruyter, 393–422.
- DOGIL, GRZEGORZ (2007). Phonetic dimensions of segmental strength, in *Proceedings of ICPHS XVI*. Saarbrücken, 89–92.
- DOHEN, MARION, LÈVENBRUCK, HÉLÈNE, CATHIARD, MARIE-AGNÈS, and SCHWARTZ, JEAN-LUC (2004). Visual perception of contrastive focus in reiterant French speech. *Speech Communication* 44: 155–72.
- DOLBEX, ANDREW E. and HANSSON, GUNNAR Ó. (1999). The source of naturalness in synchronic phonology, in S. Billings, J. Boyle, and A. Griffith (eds.), *CLS* 35, vol. 1. Chicago: CLS, 59–69.
- DOMMELEN, WIM VAN (1983). Parameter interaction in the perception of French plosives. *Phonetica* 40: 32–62.
- DONEGAN, PATRICIA and STAMPE, DAVID (1979). The study of natural phonology, in D. A. Dinnsen (ed.), *Current Approaches to Phonological Theory*. Bloomington: Indiana University Press, 126–73.
- DOOLING, ROBERT J. and BROWN, S. D. (1990). Speech perception by budgerigars (*Melopsittacus undulatus*): Spoken vowels. *Perception and Psychophysics* 47: 568–74.
- BEST, CAROL T., and BROWN, S. D. (1995). Discrimination of synthetic full-formant and sinewave /ra-la/ continua by budgerigars (*Melopsittacus undulatus*) and zebra finches (*Taeniopygia guttata*). *Journal of the Acoustical Society of America* 97: 1839–46.
- DOWNING, LAURA (1989). The interaction of tone and intonation in Jita yes/no questions. *Studies in the Linguistic Sciences* 19: 91–113.
- and POMPINO-MARSCHALL, BERND (2004). Prosody and information structure in Chichewa. *ZAS Papers in Linguistics* 37: 167–86.
- DRAGER, KATIE (2006). From bad to bed: The relationship between perceived age and vowel perception in New Zealand English. *Te Reo* 48: 55–68.
- (2008). Sensitivity to grammatical and sociophonetic variability in perception. Oral presentation given at the Eleventh Conference on Laboratory Phonology, July 1, 2008, Wellington, New Zealand.
- (2009). A sociophonetic ethnography of Selwyn Girls' High. Doctoral dissertation, University of Canterbury, NZ.
- (2010). Sensitivity to grammatical and sociophonetic variability in perception. *Laboratory Phonology* 1(1): 93–120.
- DRESHER, B. ELAN (2008). The contrastive hierarchy in phonology, in P. Avery, B. E. Dresher, and K. Rice (eds.), *Contrast in Phonology: Perception and Acquisition*. Berlin: Mouton, 11–33.

- DRESHER, B. ELAN (2009). *The Contrastive Hierarchy in Phonology*. Cambridge: Cambridge University Press.
- DUANMU, SAN (1994). Against contour tone units. *Linguistic Inquiry* 25: 555–608.
- DUPOUX, EMMANUEL, CHRISTOPHE, P., SEBASTIAN-GALLES, NÚRIA, and MEHLER, JACQUES (1997). A distressing deafness in French. *Journal of Memory and Language* 36: 406–21.
- KAKEHI, KAZUHIKO, HIROSE, YUKI, PALLIER, CHRISTOPHE, and MEHLER, JACQUES (1999). Epenthetic vowels in Japanese: A perceptual illusion? *Journal of Experimental Psychology: Human Perception and Performance* 25(6): 1568–78.
- PALLIER, CHRISTOPHE, KAKEHI, KAZUHIKO, and MEHLER, JACQUES (2001). New evidence for prelexical phonological processing in word recognition. *Language and Cognitive Processes* 5: 491–505.
- DURAND, JACQUES and LAKS, BERNARD (eds.) (1996). *Current Trends in Phonology: Models and Methods*. Salford: University of Salford Publications.
- DURAND, MARGUERITE (1955). Du rôle de l'auditeur dans la formation des sons du langage. *Journal de Psychologie Normale et Pathologique* 52: 347–55.
- DYER, JUDY M. (2002). “We all speak the same round here”: Dialect levelling in a Scottish-English community. *Journal of Sociolinguistics* 6: 99–116.
- DYHR, NIELS (1990). The activity of the cricothyroid muscle and the intrinsic fundamental frequency in Danish vowels. *Phonetica* 47(3–4): 141–54.
- EADY, STEPHEN and COOPER, WILLIAM (1986). Speech intonation and focus location in matched statements and questions. *Journal of the Acoustical Society of America* 80: 402–16.
- ECHOLS, CATHERINE and NEWPORT, ELISSA (1992). The role of stress and position in determining first words. *Language Acquisition* 2: 189–220.
- ECKERT, PENELOPE (1989). The whole woman: Sex and gender differences in variation. *Language Variation and Change* 1: 245–67.
- (2000). *Linguistic Variation as Social Practice*. Oxford: Blackwell.
- (2005). Variation, convention, and social meaning. Plenary address delivered at the Linguistic Society of America annual meeting. <<http://www.stanford.edu/~eckert/thirdwave.html>>, accessed May 30, 2009.
- and MCCONNELL-GINET, SALLY (1992). Think practically and look locally: Language and gender as community-based practice. *Annual Review of Anthropology* 21: 461–90.
- EDDINGTON, DAVID (1996). Diphthongization in Spanish derivational morphology: An empirical investigation. *Hispanic Linguistics* 8: 1–35.
- EDLUND, JENS, BESKOW, JONAS, ELENIUS, KJELL, HELLMER, KAHL, STRÖMBERGSSON, SOFIA, and HOUSE, DAVID (2010). Spontal: A Swedish spontaneous dialogue corpus of audio, video and motion capture, in N. Calzolari, K. Choukri, B. Maegaard, J. Mariani, J. Odijk, S. Piperidis, M. Rosner, and D. Tapias (eds.), *Proceedings of the Seventh Conference on International Language Resources and Evaluation (LREC'10)*, Valetta, Malta, 2992–5.
- EDMONSON, JEROLD and ESLING, JOHN (2006). The valves of the throat and their functioning in tone, vocal register and stress: Laryngoscopic case studies. *Phonology* 23: 157–91.
- EDWARDS, JAN (1992). Compensatory speech motor abilities in normal and phonologically disordered children. *Journal of Phonetics* 20: 189–207.
- and BECKMAN, MARY E. (2008a). Some cross-linguistic evidence for modulation of implicational universals by language-specific frequency effects in phonological development. *Language Learning and Development* 4: 122–56.

- (2008b). Methodological questions in studying phonological acquisition. *Clinical Linguistics and Phonetics* 22: 939–58.
- and FLETCHER, JANET (1991). The articulatory kinematics of final lengthening. *Journal of the Acoustical Society of America* 89(1): 369–81.
- and MUNSON, BENJAMIN (2004). The interaction between vocabulary size and phonotactic probability effects on children’s production accuracy and fluency in nonword repetition. *Journal of Speech, Language, and Hearing Research* 47: 421–36.
- FOURAKIS, MARIOS, BECKMAN, MARY E., and FOX, ROBERT A. (1999). Characterizing knowledge deficits in phonological disorders. *Journal of Speech, Language, and Hearing Research* 42: 169–86.
- FOX, ROBERT A., and ROGERS, CATHERINE (2002). Final consonant discrimination in children: Effects of phonological disorder, vocabulary size, and phonetic inventory size. *Journal of Speech, Language, and Hearing Research* 45: 231–42.
- GIBBON, FIONA, and FOURAKIS, MARIOS (1997). On discrete changes in the acquisition of the alveolar/velar stop consonant contrast. *Language and Speech* 40: 203–10.
- EFTING, WIEKE (1991). The effect of “information value” and “accentuation” on the duration of Dutch words, syllables, and segments. *Journal of the Acoustical Society of America* 89(1): 412–24.
- EGUCHI, SATOSHI and HIRSCH, IRA (1969). Development of speech sounds in children. *Acta Otolaryngologica Supplementum* 257: 1–51.
- EILERS, REBECCA E. and MINIFIE, FRED D. (1975). Fricative discrimination in early infancy. *Journal of Speech and Hearing Research* 18(1): 158–67.
- WILSON, WESKEY R., and MOORE, JOHN M. (1977). Developmental changes in speech discrimination in infants. *Journal of Speech and Hearing Research* 20: 766–80.
- EIMAS, PETER D., MILLER, JOANNE L., and JUSCZYK, PETER W. (1987). On infant speech perception and the acquisition of language, in S. Harnad (ed.), *Categorical Perception: The Groundwork of Cognition*. New York: Cambridge University Press, 161–95.
- SIQUELAND, EINAR R., JUSCZYK, PETER, and VIGORITO, JAMES (1971). Speech perception in infants. *Science* 171: 303–6.
- EISNER, FRANK (2006). Lexically-guided perceptual learning in speech processing. Ph.D. dissertation, Nijmegen University.
- and MCQUEEN, JAMES M. (2006). Perceptual learning in speech: Stability over time. *Journal of the Acoustical Society of America* 119: 1950–3.
- ELBERS, LOEKIE and WIJNEN, F. (1992). Effort, production skill, and language learning, in C. A. Ferguson, L. Menn, and C. Stoel-Gammon (eds.), *Phonological development: Models, research, implications*. Timonium, MD: York Press, 337–68.
- ELENBAAS, NINE (1999). A unified account of binary and ternary stress. Ph.D. dissertation, University of Utrecht. [ROA-397].
- and KAGER, RENÉ (1999). Ternary rhythm and the lapse constraint. *Phonology* 16: 273–329.
- ELLIS, ANDREW W. and LAMBON RALPH, MATTHEW A. (2000). Age of acquisition effects in adult lexical processing reflect loss of plasticity in maturing systems: Insights from connectionist networks. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 26: 1103–23.
- ELLIS, LUCY and HARDCASTLE, WILLIAM J. (2002). Categorical and gradient properties of assimilation in alveolar to velar sequences: Evidence from EPG and EMA data. *Journal of Phonetics* 30: 373–96.

- ELMAN, JEFFREY, DIEHL, RANDY, and BUCHWALD, SUSAN (1977). Perceptual switching in bilinguals. *Journal of the Acoustical Society of America* 62: 971–4.
- and McCLELLAND, JAMES (1986). Exploiting lawful variability in the speech wave, in J. S. Perkell and D. H. Klatt (eds.), *Invariance and Variability in Speech Processes*. Hillsdale, NJ: Erlbaum, 360–86.
- ELORDIETA, GORKA and CALLEJA, NAGORE (2005). Microvariation in accentual alignment in Basque Spanish. *Language and Speech* 48: 397–439.
- FROTA, SÓNIA, PRIETO, PILAR, and VIGÁRIO, MARINA (2003). Effects of constituent weight and syntactic branching on intonational phrasing in Ibero-Romance, in M.-J. Solé, D. Recasens, and J. Romero (eds.), *Proceedings of the 15th International Congress of Phonetic Sciences*. Barcelona: Causal Productions Pty Ltd., 487–90.
- — and VIGÁRIO, MARINA (2005). Subjects, objects and intonational phrasing in Spanish and Portuguese. *Studia Linguistica* (Special issue on Boundaries in Intonational Phonology, ed. M. Horne and M. van Oostendorp) 59: 110–43.
- ENGEL, ANDREAS K., FRIES, PASCAL, and SINGER, WOLF (2001). Dynamic predictions: Oscillations and synchrony in top-down processing. *Nature Reviews Neuroscience* 2: 704–16.
- ENGLUND, KJELLRUN T. (2005). Voice onset time in infant-directed speech over the first six months. *First Language* 25(2): 219–34.
- and BEHNE, DAWN (2006). Changes in infant directed speech in the first six months. *Infant and Child Development* 15: 139–60.
- ENGSTRAND, OLLE (1981). Acoustic constraints of invariant input representation? An experimental study of selected articulatory movements and targets. Reports of the Uppsala University Department of Linguistics 7, Department of Linguistics, Uppsala, Sweden, 67–94.
- ENGWALL, OLOV (2003). Combining MRI, EMA and EPG measurements in a three-dimensional tongue model. *Speech Communication* 41: 303–29.
- EPSTEIN, MELISSA and STONE, MAUREEN (2005). The tongue stops here: Ultrasound imaging of the palate. *Journal of the Acoustical Society of America* 118(4): 2128–31.
- ERICKSON, DONNA (1976). A physiological analysis of the tones of Thai. Ph.D. dissertation, University of Connecticut.
- (1994). Laryngeal muscle activity in connection with Thai tones. *Annual Bulletin of the Research Institute of Logopedics and Phoniatics* 27: 135–49.
- (2002). Articulation of extreme formant patterns for emphasized vowels. *Phonetica* 59: 134–49.
- ERIKSSON, ANDERS (2007). KatPer: A perception test, replicating a classical experiment on Categorical Perception. <<http://www.ling.gu.se/~anders/KatPer/Applet/test.eng.html>>, accessed March 13, 2009.
- ERNESTUS, MIRJAM (2000). *Voice Assimilation and Segment Reduction in Casual Dutch, a Corpus-Based Study of the Phonology-Phonetics Interface*. Utrecht: LOT.
- (forthcoming). Acoustic reduction and the roles of abstractions and exemplars in speech processing. *Lingua*.
- and BAAYEN, R. HARALD (2003). Predicting the unpredictable: Interpreting neutralized segments in Dutch. *Language* 79: 5–38.
- — (2007). Paradigmatic effects in auditory word recognition: The case of alternating voice in Dutch. *Language and Cognitive Processes* 22: 1–24.

- and SCHREUDER, ROB (2002). The recognition of reduced word forms. *Brain and Language* 81: 162–73.
- LAHEY, MYBETH, VERHEES, FEMKE, and BAAYEN, R. HARALD (2006). Lexical frequency and voice assimilation. *Journal of the Acoustical Society of America* 120: 1040–51.
- ERNST, MARC O. and BANKS, MARTIN S. (2002). Humans integrate visual and haptic information in a statistically optimal fashion. *Nature* 415(6870): 429–33.
- ESCUDERO, PAOLA (2005). Linguistic perception and second language acquisition: Explaining the attainment of optimal phonological categorization. Doctoral dissertation, Utrecht University, Utrecht. LOT Dissertation Series 113.
- (2009). Linguistic perception of similar L2 sounds, in P. Boersma and S. Hamann (eds.), *Phonology in Perception*. Berlin: Mouton de Gruyter, 151–90.
- and BENDERS, TITIA (2010). Phonetic and phonological approaches to early word recognition: Empirical findings, methodological issues, and theoretical implications, in M. Everaert, T. Lentz, H. de Mulder, Ø. Nilsen, and A. Zondervan (eds.), *The Linguistics Enterprise: From Knowledge of Language to Knowledge in Linguistics*. Amsterdam: John Benjamins, 55–78.
- and LIPSKI, SILVIA (2009). Native, non-native and L2 perceptual cue weighting for Dutch vowels: The case of Dutch, German, and Spanish listeners. *Journal of Phonetics* 37: 452–66.
- and BOERSMA, PAUL (2002). The subset problem in L2 perceptual development: Multiple category assimilation of Dutch learners of Spanish, in B. Skarabela, S. Fish, and A. H.-J. Doh (eds.), *Proceedings of the 26th Boston University Conference on Language Development*. Somerville, MA: Cascadilla.
- (2003). Modelling the perceptual development of phonological contrasts with Optimality Theory and the Gradual Learning Algorithm, in S. Arunachalam, E. Kaiser, and A. Williams (eds.), *Proceedings of the 25th Penn Linguistics Colloquium*. Penn Working Papers in Linguistics 8: 71–85.
- (2004). Bridging the gap between L2 speech perception research and phonological theory. *Studies in Second Language Acquisition* 26: 551–85.
- BROERSMA, MIRJAM, and SIMON, ELLEN (forthcoming). Recognition of auditorily confusable words in native listeners versus L2 and L3 learners. *Language and Cognitive Processes*.
- DUINMEIJER, I., VAN DEN VELDE, H., and ADANK, P. (under review). Predicting and explaining problems in L2 vowel perception: The case of Spanish learners of Dutch.
- HAYES-HARB, RACHEL, and MITTERER, HOLGER (2008). Novel L2 words and asymmetric lexical access. *Journal of Phonetics* 36: 345–60.
- and SIMON, ELLEN (in preparation). The effect of orthographic cues on L2 word learning: Spanish learners' acquisition of novel words containing Dutch vowel contrasts.
- and WANROOIJ, KAREN (2010). The effect of L1 orthography on L2 vowel perception. *Language and Speech* 53(3): 343–65.
- ESCUDIER, PIERRE, SCHWARTZ, JEAN-LUC, and BOULOGNE, M. (1985). Perception of stationary vowels: internal representation of the formants in the auditory system and two-formant models. *Franco-Swedish Seminar*, Société Française d'Acoustique, Grenoble, 143–74.
- ESLING, JOHN (1978). The identification of features of voice quality in social groups. *Journal of the International Phonetic Association* 8: 18–23.

- ESPY-WILSON, CAROL Y. (1992). Acoustic measures for linguistic features distinguishing the semi-vowels /w j r l/ in American English. *Journal of the Acoustical Society of America* 92(1): 736–57.
- ESTOW, SARAH, JAMIESON, JEREMY P., and YATES, JENNIFER R. (2007). Self-monitoring and mimicry of positive and negative social behaviors. *Journal of Research in Personality* 41: 425–33.
- ETTEMA, SANDRA L., KUEHN, DAVID P., PERLMAN, ADRIENNE L., and ALPERIN, NOAH (2002). Magnetic resonance imaging of the levator veli palatini muscle during speech. *Cleft Palate Journal* 39: 130–44.
- EULITZ, CARSTENS and LAHIRI, ADITI (2004). Neurobiological evidence for abstract phonological representations in the mental lexicon during speech recognition. *Journal of Cognitive Neuroscience* 16: 577–83.
- OBLESER, JONAS, and REETZ, HENNING (2003). Brain electric activity reflects the underspecification of phonological features in the mental lexicon. *Proceedings of the 15th International Congress of Phonetic Sciences*, Barcelona, Spain: 1631–4.
- EVANS, BRONWEN G. and IVERSON, PAUL (2004). Vowel normalization for accent: An investigation of best exemplar locations in northern and southern British English sentences. *Journal of the Acoustical Society of America* 115: 352–61.
- EVERITT, BRIAN S. and HOTHORN, TORSTEN (2010). *Statistical Analyses using R*. Boca Raton, FL: CRC Press.
- LANDAU, SABINE, and LEESE, MORVEN (2001). *Cluster Analysis*. New York: Oxford University Press.
- EVERS, VINCENT, REETZ, HENNING, and LAHIRI, ADITI (1998). Crosslinguistic acoustic categorization of sibilants independent of phonological status. *Journal of Phonetics* 26: 345–70.
- FACE, TIMOTHY L. (2005). F0 peak height and the perception of sentence type in Castilian Spanish. *Revista Internacional de Lingüística Iberoamericana* 2(6): 49–65.
- and PRIETO, PILAR (2007). Rising accents in Castilian Spanish: A revision of Sp_ToBI. *Journal of Portuguese Linguistics* 5–6: 117–46.
- FAGYAL, ZSUZSUSANSA, SWARUP, SAMARTH, ESCOBAR, ANNA MARIE, GASSER, LES, and LAKKARAJU, KIRAN (2010). Centers and peripheries: Network roles in language change. *Lingua* 120(8): 2061–79.
- FALÉ, ISABEL and FARIA, ISABEL H. (2005). A glimpse of the time course of intonation processing. *Proceedings of the 9th European Conference on Speech Communication and Technology*. Lisboa, 2377–80.
- (2006). Categorical perception of intonational contrasts in European Portuguese, in R. Hoffmann and H. Mixdorff (eds.), *Proceedings of Speech Prosody*. Dresden: TUDpress Verlag der Wissenschaften GmbH, 69–72.
- FALLOWS, DEBORAH (1981). Experimental evidence for English syllabification and syllable structure. *Journal of Linguistics* 17: 309–17.
- FANSELOW, GISBERT, FÉRY, CAROLINE, VOGEL, RALPH, and SCHLESEWSKY, MATTHIAS (eds.) (2006). *Gradience in Grammar: Generative Perspectives*. Oxford: Oxford University Press.
- FANT, GUNNAR (1959). Acoustic analysis and synthesis of speech with applications to Swedish. Ericsson Technics Report No. 1.
- (1960). *Acoustic Theory of Speech Production*. The Hague: Mouton.
- (1979). Glottal source and excitation analysis. *Speech Trans. Lab. Q. Prog. Stat. Rep.* 1. Stockholm: Royal Institute of Technology, 85–107.
- (1982). Preliminaries to analysis of the human voice source. *Speech Trans. Lab. Q. Prog. Stat. Rep.* 4. Stockholm: Royal Institute of Technology, 1–27.

- LILJENCANTS, JOHAN, and LIN, QI-GUANG (1985). A four-parameter model of glottal flow. *Speech Trans. Lab. Q. Prog. Stat. Rep.* 4. Stockholm: Royal Institute of Technology, 1–13.
- FARNETANI, EDDA and BUSÀ, M. G. (1994). Italian clusters in continuous speech. *Proceedings of the International Conference on Spoken Language Processing*, vol. 1. Yokohama, 359–62.
- and RECASENS, DANIEL (1999). Coarticulation models in recent speech production theories, in W. J. Hardcastle and N. Hewlett (eds.), *Coarticulation: Theory, Data and Techniques*. Cambridge: Cambridge University Press, 31–65.
- FEAGIN, CRAWFORD (2002). Entering the community: Fieldwork, in J. K. Chambers, P. Trudgill, and N. Schilling-Estes (eds.), *The Handbook of Language Variation and Change*, 1. Malden, MA: Blackwell, 20–39.
- FELDER, VERENA, JÖNSSON-STEINER, ELISABET, EULITZ, CARSTEN, and LAHIRI, ADITI (2009). Asymmetric processing of lexical tonal contrast in Swedish. *Attention, Perception and Psychophysics* 71: 1890–9.
- FELDMAN, LAURIE B. (2003). Morphological processing as revealed through the repetition priming task, in J. Bowers and C. Marsolek (eds.), *Rethinking Implicit Memory*. Oxford: Oxford University Press.
- FELDMAN, NAOMI H., GRIFFITHS, THOMAS L., and MORGAN, JAMES L. (2009). The influence of categories on perception: Explaining the perceptual magnet effect as optimal statistical inference. *Psychological Review* 116(4): 752–82.
- FENG, CHING-MEI, NARAYANA, SHALINI, LANCASTER, JACK L., JERABEK, PAUL A., ARNOW, THOMAS L., ZHU, FANG, TAN, LU HAI, FOX, PETER T., and GAO, JIA-HONG (2004). CBF changes during brain activation: fMRI vs. PET. *Neuroimage* 22: 443–6.
- BYERS-HEINLEIN, KRISTA, and WERKER, JANET F. (2007). Using speech sounds to guide word learning: The case of bilingual infants. *Child Development* 78: 1510–25.
- and WAXMAN, SANDRA R. (2010). What paradox? Referential cues allow for infant use of phonetic detail in word learning. *Child Development* 81(5): 1376–83.
- and WERKER, JANET F. (2003). Early word learners' ability to access phonetic detail in well-known words. *Language and Speech* 46(2–3): 245–64.
- — (2004). Infant attention to phonetic detail: Knowledge and familiarity effects. *Proceedings of the 28th Annual Boston University Conference on Language Development*. Boston: Cascadilla Press, 165–76.
- FERGUSON, CHARLES, MENN, LISE, and STOEL-GAMMON, CAROL (eds.). (1992). *Phonological Development*. Timonium, MD: York Press.
- FERNALD, ANNE (1985). Four-month-old infants prefer to listen to motherese. *Infant Behavior and Development* 8: 181–95.
- (2000). Speech to infants as hyperspeech: Knowledge-driven process in early word recognitions. *Phonetica* 57: 242–54.
- PINTO, JOHN P., SWINGLEY, DAVID, WEINBERG, AMY, and MCROBERTS, GERALD W. (1998). Rapid gains in speed of verbal processing by infants in the 2nd year. *Psychological Science* 9: 228–31.
- and SIMON, THOMAS (1984). Expanded intonation contours in mothers' speech to newborns. *Developmental Psychology* 20: 104–13.
- FERRAND, LUDOVIC and GRAINGER, JONATHAN G. (1992). Phonology and orthography in visual word recognition: Evidence from masked non-word priming. *Quarterly Journal of Experimental Psychology Section A: Human Experimental Psychology* 45: 353–72.
- — (1993). The time course of orthographic and phonological code activation in the early phases of visual word recognition. *Bulletin of the Psychonomic Society* 31: 119–22.

- FERRAND, LUDOVIC (1994). Effects of orthography are independent of phonology in masked form priming. *Quarterly Journal of Experimental Psychology* 47A: 431–41.
- SEGUI, JUAN, and GRAINGER, JONATHAN (1996). Masked priming of words and picture naming: The role of syllabic units. *Journal of Memory and Language* 35: 708–23.
- — and HUMPHREYS, GLYN W. (1997). The syllable's role in word naming. *Memory and Cognition* 25: 458–70.
- FERREIRA, FERNANDA (1993). Creation of prosody during sentence production. *Psychological Review* 100(2): 233–53.
- and TANENHAUS, MICHAEL K. (eds.) (2007–8). Special issue(s) on language–vision interactions. *Journal of Memory and Language* 57 and 58.
- FÉRY, CAROLINE, FANSELOW, GIBERT, and KRIFKA, MANFRED (eds.) (2007). The notions of information structure. *Working Papers of the SFB632, Interdisciplinary Studies on Information Structure (ISIS)* 6. Potsdam: Universitätsverlag Potsdam.
- and ISHIHARA, SHIN (2009). The phonology of second occurrence focus. *Journal of Linguistics* 45: 285–313.
- and KÜGLER, FRANK (2008). Pitch accent scaling on given, new and focused constituents in German. *Journal of Phonetics* 36(4): 680–703.
- FEYERABEND, PAUL (1975). *Against method*. Medawah, NJ: Humanities Press.
- FIDELHOLTZ, JAMES L. (1975). Word frequency and vowel reduction in English, in R. E. Grossman, L. J. San, and T. J. Vance (eds.), *Papers from the 11th Regional Meeting Chicago Linguistic Society*, 200–13.
- FIFER, WILLIAM P. and MOON, CHRISTINE (2003). Prenatal development, in A. Slater and G. Bremner (eds.), *An Introduction to Developmental Psychology*. Oxford: Blackwell, 95–114.
- FIKKERT, PAULA (1994). *On the Acquisition of Prosodic Structure*. Dordrecht: Holland Institute of Generative Linguistics.
- (2005). Getting sounds structures in mind. Acquisition bridging linguistics and psychology?, in A. Cutler (ed.), *Twenty-First Century Psycholinguistics: Four Cornerstones*. Mahwah, NJ: Lawrence Erlbaum, 43–56.
- and LEVELT, CLARA C. (2008). How does place fall into place? The lexicon and emergent constraints in the developing phonological grammar, in P. Avery, B. E. Dresher, and K. Rice (eds.), *Contrast in Phonology: Perception and Acquisition*. Berlin: Mouton.
- FINDLAY, JOHN M. (2004). Eye scanning and visual search, in J. M. Henderson and F. Ferreira (eds.), *The Interface of Language, Vision and Action: Eye Movements and the Visual World*. New York: Psychology Press, 135–59.
- FISCHER-JØRGENSEN, ELI (1990). Intrinsic F0 in tense and lax vowels with special reference to German. *Phonetica* 47: 99–140.
- FITCH, W. TECUMSEH and GIEDD, JAY (1999). Morphology and development of the human vocal tract: A study using magnetic resonance imaging. *Journal of the Acoustical Society of America* 106: 1511–22.
- FITTS, PAUL M. (1954). The information capacity of the human motor system in controlling the amplitude of movement. *Journal of Experimental Psychology* 47(6), 381–91.
- FITZPATRICK, JENNIFER and WHEELDON, LINDA R. (2000). Phonology and phonetics in psycholinguistics models of speech perception, in N. Burton-Roberts, P. Carr, and G. J. Docherty (eds.), *Phonological Knowledge: Conceptual and Empirical Issues*. Oxford: Oxford University Press, 131–60.

- FLACK, KATHRYN (2005). Lateral acoustics and phonotactics in Australian languages, in K. Flack and S. Kawahara (eds.), *Papers in Experimental Phonetics and Phonology*. UMOP 31. Amherst: GLSA, University of Massachusetts, 37–57.
- FLAGG, ELISSA J., CARDY, JANIS E. O., and ROBERTS, TIMOTHY P. L. (2006). MEG detects neural consequences of anomalous nasalization in vowel-consonant pairs. *Neuroscience Letters* 397: 263–8.
- FLANAGAN, JAMES L. (1972). *Speech Analysis Synthesis and Perception*, 2nd edn. Berlin: Springer-Verlag.
- and ISHIZAKA, KENZO (1976). Automatic generation of voiceless excitation in a vocal cord-vocal tract speech synthesizer. *IEEE Transactions on Acoustics, Speech and Signal Processing* 24: 163–70.
- FLEGE, JAMES E. (1987). The production of “new” and “similar” phones in a foreign language: Evidence for the effect of equivalence classification. *Journal of Phonetics* 15: 47–65.
- (1991). Age of learning affects the authenticity of voice-onset time (VOT) stop consonants produced in second language, *Journal of the Acoustical Society of America* 89: 395–411.
- (1992). Speech learning in a second language, in C. Ferguson, L. Menn, and C. Stoel-Gamm (eds.), *Phonological Development: Models, Research, and Implications*. Timonium, MD: York, 565–604.
- (1995). Second language speech learning: Theory, findings, and problems, in W. Strange (ed.), *Speech Perception and Linguistic Experience: Issues in Cross-language Research*. Timonium, MD: York Press, 233–77.
- (1999). Age of learning and second language speech, in D. Birdsong (ed.), *Second-Language Learning and the Critical Period Hypothesis*. London: Erlbaum, 101–31.
- (2003). Assessing constraints on second-language segmental production and perception, in A. Meyer and N. Schiller (eds.), *Phonetics and Phonology in Language Comprehension and Production: Differences and Similarities*. Berlin: Mouton de Gruyter, 319–55.
- (2006). Language contact in bilingualism: Phonetic system interactions, in J. Cole and A. Hualde (eds.), *Laboratory Phonology* 9. Berlin: Mouton.
- BIRDSONG, DAVID, BIALYSTOK, E., MACK, MOLLY, SUNG, H., and TSUKADA, K. (2006). Degree of foreign accent in English sentences produced by Korean children and adults, *Journal of Phonetics* 33: 153–75.
- BOHN, OCKE-SCHWEN, and JANG, SUNYOUNG (1997). Effects of experience on non-native speakers’ production and perception of English vowels. *Journal of Phonetics* 25: 437–70.
- and EEFING, WIEKE (1987). Production and perception of English stops by native Spanish speakers. *Journal of Phonetics* 15: 67–83.
- and HILLENBRAND, JAMES (1987). Limits on phonetic accuracy in foreign language speech production, in G. Ioup and S. Weinberger (eds.), *Interlanguage Phonology: The Acquisition of a Second Language Sound System*. Cambridge: Newbury House, 176–201.
- and MACKAY, IAN R. A. (2004). Perceiving vowels in a second language. *Studies in Second Language Acquisition* 26: 1–34.
- — and MEADOR, DIANE (1999). Native Italian speakers’ perception and production of English vowels. *Journal of the Acoustical Society of America* 106: 2973–87.
- MUNRO, MURRAY, and MACKAY, IAN R.A. (1995). Effects of age of second-language learning on the production of English consonants. *Speech Communication* 16: 1–26.

- FLEGE, JAMES E. and SKELTON, LAURIE (1992). Production of word-final English /t/-/d/ contrast by native speakers of English, Mandarin, and Spanish. *Journal of the Acoustical Society of America* 92: 128–43.
- and WANG, CHILIN (1989). Native language phonotactic constraints affect how well Chinese subjects perceive the word final English /t/-/d/ contrast. *Journal of Phonetics* 17: 299–315.
- YENI-KOMSHIAN, GRACE H., and LIU, SERENA (1999). Age constraints on second-language acquisition. *Journal of Memory and Language* 41: 78–104.
- FLEISS, JOSEPH L. (1971). Measuring nominal scale agreement among many raters. *Psychological Bulletin* 76(5): 378–82.
- FLEMMING, EDWARD (1995). Auditory representations in phonology. Doctoral dissertation, UCLA.
- (2001). Scalar and categorical phenomena in a unified model of phonetics and phonology. *Phonology* 18: 7–44.
- FLETCHER, JANET (2010). The Prosody of Speech: Timing and Rhythm, in W. J. Hardcastle, J. Laver, and F. E. Gibbon (eds.), *The Handbook of Phonetic Sciences*, 2nd edn. Oxford: Blackwell, 521–602.
- FODOR, JANET D. (2002). Psycholinguistics cannot escape prosody. *Proceedings of the Speech Prosody 2002 Conference*, Aix-en-Provence, France, 83–8.
- FOLKINS, JOHN W. and ZIMMERMANN, GERALD N. (1981). Jaw-muscle activity during speech with the mandible fixed. *Journal of the Acoustical Society of America* 69: 1441–4.
- FONTANARI, JOSÉ F. and PERLOVSKY, LEONID I. (2004). Solvable null model for the distribution of word frequencies. *Physical Review E* 70(4): 042901.
- FOOTE MICHAEL, CRAMPTON, JAMES S., BEU, ALAN G., and COOPER, ROGER A. (2008). On the bidirectional relationship between geographic range and taxonomic duration. *Paleobiology* 34: 421–33.
- FORREST, KAREN, WEISMER, GARY, MILENKOVIC, PAUL, and DOUGALL, R. N. (1988). Statistical analysis of word-initial voiceless obstruents: Preliminary data. *Journal of the Acoustical Society of America* 84: 115–23.
- FORSTER, KENNETH I. and DICKINSON, ROD G. (1976). More on the language-as-fixed effect: Monte-Carlo estimates of error rates for F₁, F₂, F₃, and minF. *Journal of Verbal Learning and Verbal Behavior* 15: 135–42.
- FOUGERON, CÉCILE (1999). Prosodically conditioned articulatory variations: A review. *UCLA Working Papers in Phonetics* 97: 1–74.
- (2010). Exploring social-indexical knowledge: A long past but a short history. *Laboratory Phonology* 1: 5–39.
- and DOCHERTY, GERARD J. (2000). Another chapter in the story of /r/: “labiodental” variants in British English. *Journal of Sociolinguistics* 4: 30–59.
- (2006). The social life of phonetics and phonology. *Journal of Phonetics* 34(4): 409–38.
- and JONES, MARK (2010). Best practices in sociophonetics: Stops, in M. Yaeger-Dror and M. Di Paolo (eds.), *Sociophonetics: a Student’s Guide*. New York: Routledge.
- and WATT, DOMINIC J. L. (2005). Phonological variation in child-directed speech. *Language* 81: 177–206.
- and KEATING, PATRICIA (1997). Articulatory strengthening at edges of prosodic domains. *Journal of the Acoustical Society of America* 101: 3728–40.

- SCOBIE, JAMES M., and WATT, DOMINIC (2010). Sociophonetics, in W. Hardcastle and J. Laver (eds.), *Handbook of Phonetic Sciences*, 2nd edn. Oxford: Blackwell, 703–54.
- and STERIADE, DONCA (1997). Does deletion of French schwa lead to neutralization of lexical distinctions? *Proceedings of the 5th European Conference on Speech Communication and Technology* (University of Patras), vol. 2, 943–6.
- FOURNIER, RACHEL, GUSSENHOVEN, CARLOS, JENSEN, OLE, and HAGOORT, PETER (2010). Lateralization of tonal and intonational pitch processing: An MEG study. *Brain Research* 1328: 79–88.
- FOWLER, CAROL A. (1980). Coarticulation and theories of extrinsic timing. *Journal of Phonetics* 8: 113–33.
- (1984). Segmentation of coarticulated speech in perception. *Perception and Psychophysics* 36: 359–68.
- (1986). An event approach to the study of speech perception from a direct-realist perspective. *Journal of Phonetics* 14: 3–28.
- (1996). Listeners do hear sounds, not tongues. *Journal of the Acoustical Society of America* 99(3): 1730–41.
- (2000). Imitation as a basis for phonetic learning after the critical period. Paper presented at the Twenty-fifth Annual Meeting of the Berkeley Linguistics Society, Berkeley, California.
- (2007). Speech production, in M. G. Gaskell (ed.), *The Oxford Handbook of Psycholinguistics*. Oxford: Oxford University Press, 489–502.
- and BROWN, JULIE M. (2000). Perceptual parsing of acoustic consequences of velum lowering from information for vowels. *Perception and Psychophysics* 62(1): 21–32.
- — SABADINI, LAURA, and WEIHING, JEFFREY (2003). Rapid access to speech gestures in perception: Evidence from choice and simple response time tasks. *Journal of Memory and Language* 49: 396–413.
- and DEKLE, DAWN J. (1991). Listening with eye and hand: Cross modal contributions to speech perception. *Journal of Experimental Psychology: Human Perception and Performance* 17: 816–28.
- and HOUSUM, JONATHAN (1987). Talkers’ signalling of “new” and “old” words in speech and listeners’ perception and use of the distinction. *Journal of Memory and Language* 26: 489–504.
- RICHARDSON, MICHAEL, MARSH, KERRY, and SHOCKLEY, KEVIN (2008). Language use, coordination, and the emergence of cooperative action, in A. Fuchs and V. Jirsa (eds.), *Understanding Complex Systems*. Berlin: Springer, 261–79.
- and ROSENBLUM, LAWRENCE D. (1991). The perception of phonetic gestures, in I. G. Mattingly, A. M. Liberman, and M. Studdert-Kennedy (eds.), *Modularity and the Motor Theory of Speech Perception*. Hillsdale, NJ: Lawrence Erlbaum, 33–60.
- RUBIN, PAUL, REMEZ, ROBERT, and TURVEY, MICHAEL (1980). Implications for speech production of a general theory of action, in B. Butterworth (ed.), *Language Production, Volume 1: Speech and Talk*. London: Academic Press, 373–420.
- and SMITH, MARY R. (1986). Speech perception as “vector analysis”: An approach to the problems of segmentation and invariance, in J. S. Perkell and D. H. Klatt (eds.), *Invariance and Variability in Speech Processes*. Hillsdale, NJ: Erlbaum, 123–36.
- FOX, ROBERT A. (1974). An experiment in cross-dialect vowel perception, in M. W. La Galy, R. A. Fox, and A. Bruck (eds.), *Papers from the Tenth Regional Meeting of the Chicago Linguistic Society*. Chicago: Chicago Linguistic Society, 178–85.

- FOX, ROBERT A. (1983). Perceptual structure of monophthongs and diphthongs in English. *Language and Speech* 26: 21–60.
- FRANCIS, ALEXANDER L. and CIOCCA, VALTER (2003). Stimulus presentation order and the perception of lexical tones in Cantonese. *Journal of Acoustical Society of America* 114: 1611–21.
- and KEI CHIT NG, BRENDA (2003). On the (non)categorical perception of lexical tones. *Perception and Psychophysics* 65: 1029–44.
- MA, LIAN, and FENN, KIMBERLY (2008). Perceptual learning of Cantonese lexical tones by tone and non-tone language speakers. *Journal of Phonetics* 36: 268–94.
- and NUSBAUM, HOWARD C. (2002). Selective attention and the acquisition of new phonetic categories. *Journal of Experimental Psychology: Human Perception and Performance* 28: 349–66.
- FRANK, AUSTIN F. and JAEGER, T. FLORIAN (2008). Speaking rationally: Uniform information density as an optimal strategy for language production. *Proceedings of the 30th Annual Meeting of the Cognitive Science Society (CogSci08)*. Washington, DC, July, 2008, 939–44.
- FRAUENFELDER, ULI H. and TYLER, LORRAINE K. (1987). *Spoken Word Recognition*. Amsterdam: Elsevier.
- FRIEDERICI, ANGELA D. and ALTER, KAI (2004). Lateralization of auditory language functions: A dynamic dual pathway model. *Brain and Language* 89: 267–76.
- and WESSELS, JEANINE M. I. (1993). Phonotactic knowledge and its use in infant speech perception. *Perception and Psychophysics* 54: 287–95.
- FRIEDRICH, CLAUDIA K. (2005). Neurophysiological correlates of mismatch in lexical access. *BMC Neuroscience* 6: 64.
- EULITZ, CARSTEN, and LAHIRI, ADITI (2006). Not every pseudoword disrupts word recognition: An ERP study. *Behavioral and Brain Functions* 2: 1–36. <<http://www.behavioralandbrainfunctions.com/content/2/1/36>>.
- KOTZ, SONYA A., FRIEDERICI, ANGELA, and GUNTER, THOMAS C. (2004). ERP correlates of lexical identification in word fragment priming. *Journal of Cognitive Neuroscience* 16: 541–52.
- LAHIRI, ADITI, and EULITZ, CARSTEN (2008). Neurophysiological evidence for underspecified lexical representations: Asymmetries with word initial variations. *Journal of Experimental Psychology: Human Perception and Performance* 34(6): 1545–59.
- FRISCH, STEFAN A. (1996). Similarity and frequency in phonology. Ph.D. dissertation, Northwestern University.
- (2000). Temporally organized lexical representations as phonological units, in M. Broe and J. Pierrehumbert (eds.), *Papers in Laboratory Phonology V: Acquisition and the Lexicon*. Cambridge: Cambridge University Press, 283–9.
- BROE, MICHAEL B., and PIERREHUMBERT, JANET B. (1995). The role of similarity in phonology: Explaining OCP-Place. *Proceedings of the 13th International Conference of the Phonetic Sciences*, Stockholm, Sweden: 544–7.
- LARGE, NATHAN R., and PISONI, DAVID B. (2000). Perception of wordlikeness: Effects of segment probability and length on the processing of nonwords. *Journal of Memory and Language* 42: 481–96.
- ZAWAYDEH, BUSHRA, and PISONI, DAVID B. (2001). Emergent phonological generalizations in English and Arabic, in J. L. Bybee and P. Hopper (eds.), *Frequency and the Emergence of Linguistic Structure*. Amsterdam: John Benjamins, 159–80.

- PIERREHUBERT, JANET B., and BROE, MICHAEL (2004). Similarity avoidance and the OCP. *Natural Language and Linguistic Theory* 22: 179–228.
- and WRIGHT, RICHARD (2002). The phonetics of phonological speech errors: An acoustic analysis of slips of the tongue. *Journal of Phonetics* 30: 139–62.
- and ZAWAYDEH, BUSHRA A. (2001). The psychological reality of OCP-Place in Arabic. *Language* 77: 91–106.
- FROMKIN, VICTORIA A. (1971). The non-anomalous nature of anomalous utterances. *Language* 47: 27–52.
- (ed.) (1973). *Speech Errors as Linguistic Evidence*. The Hague: Mouton.
- (1978). Introduction, in V. Fromkin (ed.), *Tone: A Linguistic Survey*. New York: Academic Press, 1–40.
- (1988). Grammatical aspects of speech errors, in F. J. Newmeyer (ed.), *Linguistics: The Cambridge Survey, Volume II, Linguistic Theory: Extensions and Implications*. Cambridge: Cambridge University Press, 117–38.
- FROTA, SÓNIA (2000). *Prosody and Focus in European Portuguese. Phonological Phrasing and Intonation*. New York: Garland Publishing.
- (2002). Tonal association and target alignment in European Portuguese nuclear falls, in C. Gussenhoven and N. Warner (eds.), *Laboratory Phonology 7*. The Hague: Mouton de Gruyter, 387–418.
- (forthcoming). The intonational phonology of European Portuguese, in S.-A. Jun (ed.), *Prosodic Typology II*. Oxford: Oxford University Press.
- D'IMPERIO, MARIAPAOLA, ELORDIETA, GORKA, PRIETO PILAR, and VIGÁRIO, MARINA (2007). The phonetics and phonology of intonational phrasing in Romance, in P. Prieto, J. Mascaró, and M.-J. Solé (eds.), *Prosodic and Segmental Issues in (Romance) Phonology*. Amsterdam and Philadelphia: John Benjamins, 131–53.
- SEVERINO, CÁTIA, and VIGÁRIO, MARINA (2009). Syntactic disambiguation: The role of prosody. Paper presented at the Workshop on Prosody and Meaning, Barcelona.
- and VIGÁRIO, MARINA (2007). Intonational phrasing in two varieties of European Portuguese, in T. Riad and C. Gussenhoven (eds.), *Tones and Tunes*, vol. 1. Berlin: Mouton de Gruyter, 265–91.
- FRY, DANIEL B. (1955). Duration and intensity as physical correlates of linguistic stress. *Journal of the Acoustical Society of America* 27(4): 765–8.
- (1958). Experiments in the perception of stress, *Language and Speech* 1: 126–52.
- FRYE, RICHARD E., MCGRAW FISHER, JANET, COTY, ALEXIS, ZARELLA, MELISSA, LIEDERMAN, JACQUELINE, and HALGREN, ERIC. (2007). Linear coding of voice onset time. *Journal of Cognitive Neuroscience* 19: 1476–87.
- FUCHS, SUSANNE, BRUNNER, JANA, and BUSLER, A. (2007). Temporal and spatial aspects concerning the realizations of the voicing contrast in German alveolar and postalveolar fricatives. *Advances in Speech-Language Pathology* 9(1): 1–11.
- and KOENIG, L. L. (2009). Simultaneous measures of electropalatography and intraoral pressure in selected voiceless lingual consonants and consonant sequences of German. *Journal of the Acoustical Society of America* 126(4): 1988–2001.
- FUJIMURA, OSAMU (1981). Temporal organization of articulatory movements as a multidimensional phrasal structure. *Phonetica* 38: 66–83.
- and LOVINS, JULIE BETH (1977). *Syllables as concatenative phonetic units*. Bloomington, IN: Indiana University Linguistics Club.

- FUJIMURA, OSAMU, MACCHI, MARIAN J., and STREETER, LYNN A. (1978). Perception of stop consonants with conflicting transitional cues: A cross-linguistic study. *Language and Speech* 21: 337–46.
- FUJISAKI, HIROYA, WENTAO GU, and OHNO, SUMIO (2007). Physiological and physical bases of the Command-Response Model for generating fundamental frequency contours in tone languages: Implications for the phonology of tones, in M.-J. Sole, P. Beddor, and M. Ohala (eds.), *Experimental Approaches to Phonology*. Oxford: Oxford University Press, 228–45.
- GAFOS, ADAMANTIOS (2002). A grammar of gestural coordination. *Natural Language and Linguistic Theory* 20: 269–337.
- (2006). Dynamics in grammar: Comments on Ladd and Ernestus & Baayen, in L. Goldstein, D. Whalen, and C. Best (eds.), *Laboratory Phonology 8*. Berlin and New York: Mouton de Gruyter, 51–79.
- and BENUS, STEFAN (2003). On neutral vowels in Hungarian, in M.-J. Solé, D. Recasens, and J. Romero (eds.), *Proceedings of the 15th International Congress of Phonetic Sciences*. Universitat Autònoma de Barcelona, 77–80.
- (2006). Dynamics of phonological cognition. *Cognitive Science* 30: 905–43.
- and KIROV, CHRISTO (2010). A dynamical model of change in phonological representations: The case of lenition, in F. Pellegrino, E. Marsico, I. Chitoran, and C. Coupé (eds.), *Approaches to Phonological Complexity, Phonology & Phonetics Series*. Berlin: Mouton de Gruyter, 225–46.
- GAGE, NICOLE M. and ROBERTS, TIMOTHY P. L. (2000). Temporal integration: Reflections in the M100 of the auditory evoked field. *Neuroreport* 11: 2723–6.
- and HICKOK, GREGORY (2002). Hemispheric asymmetries in auditory evoked neuromagnetic fields in response to place of articulation contrasts. *Cognitive Brain Research* 14: 303–6.
- GAHL, SUSANNE (2008). Time and Thyme are not homophones: The effect of lemma frequency on word durations in spontaneous speech. *Language* 84(3): 474–96.
- and YU, ALAN (2006). Introduction to the special issue on exemplar-based models in linguistics. *Linguistic Review* 23(3): 213.
- and YU, ALAN (eds.) (2006). *Linguistic Review* 23(3). *Special Issue on Exemplar-Based Models in Linguistics*. Berlin: De Gruyter Mouton.
- GALLARDO DEL PUERTO, FRANCISCO (2007). Is L3 phonological competence affected by the learner's level of bilingualism?, *International Journal of Multilingualism* 4: 1–16.
- GANDOUR, JACKSON (1974). On the representation of tone in Siamese, in J. G. Harris and J. R. Chamberlain (eds.), *Studies in Tai Linguistics in honor of William J. Gedney*. Bangkok: Central Institute of English Language, 170–95. (Also published in *UCLA Working Papers in Phonetics* 27: 118–46.)
- (1978). The perception of tone, in V. Fromkin (ed.), *Tone: A Linguistic Survey*. New York: Academic Press, 41–76.
- (1981). Perceptual dimensions of tone: Evidence from Cantonese. *Journal of Chinese Linguistics* 9: 20–36.
- (1983). Tone perception in Far Eastern languages. *Journal of Phonetics* 11:149–75.
- (2007). Neural substrates underlying the perception of linguistic prosody, in C. Gussenhoven and T. Riad (eds.), *Tones and Tunes, Volume 2: Experimental Studies in Word and Sentence Prosody*. Berlin and New York: Mouton de Gruyter, 3–25.
- and HARSHMAN, RICHARD (1978). Cross-language differences in tone perception: A multi-dimensional scaling investigation. *Language and Speech* 21: 1–33.

- PETTY, SORANEE H., DARDARANANDA, ROCHANA, DECHONGKIT, SUMALEE, and MUKONGOEN, SUNEI (1986). The acquisition of the voicing contrast in Thai: A study of voice onset time in word-initial stop consonants. *Journal of Child Language* 13: 561–72.
- PONGLORPISIT, SUVIT, DECHONGKIT, SUMALEE, KHUNADORN, FUANGFA, BOONGIRD, PRASERT, and POTISUK, SIRIPONG (1993). Anticipatory tonal coarticulation in Thai noun compounds after unilateral brain damage. *Brain and Language* 45(1): 1–20.
- POTISUK, SIRIPONG, KHUNADORN, F., BOONGIRD, P., and DECHONGKIT, SUMALEE (1997). Interaction between tone and intonation in Thai after unilateral brain damage. *Brain and Language* 58: 174–96.
- POTISUK, SIRIPONG, and DECHONGKIT, SUMALEE (1994). Tonal coarticulation in Thai. *Journal of Phonetics* 22: 477–92.
- PONGLORPISIT, SIRIPONG, DECHONGKIT, SUMALEE, KHUNADORN, FUANGFA, and BOONGIRD, PRASERT (1996). Tonal coarticulation in Thai after unilateral brain damage. *Brain and Language* 52(3): 505–35.
- WONG, DONALD, DZEMIDZIC, MARIO, LOWE, MARK, TONG, YUNXIA, and XIAOJIAN, LI (2003). A cross-linguistic fMRI study of perception of intonation and emotion in Chinese. *Human Brain Mapping* 18: 149–57.
- HSIEH, LI, WEINZAPFEL, BRET, VAN LANCKER, DIANA, and HUTCHINS, GARY (2000). A crosslinguistic PET study of tone perception. *Journal of Cognitive Neuroscience* 12: 207–22.
- GANONG, WILLIAM F. (1980). Phonetic categorization in auditory word perception. *Journal of Experimental Psychology: Human Perception and Performance* 6(1): 110–25.
- GAO, MAN (2006). Gestural representation and alignment patterns of Mandarin tones. Presented at the 10th Conference on Laboratory Phonology, Paris, France.
- (2008). Tonal alignment in Mandarin Chinese: An articulatory phonology account. Doctoral dissertation, Yale University.
- GÅRDING, EVA, KRATOCHVIL, PAUL, SVANTESSON, JAN-OLOF, and ZHANG, JIALU (1986). Tone 4 and tone 3 discrimination in Modern Standard Chinese. *Language and Speech* 29: 281–93.
- ZHANG, JIALU, and SVANTESSON, JAN-OLOF (1983). A generative model for tone and intonation in Standard Chinese based on data from one speaker. *Lund Working Papers* 25: 53–65.
- GARNICA, OLGA (1977). Some prosodic and paralinguistic features of speech to young children, in C. Gallaway and B. J. Richards (eds.), *Talking to Children: Language Input and Acquisition*. New York: Cambridge University Press.
- GARROD, SIMON and DOHERTY, GWYNETH (1994). Conversation, co-ordination and convention: An empirical investigation of how groups establish linguistic conventions. *Cognition* 53: 181–215.
- and PICKERING, MARTIN J. (2009). Joint action, interactive alignment, and dialog. *Topics in Cognitive Science* 1: 292–304.
- GASKELL, J. GARETH (2003). Modelling regressive and progressive effects of assimilation in speech perception. *Journal of Phonetics* 31: 447–63.
- and ELLIS, ANDREW W. (2009). Word learning and lexical development across the lifespan. *Philosophical Transactions of the Royal Society B* 364: 3607–15.
- and MARSLÉN-WILSON, WILLIAM (1996). Phonological variation and inference in lexical access. *Journal of Experimental Psychology: Human Perception and Performance* 22: 144–58.

- GASKELL, J. GARETH (1998). Mechanisms of phonological inference in speech perception. *Journal of Experimental Psychology: Human Perception and Performance* 24: 380–96.
- (2001). Lexical ambiguity and spoken word recognition: Bridging the gap. *Journal of Memory and Language* 44: 325–49.
- and SNOEREN, NATALIE D. (2008). The impact of strong assimilation on the perception of connected speech. *Journal of Experimental Psychology: Human Perception and Performance* 34(6): 1632–47.
- GAY, THOMAS (1977). Articulatory movements in VCV sequences. *Journal of the Acoustical Society of America* 62: 183–91.
- (1978a). Articulatory units: Segments or syllables?, in A. Bell and J. B. Hooper (eds.), *Syllables and Segments*. Amsterdam: North-Holland Publishing, 121–31.
- (1978b). Effect of speaking rate on vowel formant movements. *Journal of the Acoustical Society of America* 63: 223–30.
- GEE, JAMES P. and GROSJEAN, FRANCIS (1983). Performance structures: a psycholinguistic and linguistic appraisal. *Cognitive Psychology* 15: 411–58.
- GELMAN, ANDREW and HILL, JENNIFER (2007). *Data Analysis using Regression and Multi-level/Hierarchical Models*. Cambridge: Cambridge University Press.
- GERFEN, CHIP (1999). *Phonology and Phonetics in Coatzacoapan Mixtec*. Dordrecht: Kluwer.
- (2001). A critical view of licensing by cue: Codas and obstruents in Eastern Andalusian Spanish, in L. Lombardi (ed.), *Segmental Phonology in Optimality Theory*. Cambridge: Cambridge University Press, 183–205.
- GERKEN, LOUANN (1994a). Young children's representation of prosodic structure: Evidence from English-speakers' weak syllable omissions. *Journal of Memory and Language* 33: 19–38.
- (1994b). A metrical template account of children's weak syllable omissions from multisyllabic words. *Journal of Child Language* 21: 565–84.
- (1996). Prosodic structure in young children's language production. *Language* 72: 683–712.
- and BOLLT, ALEX (2008). Three exemplars allow at least some linguistic generalizations: Implications for generalization mechanisms and constraints. *Language Learning and Development* 4: 228–48.
- and MCINTOSH, BONNIE J. (1993). The interplay of function morphemes and prosody in early language. *Developmental Psychology* 29: 448–57.
- GERMAN, JAMES, PIERREHUMBERT, JANET, and KAUFMANN, STEFAN (2006). Evidence for phonological constraints on nuclear accent placement. *Language* 82: 151–68.
- GERRITS, ELLEN and SCHOUTEN, M. E. H. (2004). Categorical perception depends on the discrimination task. *Perception and Psychophysics* 66(3): 363–76.
- GHINI, MIRCO (1993). f-formation in Italian: a new proposal. *Toronto Working Papers in Linguistics* 12(2): 41–79.
- (2001a). *Asymmetries in the Phonology of Miogliola*. Berlin: Mouton. [Doctoral dissertation, University of Konstanz 1998].
- (2001b). Place of articulation first, in T. A. Hall (ed.), *Distinctive Feature Theory. Phonology & Phonetics Series*. Berlin: Mouton, 147–76.
- GIANNELLI, LUCIANO and SAVOIA, LEONARDO (1979). Indebolimento consonantico in Toscana. *Revista Italiana di Dialectologia* 2: 23–58.
- GIBBON, DAFFYD, MOORE, R., and WINSKI, RICHARD (eds.) (1997). *Handbook of Standards and Resources for Spoken Language Systems*. Berlin and New York: Mouton de Gruyter.

- GICK, BRYAN (2002). The use of ultrasound for linguistic phonetic fieldwork. *Journal of the International Phonetic Association* 32(2): 113–22.
- (2007). A lingual motor differentiation model for liquid substitutions in children's speech. Abstract for ASA meeting, Salt Lake City, Utah, June 4–8.
- BIRD, SONYA, and WILSON, IAN (2005). Techniques for field application of lingual ultrasound imaging. *Clinical Linguistics and Phonetics* 19(6/7): 503–14.
- CAMPBELL, FIONA, OH, SUNYOUNG, and TAMBURRI-WATT, LINDA (2006). Toward universals in the gestural organization of syllables: A cross-linguistic study of liquids. *Journal of Phonetics* 34: 49–72.
- PULLEYBLANK, DOUGLAS, CAMPBELL, FIONA, and MUTAKA, NGESSIMO (2006). Low vowels and transparency in Kinande vowel harmony. *Phonology* 23: 1–20.
- and WILSON, IAN (2006). Excrescent schwa and vowel laxing: Cross-linguistic responses to conflicting articulatory targets, in L. Goldstein, D. Whalen, and C. Best (eds.), *Laboratory Phonology 8*. New York: Walter de Gruyter, 635–60.
- GIEZEN, MARCEL, ESCUDERO, PAOLA, and BAKER, ANNE (under review). Rapid learning of minimally different words in children with normal hearing and deaf children with cochlear implants.
- GILBERT, RICHARD J. and NAPADOW, VITALY J. (2005). Three-dimensional muscular architecture of the human tongue determined in vivo with diffusion tensor magnetic resonance imaging. *Dysphagia* 20: 1–7.
- GILES, HOWARD (1984). The dynamics of speech accommodation. *International Journal of the Sociology of Language* 46: 1–155.
- COUPLAND, NIKOLAS, and COUPLAND, JUSTINE (1991a). Accommodation theory: Communication, context, and consequence, in H. Giles, N. Coupland, and J. Coupland (eds.), *Contexts of Accommodation: Developments in Applied Sociolinguistics*. Cambridge: Cambridge University Press, 1–68.
- COUPLAND, JUSTINE, and COUPLAND, NIKOLAS (eds.) (1991b). *Contexts of Accommodation: Developments in Applied Sociolinguistics*. Cambridge: Cambridge University Press.
- GILI FIVELA, BARBARA (2009). From production to perception and back: An analysis of two pitch accents, in S. Fuchs, H. Loevenbruck, D. Pape, and P. Perrier (eds.), *Some Aspects of Speech and the Brain*. Germany: Peter Lang GmbH, 363–405.
- and D'IMPERIO, MARIAPAOLA (2008). High peak vs high plateau in the identification of contrastive accents in Italian. Poster presented at Tone and Intonation in Europe (TIE) 3, September 15–17, 2008, Lisbon, Portugal.
- and SAVINO, MICHELINA (2003). Segments, syllables and tonal alignment: A study on two varieties of Italian, in M. J. Solé, D. Recasens, and J. Romero (eds.), *Proceedings of the 15th International Congress of Phonetic Sciences*. Barcelona: Causal Productions, 2933–6.
- GIMSON, ALFRED C. (1966). *An Introduction to the Pronunciation of English* (1st edn). London: Edward Arnold.
- GLASER, WILHELM R. (1992). Picture naming. *Cognition* 42: 61–105.
- GLEITMAN, LILA R., JANUARY, DAVID, NAPPA, REBECCA, and TRUESWELL, JOHN C. (2007). On the give and take between event apprehension and utterance formulation. *Journal of Memory and Language* 57: 544–69.
- and WANNER, ERIC (1982). The state of the state of the art, in E. Wanner and L. Gleitman (eds.), *Language Acquisition: The State of the Art*. Cambridge: Cambridge University Press, 3–48.

- GOAD, HEATHER and BRANNEN, KATHLEEN (2003). Phonetic evidence for phonological structure in syllabification, in J. van de Weijer, V. J. van Heuven, and H. van der Hulst (eds.), *The Phonological Spectrum Vol II: Suprasegmental Structure*. Amsterdam: John Benjamins, 3–30.
- GODFREY, JOHN J. and HOLLIMAN, EDWARD (1997). Switchboard-1 Release 2. Philadelphia: Linguistic Data Consortium.
- GOFFMAN, LISA (1999). Prosodic influences on speech production in children with specific language impairments and speech deficits: Kinematic, acoustic, and transcription evidence. *Journal of Speech, Language, and Hearing Research* 42: 1499–517.
- (2004). Kinematic differentiation of prosodic categories in normal and disordered language development. *Journal of Speech, Language, and Hearing Research* 47: 1088–102.
- GERKEN, LOUANN, and LUCCHESI, JULIE (2007). Relations between segmental and motor variability in prosodically complex nonword sequences. *Journal of Speech, Language and Hearing Research* 50: 444–58.
- GOLDINGER, STEPHEN D. (1996). Words and voices: Episodic traces in spoken word identification and recognition memory. *Journal of Experimental Psychology: Learning, Memory and Cognition* 22: 1166–83.
- (1997). Words and voices: Perception and production in an episodic lexicon, in K. Johnson and J. Mullenix (eds.), *Talker Variability in Speech Processing*. San Diego: AP, 33–66.
- (1998). Echoes of echoes? An episodic theory of lexical access. *Psychological Review* 105(2): 251–79.
- (2000). The role of perceptual episodes in lexical processing, in A. Cutler, J. M. McQueen, and R. Zondervan (eds.), *Proceedings of SWAP (Spoken Word Access Processes)*. Nijmegen: Max Planck Institute for Psycholinguistics, 155–9.
- (2007). A complementary-systems approach to abstract and episodic speech perception. *Proceedings of the 17th International Congress of Phonetic Sciences*, Saarland University, Saarbrücken, 6–10 August, 49–54.
- GOLDMAN, MICHAEL D., SMITH, H. J., and ULMER, W. T. (2005). Whole-body plethysmography, in R. Gosselink and H. Stam (eds.), *Lung Function Testing (European Respiratory Monograph 31)*. European Respiratory Society, 15–43.
- GOLDRICK, MATTHEW (2007). Connectionist principles in theories of speech production, in M. G. Gaskell (ed.), *The Oxford Handbook of Psycholinguistics*. Oxford: Oxford University Press, 515–30.
- and BLUMSTEIN, SHEILA (2006). Cascading activation from phonological planning to articulatory processes: Evidence from tongue twisters. *Language and Cognitive Processes* 21: 649–83.
- and LARSON, MEREDITH (2008). Phonotactic probability influences speech production. *Cognition* 107: 1155–64.
- GOLDSMITH, JOHN (1976). Autosegmental phonology. Ph.D. dissertation, MIT. [Published, New York: Garland Press, 1979.]
- (1979). *Autosegmental Phonology*. New York: Garland.
- (1985). Vowel harmony in Khalka Mongolian, Yaka, Finnish and Hungarian. *Phonology Yearbook* 2: 253–75.
- (1990). *Autosegmental and Metrical Phonology*. Oxford: Blackwell.
- (ed.) (1995). *The Handbook of Phonological Theory*. Cambridge, MA: Blackwell.

- (2002). Probabilistic models of grammar: Phonology as information minimization. *Phonological Studies* 5: 21–46.
- GOLDSTEIN, LOUIS (1977). Categorical features in speech perception and production. *UCLA Working Papers in Phonetics* 39: 1–36.
- (1983). Vowel shifts and articulatory-acoustic relations, in A. Cohen and M. P. R. v. d. Broecke (eds.), *Abstracts of the 10th International Congress of Phonetic Sciences*. Dordrecht: Foris, 267–73.
- BYRD, DANI, and SALTZMAN, ELLIOT (2006). The role of vocal tract gestural action units in understanding the evolution of phonology, in M. Arbib (ed.), *From Action to Language: The Mirror Neuron System*. Cambridge: Cambridge University Press, 215–49.
- CHITORAN, IOANA, and SELKIRK, ELISABETH (2007). Syllable structure as coupled oscillator modes: Evidence from Georgian vs. Tashlhiyt Berber, in J. Trouvain and W. J. Barry (eds.), *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarland University, Saarbrücken, 241–4, <<http://www.icphs2007.de>>.
- POUPLIER, MARIANNE, CHEN, LARISSA, SALTZMAN, ELLIOT, and BYRD, DANI (2007). Dynamic action units slip in speech production errors. *Cognition* 103: 386–412.
- GOLDSTEIN, MICHAEL H. and SCHWADE, J. A. (2008). Social feedback to infants' babbling facilitates rapid phonological learning. *Psychological Science* 19: 515–22.
- (2009). From birds to words: Perception of structure in social interactions guides vocal development and language learning, in M. S. Blumberg, J. H. Freeman, and S. R. Robinson (eds.), *The Oxford Handbook of Developmental and Comparative Neuroscience*. Oxford: Oxford University Press.
- GOLDSTONE, ROBERT L. and MEDIN, DOUG L. (1994). The time course of comparison. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 20: 29–50.
- GOLDWATER, SHARON and JOHNSON, MARK (2003). Learning OT constraint rankings using a Maximum Entropy Model, in J. Spenader, A. Eriksson, and Ö. Dahl (eds.), *Proceedings of the Stockholm Workshop on Variation within Optimality Theory*. Stockholm, Stockholm University Department of Linguistics, 111–20.
- GOLESTANI, NARLY and ZATORRE, ROBERT J. (2009). Individual differences in the acquisition of second language phonology. *Brain and Language* 109: 55–67. doi:10.1016/j.bandl.2008.01.005.
- GOLINKOFF, ROBERTA M., HIRSH-PASEK, KATHY, CAULEY, KATHLEEN M., and GORDON, LAURA (1987). The eyes have it: Lexical and syntactic comprehension in a new paradigm. *Journal of Child Language* 14: 23–45.
- GÓMEZ, REBECCA L. (2002). Variability and detection of invariant structure. *Psychological Science* 13(5): 431–6.
- GONZÁLEZ ARDEO, JUAN M. (2001). Engineering students and ESP in the Basque Country: SLA versus TLA, in J. Cenoz, B. Hufeisen, and U. Jessner (eds.), *Looking Beyond Second Language Acquisition: Studies in Tri- and Multilingualism*. Tübingen: Stauffenburg, 75–95.
- GORDEEVA, OLGA B. (2008). The relative importance of laryngeal, supralaryngeal and temporal speech production levels in the implementation of the Scottish Vowel Length Rule. Poster paper presented at the Meeting of the British Association of Academic Phoneticians (BAAP), Sheffield.
- GORDON, ELIZABETH (1997). Sex, speech, and stereotypes: Why women use prestige forms more than men. *Language in Society* 26: 47–64.
- GORDON, JEAN K. (2002). Phonological neighborhood effects in aphasic speech errors: Spontaneous and structured contexts. *Brain and Language* 82: 113–45.

- GORDON, MATTHEW (2004). Syllable weight, in B. Hayes, R. Kirchner, and D. Steriade (eds.), *Phonetically Based Phonology*. Cambridge: Cambridge University Press, 277–312.
- (2008). Pitch accent timing and scaling in Chickasaw. *Journal of Phonetics* 36: 521–35.
- GOTO, H. (1971). Auditory perception by normal Japanese adults of the sounds ‘l’ and ‘r’. *Neuropsychologia* 9: 317–23.
- GOTTFRIED, TERRY L. (1984). Perception of temporal and spectral information in French vowels. *Language and Speech* 31: 57–75.
- (2007). Music and language learning. Effect of musical training on learning L2 speech contrasts, in O.-S. Bohn and M. Munro (eds.), *Language Experience in Second-language Speech Learning: In honor of James Emil Flege*. Amsterdam: John Benjamins, 222–37.
- GOUDBEEK, MARTIN, CUTLER, ANNE, and SMITS, ROEL (2008). Supervised and unsupervised learning of multidimensionally varying non-native speech categories. *Speech Communication* 50: 109–25.
- SMITS, ROEL, SWINGLEY, DANIEL, and CUTLER, ANNE (2005). Acquiring auditory and phonetic categories, in H. Cohen, and C. Lefebvre (eds.), *Categorization in Cognitive Science*. Amsterdam: Elsevier, 497–513.
- GOUT, ARIEL, CHRISTOPHE, ANNE, and MORGAN, JAMES L. (2004). Phonological phrase boundaries constrain lexical access II. Infant data. *Journal of Memory and Language* 51: 548–67.
- GOVENDER, NATASHA, BARNARD, ETIENNE, and DAVEL, MARELIE (2007). Pitch modelling for the Nguni languages. *South African Computer Journal* 38: 28–39.
- GOW, DAVID W. (2001). Assimilation and anticipation in continuous spoken word recognition. *Journal of Memory and Language* 45: 133–59.
- (2002a). Does assimilation create lexical ambiguity? *Experimental Psychology: Human Performance* 28: 163–79.
- (2002b). Does English coronal place assimilation create lexical ambiguity? *Journal of Experimental Psychology: Human Perception and Performance* 28(1): 163–79.
- (2003). Feature parsing: Feature cue mapping in spoken word recognition. *Perception and Psychophysics* 65: 575–90.
- and GORDON, P. C. (1995). Lexical and prelexical influences on word segmentation: Evidence from priming. *Journal of Experimental Psychology: Human Perception and Performance* 21: 344–59.
- and IM, AARON M. (2004). A cross-linguistic examination of assimilation context effects. *Journal of Memory and Language* 51: 279–96.
- and McMURRAY, BOB (2004). From sound to sense and back again: The integration of lexical and speech processes. *The Proceedings of From Sound to Sense: 50+ Years of Discoveries in Speech Communication*. Boston MA.
- — (2007). Word recognition and phonology: The case of English coronal place assimilation, in J. S. Cole and J. Hualde (eds.), *Laboratory Phonology 9*. New York: Mouton de Gruyter, 173–200.
- GRABE, ESTHER. (1998). Pitch accent realisation in English and German. *Journal of Phonetics* 26: 129–44.
- (2001). The IViE Labeling Guide. <<http://www.phon.ox.ac.uk/files/apps/IViE//guide.html>>, accessed February 3, 2010.
- (2004). Intonational variation in urban dialects of English spoken in the British Isles, in P. Gilles and J. Peters (eds.), *Regional Variation in Intonation*. Tübingen: Niemeyer, 9–31.

- KOCHANSKI, GREG, and COLEMAN, JOHN (2007). Connecting intonation labels to mathematical descriptions of fundamental frequency. *Language and Speech* 50: 281–310.
- and POST, BRECHTJE (2004). Intonational variation in the British Isles, in G. Sampson and D. McCarthy (eds.), *Corpus Linguistics: Readings in a Widening Discipline*. London and New York: Continuum International, 474–81.
- — and NOLAN, FRANCIS (2001a). Modelling intonational variation in English. The IViE system, in S. Puppel and G. Demenko (eds.), *Proceedings of Prosody 2000*. Poznan: Adam Mickiewicz University, 51–7.
- — — (2001b). The IViE Corpus. Department of Linguistics, University of Cambridge. <http://www.phon.ox.ac.uk/old_IViE/>, accessed May 6, 2009.
- — — and FARRAR, KIMBERLY (2000). Pitch accent realization in four varieties of British English. *Journal of Phonetics* 28: 161–85.
- ROSNER, BURTON S., GARCÍA-ALBEA, JOSÉ E., and ZHOU, XIAOLIN (2003). Perception of English intonation by English, Spanish, and Chinese listeners. *Language and Speech* 46: 375–401.
- — and WARREN, PAUL (1995). Stress shift: do speakers do it or do listeners hear it?, in B. Connell and A. Arvaniti (eds.), *Phonology and Phonetic Evidence: Papers in Laboratory Phonology IV*. Cambridge: Cambridge University Press, 95–110.
- GRAHAM, LOUELLA W. and HOUSE, ARTHUR S. (1971). Phonological oppositions in children: A perceptual study. *Journal of the Acoustical Society of America* 49: 559–66.
- GREENBERG, JOSEPH H. (1950). The patterning of root morphemes in Semitic. *Word* 6: 162–81.
- and JENKINS, JAMES J. (1964). Studies in the psychological correlates of the sound system of American English: I. Measuring linguistic distance from English. II. Distinctive features and psychological space. *Word* 20: 157–77.
- GREENBERG, STEVEN (1999). Speaking in shorthand: A syllable-centric perspective for understanding pronunciation variation. *Speech Communication* 29: 159–76.
- and FOSLER-LUSSIER, ERIC (2000). The uninvited guest: Information's role in guiding the production of spontaneous speech. *Proceedings of the Crest Workshop on Models of Speech Production: Motor Planning and Articulatory Modelling*, 129–32.
- HOLLENBACK, JOY, and ELLIS, DAN (1996). Insights into spoken language gleaned from phonetic transcription of the Switchboard Corpus. *Proceedings of the Fourth International Conference on Spoken Language Processing (ICSLP 96)* 1. Philadelphia, 24–7.
- GREGORY, STANFORD, WEBSTER, STEPHEN, and HUANG, GANG (1993). Voice pitch and amplitude convergence as a metric of quality in dyadic interviews. *Language and Communication* 13: 195–217.
- GRICE, MARTINE (1995a). *The Intonation of Interrogation in Palermo Italian: Implications for Intonational Theory*. Tübingen: Niemeyer.
- (1995b). Leading tones and downstep in English. *Phonology* 12: 183–233.
- LADD, D. ROBERT, and ARVANITI, AMALIA (2000). On the place of “phrase accents” in intonational phonology. *Phonology* 17: 143–85.
- GRIER, J. BROWN (1971). Nonparametric indexes for sensitivity and bias: Computing formulas. *Psychological Bulletin* 75: 424–9.
- GRIESER, DIANNE and KUHL, PATRICIA K. (1989). Categorization of speech by infants: Support for speech-sound prototypes. *Developmental Psychology* 25: 577–88.
- GRIFFIN, ZENZI M. and BOCK, J. KATHRYN (2000). What the eyes say about speaking. *Psychological Science* 11: 274–9.

- GRIFFITHS, THOMAS L. and KALISH, MICHAEL L. (2007). Language evolution by iterated learning with Bayesian agents. *Cognitive Science* 31: 441–80.
- GRIMSHAW, JANE (1981). Form, function, and the language-acquisition device, in C. L. Baker and J. J. McCarthy (eds.), *The Logical Problem of Language Acquisition*. Cambridge, MA: MIT Press, 165–82.
- GROSJEAN, FRANCOIS (1980). Spoken word recognition processes and the gating paradigm. *Perception and Psychophysics* 28(4): 267–83.
- (1996). Gating. *Language and Cognitive Processes* 11(6): 597–604.
- (2001). The bilingual's language modes, in J. Nicol (ed.), *One Mind, Two Languages: Bilingual Language Processing*. Oxford: Blackwell, 1–22.
- (2008). *Studying Bilinguals*. Oxford: Oxford University Press.
- and COLLINS, MARYANN (1979). Breathing, pausing, reading. *Phonetica* 36: 98–114.
- GROSSBERG, STEPHEN (1976). Adaptive pattern classification and universal recoding, I: Parallel development and coding of neural feature detectors. *Biological Cybernetics* 23: 121–34.
- (1980). How does a brain build a cognitive code? *Psychological Review* 87: 1–51.
- (1987). Competitive learning: From interactive activation to adaptive resonance. *Cognitive Science* 11: 23–63.
- (2003). Resonant neural dynamics of speech perception. *Journal of Phonetics* 31: 423–45.
- GROSZ, BARBARA and HIRSCHBERG, JULIA (1992). Some intonational characteristics of discourse structure. *Proceedings of the International Conference on Spoken Language Processing*. Banff, October, 429–32.
- GU, CHONG (2002). *Smoothing Spline ANOVA Models*. New York: Springer.
- GU, WENTAO and LEE, TAN (2007). Effects of tonal context and focus on Cantonese Fo. *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarland University, Saarbrücken.
- GUENTHER, FRANK H. (1995). Speech sound acquisition, coarticulation, and rate effects in a neural network model of speech production. *Psychological Review* 102: 594–621.
- (2006). Cortical interactions underlying the production of speech sounds. *Journal of Communication Disorders* 39: 350–65.
- and GJAJA, MARIN N. (1996). The perceptual magnet effect as an emergent property of neural map formation. *Journal of the Acoustical Society of America* 100: 1111–21.
- HUSAIN, FATIMA T., COHEN, MICHAEL A., and SHINN-CUNNINGHAM, BARBARA G. (1999). Effects of categorization and discrimination training on auditory perceptual space. *Journal of the Acoustical Society of America* 106: 2900–12.
- NIETO-CASTANON, ALFONSO, GHOSH, SATRAJIT S., and TOURVILLE, JAMES A. (2004). Representation of sound categories in auditory cortical maps. *Journal of Speech, Language, and Hearing Research* 47: 46–57.
- and PERKELL, JOSEPH S. (2004). A neural model of speech production and its application to studies of the role of auditory feedback in speech, in B. Maassen, R. Kent, H. Peters, P. van Lieshout, and W. Hulstijn (eds.), *Speech Motor Control in Normal and Disordered Speech*. Oxford: Oxford University Press, 29–49.
- GUION, SUSAN G. (1998). The role of perception in the sound change of velar palatalization. *Phonetica* 55: 18–52.
- (2003). The vowel system of Quichua-Spanish Bilinguals. Age of acquisition effect on the mutual influence of the first and second languages. *Phonetica* 60: 98–128.
- and WAYLAND, RATREE (2004). Aerodynamic of [r] in tonogenesis. Paper presented at the 9th Conference on Laboratory Phonology.

- GUO, TAOMEI and PENG, DANLING (2006). Event-related potential evidence for parallel activation of two languages in bilingual speech production. *NeuroReport* 17: 1757–60.
- GUSSENHOVEN, CARLOS (1984). *On the Grammar and Semantics of Sentence Accents*. Dordrecht: Foris.
- (2000a). The boundary tones are coming: On the non-peripheral realization of boundary tones, in M. Broe and J. Pierrehumbert (eds.), *Papers in Laboratory Phonology V: Acquisition and the Lexicon*. Cambridge: Cambridge University Press, 132–51.
- (2000b). The lexical tone contrast of Roermond Dutch in Optimality Theory, in M. Horne (ed.), *Prosody: Theory and Experiment. Studies Presented to Gösta Bruce*. Amsterdam: Kluwer, 129–67.
- (2004). *The Phonology of Tone and Intonation*. Cambridge: Cambridge University Press.
- (2006). Experimental approaches to establishing discreteness of intonational contrasts, in S. Suhoff, D. Lenertová, R. Meyer, S. Pappert, P. Augurzky, I. Mleinek, N. Richter, and J. Schliesser (eds.), *Methods in Empirical Prosody Research*. Berlin: Mouton de Gruyter, 321–34.
- and JACOBS, H. (1998). *Understanding Phonology*. London: Arnold.
- and RIETVELD, TONI (1992). A Target-Interpolation Model for the intonation of Dutch, *Proceedings of the Second International Conference of Speech and Language Processing (ICSLP'92)*. Banff, 1235–8.
- (2000). The behavior of H* and L* under variations in pitch range in Dutch rising contours. *Language and Speech* 43: 183–203.
- ——— KERKHOFF, JOOP, and TERKEN, JACQUES (2003). Transcription of Dutch Intonation: Courseware, <<http://todi.let.kun.nl/ToDI/home.htm>>, accessed February 3, 2010.
- GUT, ULRIKE (2007). Learner corpora in second language research and teaching, in J. Trouvain and U. Gut (eds.), *Non-native Prosody: Phonetic Description and Teaching Practice*. Berlin: Mouton de Gruyter, 145–67.
- GUY, GREGORY R. (1980). Variation in the group and the individual: The case of final stop deletion, in William Labov (ed.), *Locating Language in Time and Space*. New York: Academic Press, 1–36.
- (1991a). Explanation in variable phonology. *Language Variation and Change* 3: 1–22.
- (1991b). Contextual conditioning in variable lexical phonology. *Language Variation and Change* 3: 223–39.
- (1997). Violable is variable: Optimality Theory and linguistic variation. *Language Variation and Change* 9: 333–47.
- and BOBERG, CHARLES (1997). Inherent variability and the Obligatory Contour Principle. *Language Variation and Change* 9: 149–64.
- HAAN, JUDITH (2002). *Speaking of Questions*. Utrecht: LOT dissertation series.
- HAAS, MARY (1968). Notes on a Chipewyan dialect. *International Journal of American Linguistics* 34(3): 165–75.
- HAERI, NILOOFAR (1996). *The Sociolinguistic Market of Cairo: Gender, Class and Education*. London and New York: Kegan Paul International.
- HAGGARD, MARK, AMBLER, STEPHEN, and CALLOW, MO (1970). Pitch as a voicing cue. *Journal of the Acoustical Society of America* 47: 613–17.
- HAJEK, JOHN (1997). *Universals of Sound Change in Nasalization*. Repr. 1999. Oxford: Blackwell.

- HAKEN, H., KELSO, J. A. SCOTT, and BUNZ, H. (1985). A theoretical model of phase transitions in human hand movements. *Biological Cybernetics* 51: 347–56.
- HALE, MARK, KISSOCK, MADELYN, and REISS, CHARLES (2007). Microvariation, variation, and the features of universal grammar. *Lingua* 117: 645–65.
- and REISS, CHARLES (2000). Substance abuse and dysfunctionality: Current trends in phonology. *Linguistic Inquiry* 31: 157–69.
- HALL, NANCY E. (2003). Gestures and segments: Vowel intrusion as overlap. Ph.D. dissertation, University of Massachusetts, Amherst.
- HALLE, MORRIS (1959). *The Sound Pattern of Russian*. The Hague: Mouton.
- (1964). On the bases of phonology, in J. A. Fodor and J. J. Katz (eds.), *The Structure of Language*. Englewood Hills, NJ: Prentice-Hall, 324–33.
- (1978). Knowledge unlearned and untaught: What speakers know about the sounds of their language, in M. Halle, J. Bresnan, and G. A. Miller (eds.), *Linguistic Theory and Psychological Reality*. Cambridge, MA: MIT Press, 294–303.
- (1992). Features, in William Bright (ed.), *Oxford International Encyclopedia of Linguistics*. New York: Oxford University Press.
- 2002. INTRODUCTION, in M. HALLE (ed.), *From Memory to Speech and Back: Papers on Phonetics and Phonology 1954–2002*. Berlin: Mouton de Gruyter, 1–17.
- and MARANTZ, ALEC (1993). Distributed morphology and the pieces of inflection, in K. Hale and S. J. Keyser (eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*. Cambridge, MA: MIT Press, 111–176.
- and STEVENS, KENNETH N. (1962). Speech recognition: A model and a program for research. *IRE Transactions on Information Theory* IT-8: 155–9.
- (1971). A note on laryngeal features. *MIT Quarterly Progress Report* 11: 198–213.
- and VERGNAUD, JEAN-ROGER (1987). *An Essay on Stress*. Cambridge, MA: MIT Press.
- HALLÉ, PIERRE A. (1994). Evidence for tone-specific activity of the sternohyoid muscle in Modern Standard Chinese. *Language and Speech* 37: 103–24.
- BEST, CATHERINE T., and BCHRACH, A. (2003). Perception of /t/ and /d/ clusters: A cross-linguistic perceptual study with French and Israeli listeners, in M. J. Solé, D. Recasens, and J. Romero (eds.), *Proceedings of the 15th International Congress of Phonetic Sciences*. Barcelona: Causal Productions, 2893–6.
- CHANG, Y. C., and BEST, CATHERINE T. (2004). Identification and discrimination of Mandarin Chinese tones by Mandarin Chinese vs. French listeners. *Journal of Phonetics* 31: 395–421.
- HALLIDAY, MICHAEL A. K. (1967). *Intonation and Grammar in British English*. The Hague and Paris: Mouton.
- (1970). *A Course in Spoken English: Intonation*. Oxford: Oxford University Press.
- HÄMÄLÄINEN, MATTI, HARI, RIITA, ILMONIEMI, RISTO J., KNUUTILA, JUKKA, and LOUNASMAA, OLLI V. (1993). Magnetoencephalography: Theory, instrumentation, and applications to noninvasive studies of the working human brain. *Reviews of Modern Physics* 65: 413–97.
- HAMANN, SILKE (2003). Norwegian retroflexion: Licensing by cue or prosody?, in A. Dahl, K. Benzen, and P. Svenonius (eds.), *Proceedings of the 19th Scandinavian Conference on Linguistics*. Nordlyd 31, 63–77.
- APOUSSIDOU, DIANA, and BOERSMA, PAUL (forthcoming). Modelling the formation of phonotactic restrictions across the mental lexicon, *Proceedings of the 45th Meeting of the Chicago Linguistic Society*.

- BOERSMA, P., and CÁVAR, MAŁGORZATA (2010). Language-specific differences in the weighting of perceptual cues for labiodentals. *Proceedings of New Sounds 2010*, Poznań. 167–72.
- HAMMOND, MICHAEL (1999). *The Phonology of English: A Prosodic Optimality-theoretic Approach*. Oxford: Oxford University Press.
- (2004). Gradience, phonotactics, and the lexicon in English phonology. *International Journal of English Studies* 4: 1–24.
- HAN, MIEKO S. and KIM, KONG-ON (1974). Phonetic variation of Vietnamese tones in disyllabic utterances. *Journal of Phonetics* 2: 223–32.
- HANKAMER, JORGE (1989). Morphological parsing and the lexicon in lexical representation and process, in W. Marslen-Wilson (ed.), *Lexical Representation and Process*. Cambridge, MA: MIT Press, 392–408.
- HANNA, JOY E. and TANENHAUS, MICHAEL K. (2004). Pragmatic effects on referent resolution in a collaborative task: Evidence from eye movements. *Cognitive Science* 28: 105–15.
- HANNULA, DEBORAH E. and CHARAN, RANGANATH (2009). The eyes have it: Hippocampal activity predicts expression of memory in eye movements. *Neuron* 63: 592–9.
- HANSEN, JETTE (2004). Developmental sequences in the acquisition of English L2 syllable codas. *Studies in Second Language Acquisition* 26: 85–124.
- HANSON, HELEN M. (1995). Glottal characteristics of female speakers. Ph.D. dissertation, Harvard University, Cambridge, MA.
- (1997a). Glottal characteristics of female speakers: Acoustic correlates. *Journal of the Acoustical Society of America* 101: 466–81.
- (1997b). Vowel amplitude variation during sentence production, in *Proceedings of the IEEE ICASSP-97*, Munich, 1627–30.
- (2009). Effects of obstruent consonants on fundamental frequency at vowel onset in English. *Journal of the Acoustical Society of America* 125(1): 425–41.
- and CHUANG, ERIKA S. (1999). Glottal characteristics of male speakers: Acoustic correlates and comparison with female data. *Journal of the Acoustical Society of America* 106: 1064–77.
- SLIFKA, JANET, SHATTUCK-HUFNAGEL, STEFANIE, and KOBLER, JAMES (2005). Identification of final fall in subglottal pressure contours of speech utterances. *Journal of the Acoustical Society of America* 119: 3393–4.
- — — — — (2007). Tone distribution and its effect on subglottal pressure during speech. *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, 545–8.
- and STEVENS, KENNETH N. (2002). A quasiarticulatory approach to controlling acoustic source parameters in a Klatt-type formant synthesizer using Hlsyn. *Journal of the Acoustical Society of America* 112(3): 1158–82.
- HANSON, KRISTIN and KIPARSKY, PAUL (1996). A parametric theory of poetic meter. *Language* 72: 287–335.
- HANSSON, GUNNAR Ó. (2001). Theoretical and typological issues in consonant harmony. Ph.D. dissertation, UC Berkeley.
- (2003). Laryngeal licensing and laryngeal neutralization in Faroese and Icelandic. *Nordic Journal of Linguistics* 26: 45–79.
- (2008). Diachronic explanations of sound patterns. *Language and Linguistics Compass* 2: 859–93.

- HAO, YEN-CHEN and DE JONG, KENNETH (2007). The categorical nature of tones and consonants: Evidence from second language perception and production. *Journal of the Acoustical Society of America* 122: 3018.
- HARDCASTLE, WILLIAM J. (1972). The use of electropalatography in phonetic research. *Phonetica* 25: 197–215.
- (1985). Some phonetic and syntactic constraints on lingual coarticulation during /k/ sequences. *Speech Communication* 4: 247–63.
- and HEWLETT, NIGEL (1999). *Coarticulation: Theory, Data and Techniques*. Cambridge: Cambridge University Press.
- HARDEN, R. JOYCE (1975). Comparison of glottal area changes as measured from ultrahigh-speed photographs and photoelectric glottographs. *Journal of Speech and Hearing Research* 18: 728–38.
- HARE, MARY (1990). The role of similarity in Hungarian vowel harmony: A connectionist account. *Connection Science* 2: 123–50.
- HARNAD, STEVAN R. (1990). *Categorical Perception: The Groundwork of Cognition*. Cambridge: Cambridge University Press.
- HARNSBERGER, JAMES D. (2001). The perception of Malayalam nasal consonants by Marathi, Punjabi, Tamil, Oriya, Bengali, and American English listeners: A multidimensional scaling analysis. *Journal of Phonetics* 29: 303–27.
- HARRELL, FRANK. (2001). *Regression Modeling Strategies*. Berlin: Springer.
- HARRINGTON, JONATHAN (2006). An acoustic analysis of “happy-tensing” in the Queen’s Christmas broadcasts. *Journal of Phonetics* 34: 439–57.
- (2007). Evidence for a relationship between synchronic variability and diachronic change in the Queen’s annual Christmas broadcasts, in J. Cole and J. I. Hualde (eds.), *Laboratory Phonology 9*. Berlin: Mouton de Gruyter, 125–43.
- BECKMAN, MARY E., FLETCHER, JANET, and PALETHORPE, SALLYANNE (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*. Australian Speech Science and Technology Association, Inc., 1851–4.
- FLETCHER, JANET, and BECKMAN, MARY E. (2000). Manner and place conflicts in the articulation of accent in Australian English, in M. Broe and J. Pierrehumbert (eds.), *Papers in Laboratory Phonology V: Language Acquisition and the Lexicon*. Cambridge: Cambridge University Press, 40–51.
- KLEBER, F., and REUBOLD, U. (2008). Compensation for coarticulation, /u/-fronting, and sound change in Standard Southern British: an acoustic and perceptual study. *Journal of the Acoustical Society of America* 123: 2825–35.
- PALETHORPE, SALLYANNE, and WATSON, CATHERINE I. (2000). Does the Queen speak the Queen’s English? *Nature* 408: 927–8.
- — — (2005). Deepening or lessening the divide between diphthongs? An analysis of the Queen’s annual Christmas broadcasts, in W. J. Hardcastle and J. Beck (eds.), *The Gift of Speech (Festschrift for John Laver)*. Hillsdale, NJ: Lawrence Erlbaum, 227–61.
- — — (2007). Age-related changes in fundamental frequency and formants: a longitudinal study of four speakers. *Proceedings of Interspeech 2007*, Antwerp.
- HARRIS, CYRIL M. (1953). A study of the building blocks in speech. *Journal of the Acoustical Society of America* 25: 962–9.
- and WOLPERT, DANIEL M. (1998). Signal-dependent noise determines motor planning. *Nature* 394: 780–4.

- HARRIS, JAMES W. (1969). *Spanish Phonology*. Cambridge, MA: MIT Press.
- (1978). Two theories of non-automatic morphophonological alternations. *Language* 54: 41–60.
- (1994). *English Sound Structure*. Oxford and Cambridge, MA: Blackwell.
- and LINDSEY, GEOFF (1995). The elements of phonological representation, in J. Durand and F. Katamba (eds.), *Frontiers of Phonology: Atoms, Structures, Derivations*. Harlow, Essex: Longman, 34–79.
- (2000). Phonology without categorical phonetics, in N. Burton-Roberts, P. Carr, and G. Docherty (eds.), *Phonological Knowledge: Conceptual and Empirical Issues*. Oxford: Oxford University Press, 185–205.
- HARRIS, KATHERINE S. (1958). Cues for the discrimination of American English fricatives in spoken syllables. *Language and Speech* 1: 1–7.
- (1978). Vowel duration change and its underlying physiological mechanisms, *Language and Speech* 21: 354–61.
- HARRIS, ZELIG S. (1951). *Methods in Structural Linguistics*. Chicago: University of Chicago Press.
- HART, JOHAN and COHEN, ANTONIE (1973). Intonation by rule: A perceptual quest. *Journal of Phonetics* 1: 309–27.
- and COLLIER, RENÉ (1975). Integrating different levels of intonation analysis. *Journal of Phonetics* 3: 235–55.
- and COHEN, ANTONIE (1990). *A Perceptual Study of Intonation: An Experimental-Phonetic Approach to Speech Melody*. Cambridge: Cambridge University Press.
- HARTSUIKER, ROBERT, CORLEY, MARTIN, and MARTENSEN, HEIKE (2005). The lexical bias effect is modulated by context, but the standard monitoring account doesn't fly: Related reply to Baars, Motley, and MacKay (1975). *Journal of Memory and Language* 52: 58–70.
- HASEGAWA-JOHNSON, MARK and FLECK, MARGARET (2007). The ISLEX Project, <<http://www.isle.uiuc.edu/dict>>, accessed April 20, 2009.
- HATTORI, KOTA and IVERSON, PAUL (2009). English /r/-/l/ category assimilation by Japanese adults: Individual differences and the link to identification accuracy. *Journal of the Acoustical Society of America* 125(1): 469–79.
- HAUDRICOURT, ANDRÉ-GEORGES (1954). De l'origine des tons en Vietnamien. *Journal Asiatique* 242: 69–82.
- HAUSER, MARC D., NEWPORT, ELISSA L., and ASLIN, RICHARD N. (2001). Segmentation of the speech stream in a nonhuman primate: Statistical learning in cotton top tamarins. *Cognition* 78: B53–B64.
- HAWKINS, SARAH (2003). Roles and representations of systematic fine phonetic detail in speech understanding. *Journal of Phonetics* 31: 373–405.
- (2004). Puzzles and patterns in 50 years of research on speech perception, in J. Slifka, S. Manuel, J. Perkell, and S. Shattuck-Hufnagel (eds.), *Sound to Sense: 50+ Years of Discoveries in Speech Communication*, <<http://www.rle.mit.edu/soundtosense/conference/pages/invited.htm>>.
- (2010a). Phonological features, auditory objects, and illusions. *Journal of Phonetics* 38: 60–89.
- (2010b). Phonetic variation as communicative system: Perception of the particular and the abstract, in C. Fougeron, B. Kühnert, M. D'Imperio, and N. Vallée (eds.), *Laboratory Phonology 10*. Berlin: Mouton de Gruyter, 479–510.

- HAWKINS, SARAH and MIDGLEY, JONATHAN (2005). Formant frequencies of RP monophthongs in four age groups of speakers. *Journal of the International Phonetic Association* 35: 183–99.
- and NGUYEN, NOËL (2004). Influence of syllable-coda voicing on the acoustic properties of syllable-onset /l/ in English. *Journal of Phonetics* 32: 199–231.
- and SMITH, RACHEL (2001). Polysp: a polysystemic, phonetically-rich approach to speech understanding. *Italian Journal of Linguistics/Rivista di Linguistica* 13: 99–188.
- HAY, JENNIFER B. (2002). From speech perception to morphology: Affix-ordering revisited. *Language* 78(3): 527–55.
- (2003). *Causes and Consequences of Word Structure*. New York and London: Routledge.
- and BAAYEN, R. HARALD (2002). Parsing and productivity, in G. E. Booij and J. van Marle (eds.), *Yearbook of Morphology*. Dordrecht: Kluwer Academic Publishers, 203–55.
- (2005). Shifting paradigms: Gradient structure in morphology. *Trends in Cognitive Sciences* 9(7): 342–8.
- and BRESNAN, JOAN (2006). Spoken syntax: The phonetics of giving a hand in New Zealand English. *The Linguistic Review* 23: 321–49.
- and DRAGER, KATIE (2007). Sociophonetics. *Annual Review of Anthropology* 36: 89–103.
- (2010). Stuffed toys and speech perception. *Linguistics* 48(4): 865–92.
- and WARREN, PAUL (2009). Careful who you talk to: An effect of experimenter identity on the production of the NEAR/SQUARE merger in New Zealand English. *Australian Journal of Linguistics* 29(2): 269–85.
- (2010). Short-term exposure to one dialect affects processing of another. *Language and Speech* 53(4): 447–71.
- and MACLAGAN, MARGARET (2010). Social and phonetic conditioners on the frequency and degree of “intrusive /r/” in New Zealand English, in D. Preston and N. Niedzielski (eds.), *A Reader in Sociophonetics*. Trends in Linguistics Studies and Monographs 219. New York: De Gruyter Mouton, 41–69.
- NOLAN, A., and DRAGER, KATIE (2006). From fush to feesh: Exemplar priming in speech perception. *The Linguistic Review* 23(3): 351–79.
- PIERREHUMBERT, JANET, and BECKMAN, MARY E. (2003). Speech perception, well-formedness, and the statistics of the lexicon, in J. Local, R. Ogden, and R. Temple, (eds.), *Phonetic Interpretation: Papers in Laboratory Phonology VI*. Cambridge: Cambridge University Press, 58–74.
- and PLAG, INGO (2004). What constrains possible suffix combinations? On the interaction of grammatical and processing restrictions in derivational morphology. *Natural Language and Linguistic Theory* 22: 565–96.
- and SUDBURY, ANDREA (2005). How rhoticity became /r/-sandhi. *Language* 81(4): 799–823.
- WARREN, PAUL, and DRAGER, KATIE (2006). Factors influencing speech perception in the context of a merger-in-progress. *Journal of Phonetics* 34(4): 458–84.
- HAYES, BRUCE (1984). The phonology of rhythm in English. *Linguistic Inquiry* 15: 33–74.
- (1986). Assimilation as spreading in Toba Batak. *Linguistic Inquiry* 17: 467–99.
- (1995). *Metrical Stress Theory*. Chicago: The University of Chicago Press.
- (2000). Gradient well-formedness in Optimality Theory, in J. Dekkers, F. van der Leeuw, and J. van de Weijer (eds). *Optimality Theory: Phonology, Syntax, and Acquisition*. Oxford: Oxford University Press, 88–120.
- (2009). *Introductory Phonology*. Malden, MA: Wiley-Blackwell.

- KIRCHNER, ROBERT, and STERIADE, DONCA (2004). *Phonetically Based Phonology*. Cambridge: Cambridge University Press.
- and LAHIRI, ADITI (1991). Bengali intonational phonology. *Natural Language and Linguistic Theory* 9: 47–96.
- and LONDE, ZSUZSA (2006). Stochastic phonological knowledge: The case of Hungarian vowel harmony. *Phonology* 23: 59–104.
- and MCEACHERN, MARGARET (1998). Quatrain form in English folk verse. *Language* 64: 473–507.
- TESAR, BRUCE, and ZURAW, KIE (2003). OTSoft 2.1, software package, <<http://www.linguistics.ucla.edu/people/hayes/otsoft/>>.
- SIPTÁR, PÉTER, ZURAW, KIE, and LONDE, ZSUZSA (2009). Natural and unnatural constraints in Hungarian vowel harmony. *Language* 85: 822–63.
- and WILSON, COLIN (2008). A maximum entropy model of phonotactics and phonotactic learning. *Linguistic Inquiry* 39: 379–440.
- HAYES, RACHEL A. and SLATER, ALAN (2008). Three-month-olds' detection of alliteration in syllables. *Infant Behavior and Development* 31(1): 153–6.
- HAZAN, VALERIE and BARRETT, SARAH (2000). The development of phonemic categorization in children aged 6–12. *Journal of Phonetics* 28: 377–96.
- HCRC MAP TASK CORPUS (1993). Philadelphia: Linguistic Data Consortium.
- HEBB, DONALD O. (1949). *The Organization of Behavior: A Neuropsychological Theory*. New York: Wiley.
- HEEREN, WILLEMJIN. F. L. and SCHOUTEN, M. E. H. (2008). Perceptual development of phoneme contrasts: How sensitivity changes along acoustic dimensions that contrast phoneme categories. *Journal of the Acoustical Society of America* 124: 2291–302.
- HEERINGA, WILBERT, JOHNSON, KEITH, and GOOSKENS, CHARLOTTE (2009). Measuring Norwegian dialect distances using acoustic features. *Speech Communication* 51: 167–83.
- HELDNER, MATTIAS and STRANGERT, EVA (2001). Temporal effects of focus in Swedish. *Journal of Phonetics* 29: 329–61.
- HELLMUTH, SAM (2004). Prosodic weight and phonological phrasing in Cairene Arabic, in N. Adams, A. Cooper, F. Parrill, and T. Wier (eds.), *Proceedings from the 40th Annual Meeting of the Chicago Linguistics Society*, 97–111.
- (2005a). No de-accenting in (or of) phrases: Evidence from Arabic for cross-linguistic and cross-dialectal prosodic variation, in S. Frota, M. Vigário and M. J. Freitas (eds.), *Prosodies*. Berlin and New York: Mouton de Gruyter, 99–112.
- (2005b). Pitch accent alignment in Egyptian Arabic: Exploring the boundaries of cross-linguistic alignment variation. Paper presented at Phonetics and Phonology in Iberia, PaPI 2005, Bellaterra, Spain, June 20–21, 2005.
- (2007). The relationship between prosodic structure and pitch accent distribution: Evidence from Egyptian Arabic. *The Linguistic Review* (Special issue on Prosodic Phrasing, ed. S. Frota and P. Prieto) 24: 291–316.
- VAN DER HELM, PETER A. (2000). Simplicity versus likelihood in visual perception: From surprisals to precisals. *Psychological Bulletin* 126(5): 770–800.
- HEMAN-ACKAH, YOLANDA and BARR, ARLENE (2006). The value of laryngeal electromyography in the evaluation of laryngeal motion abnormalities. *Journal of Voice* 20: 452–60.
- HENDERSON, JOHN M. and FERREIRA, FERNANDA (2004). Scene perception for psycholinguists, in J. M. Henderson and F. Ferreira (eds.), *The Interface of Language, Vision and Action: Eye Movements and the Visual World*. New York: Psychology Press, 1–58.

- HERMAN, REBECCA (1996). Final lowering in Kipare. *Phonology* 13: 171–96.
- HERMES, ANNE, GRICE, MARTINE, MÜCKE, DORIS, and NIEMANN, HENRIK (2008). Articulatory indicators of syllable affiliation in word-initial consonant clusters in Italian, in R. Sock, S. Fuchs, and Y. Laprie (eds.), *Proceedings of the 8th International Seminar on Speech Production*. Strasbourg: INRIA, 433–6, <<http://issp2008.loria.fr/proceedings.html>>.
- HERTEGÅRD, STELLAN and GAUFFIN, JAN (1992). Acoustic properties of the Rothenberg mask, *Speech Trans. Lab. Q. Prog. Stat. Rep.* 2–3, Stockholm: Royal Institute of Technology: 9–18.
- and LINDESTAD, PER-ÅKE (1995). A comparison of subglottal and intraoral pressure measurements during phonation. *Journal of Voice* 9: 149–55.
- HERTZ, SUSAN R. (1990). The Delta Programming Language: An integrated approach to nonlinear phonology, phonetics, and speech synthesis, in J. Kingston and M. E. Beckman (eds.), *Papers in Laboratory Phonology I: Between Grammar and Physics of Speech*. Cambridge: Cambridge University Press, 215–57.
- (1991). Streams, phones and transitions: Toward a new phonological and phonetic model of formant timing. *Journal of Phonetics* 19: 91–109.
- HESELWOOD, BARRY and MCCHRYSAL, LOUISE (2000). Gender, accent features and voicing in Panjabi–English bilingual children. *Leeds Working Papers in Linguistics and Phonetics* 8: 45–70.
- VAN HEUVEN, VINCENT (1997). Effects of focus distribution and accentuation on the temporal and melodic organisation of word groups in Dutch, in S. Barbiers, J. Rooryck, and J. van de Weijer (eds.), *Small Words in the Big Picture. Squibs for Hans Bennis*. HIL Occasional Papers 2. Leiden: Holland Institute of Generative Linguistics, 37–42.
- and SLUIJTER, AGAATH M. C. (1996). Notes on the phonetics of word prosody, in R. Goedemans, H. van der Hulst, and E. Visch (eds.), *Stress Patterns of the World, Part 1: Background*, vol. 2. The Hague: Holland Institute of Generative Linguistics, Leiden/Holland Academic Graphics, 233–69.
- HEWITT, ROGER (1986). *White Talk, Black Talk*. Cambridge: Cambridge University Press.
- HEWLETT, NIGEL and WATERS, DAPHNE (2004). Gradient change in the acquisition of phonology. *Clinical Linguistics and Phonetics* 18: 523–33.
- HICKOK, GREGORY and POEPEL, DAVID (2004). Dorsal and ventral streams: A framework for understanding aspects of the functional anatomy of language. *Cognition* 92: 67–99.
- (2007). The cortical organization of speech processing. *Nature Reviews Neuroscience* 8: 393–402.
- HIGGINS, JOHN (2009). Minimal pairs for English RP. <<http://myweb.tiscali.co.uk/wordscape/wordlist>>, accessed March 13, 2009.
- HILLENBRAND, JAMES M. (1983). Perceptual organization of speech sounds by infants. *Journal of Speech and Hearing Research* 26: 268–82.
- CLARK, MICHAEL J., and HOUDE, ROBERT A. (2000). Some effects of duration on vowel recognition. *Journal of the Acoustical Society of America* 108: 3013–22.
- GETTY, LAURA A., CLARK, MICHAEL J., and WHEELER, KIMBERLEE (1995). Acoustic characteristics of American English vowels. *Journal of the Acoustical Society of America* 97(5): 3099–111.
- HILLMAN, ROBERT E., HOLMBERG, EVA B., PERKELL, JOSEPH S., WALSH, MICHAEL, and VAUGHAN, CHARLES (1989). Objective assessment of vocal hyperfunction: An experimental framework and initial results. *Journal of Speech and Hearing Research* 32: 373–92.

- (1990). Phonatory function associated with hyperfunctionally related vocal fold lesions. *Journal of Voice* 4: 52–63.
- HINSKENS, FRANS, VAN HOUT, ROELAND, and WETZELS, LEO (1997a). Balancing data and theory in the study of phonological variation and change, in F. Hinskens, R. van Hout, and L. Wetzels (eds.), *Variation, Change and Phonological Theory*. Amsterdam and Philadelphia: John Benjamins, 1–33.
- (eds.) (1997b). *Variation, Change and Phonological Theory*. Amsterdam and Philadelphia: John Benjamins.
- HIRATA, YUKARI, WHITEHURST, ELIZABETH, and CULLINGS, EMILY (2007). Training native English speakers to identify Japanese vowel length contrasts with sentences at varied speaking rates. *Journal of the Acoustical Society of America* 121: 3837–45.
- HIROSE, HAJIME (1997). Investigating the physiology of laryngeal structures, in W. J. Hardcastle and J. Laver (eds.), *The Handbook of Phonetic Sciences*. Oxford: Blackwell, 116–36.
- HIRSCHBERG, JULIA (2000). A corpus-based approach to the study of speaking style, in M. Horne (ed.), *Prosody: Theory and Experiment*. Dordrecht: Kluwer Academic Publishers, 335–50.
- GRAVANO, AGUSTIN, NENKOVA, ANI, SNEED, ELISA, and WARD, GREGORY (2007). Intonational overload: Uses of the H* !H* L- L% contour in read and spontaneous speech, in J. Cole and J. I. Hualde (eds.), *Laboratory Phonology* 9. Berlin: Mouton de Gruyter, 455–82.
- and NAKATANI, CHRISTINE H. (1996). A prosodic analysis of discourse segments in direction-giving monologues. *Proceedings of the 34th Annual Meeting on Association for Computational Linguistics*, Santa Cruz, California, 286–93.
- HIRSCHFELD, GERRIT, JANSMA, BERNADETTE M., BÖLTE, JENS, and ZWITSERLOOD, PIENIE (2008). Interference and facilitation in overt speech production investigated with event-related potentials. *NeuroReport* 19: 1227–30.
- HIRSH-PASEK, KATHY, KEMLER NELSON, DEBORAH, JUSCZYK, PETER, WRIGHT, KIMBERLY, DRUSS, BENJAMIN, and KENNEDY, LORI (1987). Clauses are perceptual units for prelinguistic infants. *Cognition* 26: 269–86.
- HIRST, DANIEL, DI CRISTO, ALBERT, and ESPESSER, ROBERT (2000). Levels of representation and levels of analysis for intonation, in M. Horne (ed.), *Prosody: Theory and Experiment*. Dordrecht: Kluwer Academic Publishers, 51–87.
- and ESPESSER, ROBERT (1993). Automatic modelling of fundamental frequency using a quadratic spline function. *Travaux de l'Institut de Phonétique d'Aix* 15: 71–85.
- HIXON, THOMAS (1966). Turbulent noise sources for speech. *Folia phoniatrica* 18: 168–82.
- HOBEN, THOMAS and GILMORE, RICK O. (2004). Habituation assessment in infancy. *Psychological Methods* 9(1): 70–92.
- HOCK, HANS H. (1992). Causation in language change, in W. Bright (ed.), *Oxford International Encyclopedia of Linguistics*, vol. 1. London and New York: Oxford University Press, 228–31.
- HOCKETT, CHARLES F. (1953). Review of Claude L. Shannon and Warren Weaver, *The Mathematical Theory of Communication*. *Language* 29: 69–93.
- (1954). Two models of grammatical description. *Word* 10: 210–34.
- (1955). *A Manual of Phonology*. Indiana University Publications in Anthropology and Linguistics 11. Baltimore: Waverly Press and Indiana University.
- (1961). Linguistic elements and their relations. *Language* 37(1): 29–53.

- HOCKEY, BETH ANN and FAGYAL, ZSUZSANNA (1999). Phonemic vowel length and pre-boundary lengthening: An experimental investigation on the use of durational cues in Hungarian, in *Proceedings of the XIVth ICPHS*, San Francisco, 313–16.
- HOEKSEMA, JACOB (1985). Formal properties of stress representations, in H. van der Hulst, and N. Smith (eds.), *Advances in nonlinear phonology*. Dordrecht: Foris Publications, 83–99.
- HÖHLE, BARBARA, SCHMITZ, MICHAELA, SANTELMANN, LYNN M., and WEISSENBORN, JÜRGEN (2006). The recognition of discontinuous verbal dependencies by German 19-month-olds: Evidence for lexical and structural influences on children's early processing capacities. *Language Learning and Development* 2: 277–300.
- HOJEN, ANDERS and FLEGE, JAMES E. (2006). Early learners' discrimination of second-language (L2) vowels. *Journal of the Acoustical Society of America* 119: 3072–84.
- HOLES, CLIVE (1986). The social motivation for phonological convergence in three Arabic dialects. *International Journal of the Sociology of Language* 51: 33–51.
- HOLMBERG, EVA B., HILLMAN, ROBERT E., and PERKELL, JOSEPH S. (1988). Glottal airflow and transglottal air pressure measurements for male and female speakers in soft, normal, and loud voice. *Journal of the Acoustical Society of America* 84: 511–29.
- GUIOD, PETER, and GOLDMAN, SUSAN L. (1995). Comparisons among aerodynamic, electroglottographic, and acoustic spectral measures of female voice. *Journal of Speech and Hearing Research* 38: 1212–23.
- HOLMES, JANET (1997). Maori and Pakeha English: Some New Zealand social dialect data. *Language in Society* 26: 65–101.
- HOLMQUIST, JONATHAN (1985). Social correlates of a linguistic variable: A study in a Spanish village. *Language in Society* 14: 191–203.
- HOLST, TARA and NOLAN, FRANCIS (1995). The influence of syntactic structure on [s] to [ʃ] assimilation, in B. Connell and A. Arvaniti (eds.), *Phonology and Phonetic Evidence: Papers in Laboratory Phonology IV*. Cambridge: Cambridge University Press, 315–33.
- HOLT, LORI L. (2006). The mean matters: Effects of statistically-defined non-speech spectral distributions on speech categorization. *Journal of the Acoustical Society of America* 120: 2801–17.
- and LOTTO, ANDREW J. (2006). Cue weighting in auditory categorization: Implications for first and second language acquisition. *Journal of the Acoustical Society of America* 119: 3059–71.
- (2008). Speech perception within an auditory cognitive science framework. *Current Directions in Psychological Science* 17: 42–6.
- (2010). Speech perception as categorization. *Attention, Perception & Psychophysics* 72, 1218–27.
- and DIEHL, RANDY L. (2004). Auditory discontinuities interact with categorization: Implications for speech perception. *Journal of the Acoustical Society of America* 116: 1763–73.
- and KLUENDER, KEITH R. (1998). Incorporating principles of general learning in theories of language acquisition, in M. Gruber, C. D. Higgins, K. S. Olson, and T. Wysocki (eds.), *Chicago Linguistic Society, Volume 34: The Panels*. Chicago: Chicago Linguistic Society, 253–68.
- (2001). Influence of fundamental frequency on stop-consonant voicing perception: A case of learned covariation or auditory enhancement? *Journal of the Acoustical Society of America* 109: 764–74.

- HOMAE, FUMITAKA, WATANABE, HAMA, NAKANO, TAMAMI, and TAGA, GENTARO (2007). Prosodic processing in the developing brain. *Neuroscience Research* 59: 29–39.
- HOMBERT, JEANMARIE (1978). Consonant types, vowel quality, and tone, in V. Fromkin (ed.), *Tone: A Linguistic Survey*. New York: Academic Press, 77–111.
- OHALA, JOHN, and EWAN, WILLIAM (1979). Phonetic explanations for the development of tones. *Language* 55: 37–58.
- HONDA, KIYOSHI (2004). Physiological factors causing tonal characteristics of speech: From global to local prosody, in *Proceedings of Speech Prosody 2004*, Nara, 739–44.
- and FUJIMURA, OSAMU (1991). Intrinsic vowel F0 and phrase-final F0 lowering: Phonological vs. biological explanations, in J. Gauffin and B. Hammerberg (eds.), *Vocal Fold Physiology*. San Diego: Singular, 149–57.
- HONOROF, DOUGLAS (1999). Articulatory gestures and Spanish nasal assimilation. Doctoral dissertation, Yale University.
- HOOLE, PHILIP (1999). Laryngeal coarticulation. Section A: Coarticulatory investigations of the devoicing gesture, in W. H. Hardcastle and N. Hewlett (eds.), *Coarticulation: Theory, Data and Techniques*. Cambridge: Cambridge University Press, 105–21.
- (2006). Experimental studies of laryngeal articulation. Part I: Electromyographic investigation of laryngeal activity in vowel intrinsic pitch and consonant voicing. Unpublished habilitation thesis, Ludwig-Maximilians-Universität, Munich. <http://www.phonetik.unimuenchen.de/~hoole/pdf/habilemg_chap_all.pdf>, accessed September 12, 2009.
- and HONDA, KIYOSHI (2011). Automaticity vs. feature-enhancement in the control of segmental Fo, in G. N. Clements and R. Ridouane (eds.), *Where do phonological features come from? Cognitive, physical and developmental bases of distinctive speech categories*. Amsterdam: John Benjamins, 131–71.
- and MOOSHAMMER, CHRISTINE (2002). Articulatory analysis of the German vowel system, in P. Auer, P. Gilles, and H. Spiekermann (eds.), *Silbenschnitt und Tonakzente*. Tübingen: Niemeyer, 129–52.
- MUNHALL, K., and MOOSHAMMER, C. (1998). Do airstream mechanisms influence tongue movement paths? *Phonetica* 55(3): 131–46.
- HOOPER, JOAN B. (1976a). *An Introduction to Natural Generative Phonology*. New York: Academic Press.
- (1976b). Word frequency in lexical diffusion and the source of morphophonological change, in W. M. Christie (ed.), *Current Progress in Historical Linguistics*. Amsterdam: North Holland, 96–105.
- HOOVER, JILL R. and STORKEL, HOLLY L. (2007). Phonological and lexical cues in word learning by preschool children in a seminar entitled Word Learning in Situ: Interplay between Learners and Learning Environments (Convener: K. K. McGregor). American Speech-Language-Hearing Association Convention, Boston, MA.
- HOPPER, PAUL J. and TRAUOGOTT, ELIZABETH C. (2003). *Grammaticalization*. Cambridge: Cambridge University Press.
- HORN, DAVID L., HOUSTON, DEREK M., and MIYAMOTO, RICHARD T. (2007). Speech discrimination skills in deaf infants before and after cochlear implantation. *Audiological Medicine* 5: 232–41.
- HORN, ROGER A. and JOHNSON, CHARLES R. (1990). Norms for Vectors and Matrices, ch. 5 in *Matrix Analysis*. Cambridge: Cambridge University Press.
- HORNE, MERLE (1990). Empirical evidence for a deletion formulation of the rhythm rule in English. *Linguistics* 28: 959–81.

- HORVATH, BARBARA and SANKOFF, DAVID (1987). Delimiting the Sydney speech community. *Language in Society* 16: 179–204.
- HOUDE, ROBERT (1968). A study of tongue body motion during selected speech sounds. *Speech Communication Research Laboratory (Santa Barbara), Monograph No. 2* (also available as Ph.D. dissertation, University of Michigan, 1967).
- HOUSE, DAVID (1990). *Tonal Perception in Speech*. Lund, Sweden: Lund University Press.
- HOUSE, JILL (2006). Constructing a context with intonation. *Journal of Pragmatics* 38: 1542–58.
- HOUSTON, DEREK M., HORN, DAVID L., QI, RONG, TING, JONATHAN, and GAO, SUJUAN (2007). Assessing speech discrimination in individual infants. *Infancy* 12: 119–45.
- and JUSCZYK, PETER (2003). Infants' long-term memory for the sound patterns of words and voices. *Journal of Experimental Psychology: Human Perception and Performance* 29: 1143–54.
- HOWE, DARIN and PULLEYBLANK, DOUGLAS (2001). Patterns and timing of glottalisation. *Phonology* 18: 45–80.
- HOWE, MICHAEL S. and MCGOWAN, RICHARD S. (2005). Aeroacoustics of [s]. *Proceedings of the Royal Society A*, 461: 1005–28.
- HRUSCHKA, DANIEL J., CHRISTIANSEN, MORTEN H., BLYTHE, RICHARD, CROFT, WILLIAM, HEGGARTY, PAUL, MUFWENE, SALIKOKO S., PIERREHUMBERT, JANET B., and POPLACK, SHANA (2009). Building social cognitive models of language change. *Trends in Cognitive Sciences* 13: 464–9.
- HSIEH, LI, LEONARD, LAURENCE B., and SWANSON, LORI (1999). Some differences between English plural noun inflections and third singular verb inflections in the input: The contributions of frequency, sentence position, and duration. *Journal of Child Language* 26: 531–43.
- HUDSON-KAM, CARLA L. and NEWPORT, ELISSA L. (2009). Getting it right by getting it wrong: When learners change languages. *Cognitive Psychology* 59: 30–66.
- HUETTIG, FALK and MCQUEEN, JAMES M. (2007). The tug of war between phonological, semantic and shape information in language-mediated visual search. *Journal of Memory and Language* 57: 460–82.
- HUFFMAN, MARIE K. (1990). Implementation of nasal: timing and articulatory landmarks. Ph.D. dissertation, UCLA. Distributed as UCLA Working Papers in Phonetics 75.
- (1991). Time-varying properties of contextually nasalized vowels: Acoustics and perception, in *Proceedings of the 12th International Congress of Phonetic Sciences*. Aix-en-Provence: Université de Provence Aix-Marseille, 130–3.
- (2007). Laboratory phonology and socio-phonetics: Partners in a conversation whose time has come, in J. Cole and J. I. Hualde (eds.), *Laboratory Phonology* 9. Berlin: Mouton de Gruyter, 113–23.
- HULL, DAVID L. (ed.) (1988). *Science as a Process*. Chicago: The University of Chicago Press.
- (1989). *The Metaphysics of Evolution*. Albany, NY: State University of New York Press.
- HULST, HARRY G. VAN DER and RITTER, NANCY A. (1999). Theories of the syllable, in H. G. van der Hulst and N. A. Ritter (eds.), *The Syllable: Views and Facts*. Berlin: Mouton de Gruyter, 13–52.
- and WEIJER, JEROEN VAN DER (1995). Vowel harmony, in J. Goldsmith (ed.), *Handbook of Phonological Theory*. Cambridge, MA: Blackwell, 495–534.
- HUME, ELIZABETH and JOHNSON, KEITH (2001). *The Role of Speech Perception in Phonology*. New York: Academic Press.

- HUSSAIN, SARMAD, DURRANI, NADIR, and GUL, SANA (2005). *Pan Localization: Survey of Language Computing in Asia*. Center for Research in Urdu Language Processing, Lahore, Pakistan. <<http://www.idrc.ca/uploads/user-S/11446781751Survey.pdf>>, accessed April 14, 2009.
- HUTTERS, BIRGIT (1985). Vocal fold adjustments in aspirated and unaspirated stops in Danish. *Phonetica* 42: 1–24.
- HWANG, SO-ONE, MONAHAN, PHILIP J., and IDSARDI, WILLIAM J. (2010). Underspecification and asymmetries in voicing perception. *Phonology* 27: 205–24.
- HYMAN, LARRY (1973). The feature [grave] in phonological theory. *Journal of Phonetics* 1: 329–37.
- (1975). *Phonology: Theory and Analysis*. New York, NY: Holt, Rinehart & Winston.
- (1976). Phonologization, in A. Juilland (ed.), *Linguistic Studies Presented to Joseph H. Greenberg*. Saratoga: Anma Libri, 407–18.
- (1978). Historical tonology, in V. Fromkin (ed.), *Tone: A Linguistic Survey*. New York: Academic Press, 257–70.
- (1979). A reanalysis of tonal downstep. *Journal of African Languages and Linguistics* 1: 9–29.
- (1993). Register tones and tonal geometry, in H. van der Hulst and K. Snider (eds.), *The Phonology of Tone: The Representation of Tonal Register*. Berlin and New York: Mouton de Gruyter, 75–108.
- (2001). The limits of phonetic determinism in phonology: *NC revisited, in E. Hume and K. Johnson (eds.), *The Role of Speech Perception in Phonology*. New York: Academic Press, 141–85.
- (2007). Universals of tone rules: 30 years later, in C. Gussenhoven and T. Riad (eds.), *Tones and Tunes*, vol. 2. Berlin: Mouton de Gruyter, 1–35.
- (2008). Tonal and nontonal intonation in Shekgalagari. Presentation at the Third Conference on Tone and Intonation in Europe. Lisbon, Portugal.
- HYSLOP, GWENDOLYN (2009). Kurtop tone: A tonogenetic case study. *Lingua* 119(6): 827–45.
- IACOBONI, MARCO (2008). The role of premotor cortex in speech perception: Evidence from fMRI and rTMS. *Journal of Physiology Paris* 102: 31–4.
- IGARASHI, YOSUKE (2004). Segmental anchoring of f₀ under changes in speech rate: Evidence from Russian, in B. Bel and I. Marlien (eds.), *Proceedings of Speech Prosody 2004*, Nara, Japan, March 23–26, 2004. ISCA, 25–8.
- IJAZ, MADIHA and HUSSAIN, SARMAD (2007). Corpus-based lexicon development. Paper presented at the Conference on Language and Technology, University of Peshawar, Pakistan.
- IKEDA, KAZUNARI, HAYASHI, AKIKO, HASHIMOTO, SOUICHI, OTOMO, KIYOSHI, and KANNO, ATSUSHI (2002). Asymmetrical mismatch negativity in humans as determined by phonetic but not physical difference. *Neuroscience Letters* 321: 133–6.
- IMBRIE, ANNIKA K. K. (2005). Acoustical study of the development of stop consonants in children. Doctoral dissertation, Harvard-MIT Division of Health Sciences and Technology, Massachusetts Institute of Technology, Cambridge, MA.
- INDEFREY, PETER and LEVELT, WILLEM J. M. (2004). The spatial and temporal signatures of word production components. *Cognition* 92: 101–44.
- INGRAM, JOHN C. L. and PARK, SEE-GYOON (1997). Cross-language vowel perception and production by Japanese and Korean learners of English. *Journal of Phonetics* 25: 343–70.

- INKELAS, SHARON (1995). The consequences of optimization for underspecification, in E. Buckley and S. Iatridou (eds.), *Proceedings of the Twenty-Fifth Northeastern Linguistics Society*. Amherst: GLSA, 287–302.
- (1998). The theoretical status of morphologically conditioned phonology: A case study of dominance effects, in G. Booij and J. van Marle (eds.), *Yearbook of Morphology 1997*. Dordrecht: Kluwer, 121–55.
- and LEBEN, WILL (1990). Where phonetics and phonology intersect: The case of Hausa intonation, in J. Kingston and M. Beckman (eds.), *Papers in Laboratory Phonology I: Between the Grammar and Physics of Speech*. Cambridge: Cambridge University Press.
- ORGUN, ORHAN, and ZOLL, CHERYL (1997). The implications of lexical exceptions for the nature of grammar, in I. Roca, (ed.), *Derivations and Constraints in Phonology*. Oxford: Clarendon Press, 393–418.
- ISELI, MARKUS and ALWAN, ABEER (2004). An improved correction formula for the estimation of harmonic magnitudes and its application to open quotient estimation, in *Proceedings of the IEEE ICASSP-04* 1, 669–72.
- ISHIDA, RICHARD (2009). IPA Character Picker, <<http://rishida.net/scripts/pickers/ipa>>, accessed March 13, 2009.
- ISHIHARA, SHINICHIRO and FÉRY, CAROLINE (2006). The phonology of second occurrence focus. *Journal of Linguistics* 45(2): 285–313.
- ISHIHARA, TAKEISHI (2003). A phonological effect on tonal alignment in Tokyo Japanese, in M. J. Solé, D. Recasens, and J. Romero (eds.), *Proceedings of the 15th International Congress of Phonetic Sciences*, vol. 1. Barcelona: Causal Productions, 615–18.
- ISHIKAWA, KEIICHI (2002). Syllabification of intervocalic consonants by English and Japanese speakers. *Language and Speech* 45: 355–85.
- ISKAROUS, KHALIL (2005a). Detecting the edge of the tongue: A tutorial. *Clinical Linguistics and Phonetics* 19(6/7): 555–65.
- (2005b). Patterns of tongue movement. *Journal of Phonetics* 33: 363–81.
- GOLDSTEIN, LOUIS M., WHALEN, DOUGLAS H., TIEDE, MARK K., and RUBIN, PHILIP E. (2003). CASY: The Haskins Configurable Articulatory Synthesizer. *Proceedings of the 15th International Congress of Phonetic Sciences* 1, 185–8.
- ISSHIKI, NOBUHIKO (1964). Regulatory mechanism of voice intensity variation. *Journal of Speech, Language and Hearing Research* 7: 17–29.
- ITÔ, JUNKO and MESTER, ARMIN (1995). Japanese phonology, in J. A. Goldsmith (ed.), *The Handbook of Phonological Theory*. Oxford: Blackwell, 817–38.
- (1999). The phonological lexicon, in N. Tsujimura (ed.), *The Handbook of Japanese Linguistics*. Oxford: Blackwell, 62–100.
- ITO, KIWAKO and SPEER, SHARI R. (2008). Anticipatory effects of intonation: Eye movements during instructed visual search. *Journal of Memory and Language* 58: 541–73.
- IVERSON, PAUL, EKANAYAKE, DULIKA, HAMANN, SILKE, SENNEMA, ANKE, and EVANS, BRONWEN G. (2008). Category and perceptual interference in second-language phoneme learning: An examination of English /w/-/v/ learning by Sinhala, German, and Dutch speakers. *Journal of Experimental Psychology: Human Perception and Performance* 34: 1305–16.
- and EVANS, BRONWEN G. (2007). Learning English vowels with different first-language vowel systems: Perception of formant targets, formant movement, and duration. *Journal of the Acoustical Society of America* 122: 2842–54.
- HAZAN, VALERIE, and BANNISTER, KERRY (2005). Phonetic training with acoustic cue manipulation: A comparison of methods for teaching English /ɾ/-/l/ to Japanese adults. *Journal of the Acoustical Society of America* 118(5): 3267–78.

- and KUHL, PATRICIA K. (1995). Mapping the perceptual magnet effect for speech using signal detection theory and multidimensional scaling. *Journal of the Acoustical Society of America* 97: 553–62.
- (1996). Influences of phonetic identification and category goodness on American listeners' perception of /r/ and /l/. *Journal of the Acoustical Society of America* 99: 1130–40.
- — AKAHANE-YAMADA, REIKO, DIESCH, E., TOHKURA, YOH'ICHI, KETTERMANN, ANDREAS, and SIEBERT, CLAUDIA (2003). A perceptual interference account of acquisition difficulties for non-native phonemes. *Cognition* 87: B47–B57.
- PINET, MELANIE, and EVANS, BRONWEN G. (2011). Auditory training for experienced and inexperienced second-language learners: Native French speakers learning English vowels. *Applied Psycholinguistics*, doi:10.1017/S0142716411000300.
- SMITH, CHARLOTTE A., and EVANS, BRONWEN G. (2006). Vowel recognition via cochlear implants and noise vocoders: Effects of formant movement and duration. *Journal of the Acoustical Society of America* 120: 3998–4006.
- JABLONSKI, DAVID (2005). Mass extinctions and macroevolution. *Paleobiology* 31: 192–210.
- JACKENDOFF, RAY. (1972). *Semantic Interpretation in Generative Grammar*. Cambridge, MA: MIT Press.
- (1997). *The architecture of the language faculty*. Cambridge, MA: MIT Press.
- JACKSON, PHILIP J. B. and SHADLE, CHRISTINE H. (2000). Frication noise modulated by voicing, as revealed by pitch-scaled decomposition. *Journal of the Acoustical Society of America* 108(4): 1421–34.
- (2001). Decomposing speech signals into their simultaneous voiced and unvoiced components. *IEEE Transactions on Speech and Audio Processing* 9(7): 713–26.
- JACOBS, ROBERT A. (2002). What determines visual cue reliability? *Trends in Cognitive Science* 6(8): 345–50.
- JACQUEMOT, CHARLOTTE, PALLIER, CHRISTOPHE, LEBIHAN, DENIS, DEHAENE, STANISLAS, and DUPOUX, EMMANUEL (2003). Phonological grammar shapes the auditory cortex: A functional magnetic resonance imaging study. *Journal of Neuroscience* 23: 9541–6.
- JAEGER, FLORIAN (2008). Categorical data analysis: Away from ANOVAs (transformation or not) and towards Logit Mixed Models. *Journal of Memory and Language* 59: 434–46.
- JAEGER, JERI J. (1980). Testing the psychological reality of phonemes. *Language and Speech* 23: 233–53.
- (1984). Assessing the psychological status of the vowel shift rule. *Journal of Psycholinguistic Research* 13: 13–36.
- JÄGER, GERHARD (2007). Maximum entropy models and stochastic Optimality Theory, in A. Zaenen, J. Simpson, T. Holloway King, J. Grimshaw, J. Maling, and C. Manning (eds.), *Architectures, Rules, and Preferences: Variations on Themes by Joan W. Bresnan*. Stanford: CSLI Publications, 467–79.
- and ROSENBAACH, ANETTE (2006). The winner takes it all – almost: Cumulativity in grammatical variation. *Linguistics* 44: 937–71.
- JAKOBSON, ROMAN. C. (1941). *Child Language, Aphasia and Phonological Universals*. The Hague: Mouton de Gruyter.
- FANT, GUNNAR M., and HALLE, MORRIS (1963/1952). *Preliminaries to Speech Analysis: The Distinctive Features and their Correlates*. Cambridge, MA: MIT Press.
- JAMIESON, DONALD G. and MOROSAN, DAVID E. (1989). Training new, nonnative speech contrasts: A comparison of the prototype and perceptual fading techniques. *Canadian Journal of Psychology* 43: 88–96.

- JANDA, LAURA A., NESSET, TORE, and BAAYEN, R. HARALD (2010). Capturing correlational structure in Russian paradigms: A case study in logistic mixed-effects modeling. *Corpus Linguistics and Linguistic Theory* 6: 29–48.
- JANDA, RICHARD D. (2001). Beyond “pathways” and “unidirectionality”: On the discontinuity of language transmission and the counterability of grammaticalization. *Language Sciences* 23: 265–340.
- (2003). “Phonologization” as the start of dephoneticization—Or, on sound change and its aftermath: Of extension, generalization, lexicalization, and morphologization, in B. D. Joseph and R. D. Janda (eds.), *The Handbook of Historical Linguistics*. Malden, MA: Blackwell, 401–22.
- and JOSEPH, BRIAN D. (2001). Reconsidering the canons of sound-change: Towards a big bang theory, in *Historical Linguistics 2001. Selected Papers from the 15th International Conference on Historical Linguistics*, Melbourne, August 13–17, 2001, 205–19.
- JANNEDY, STEFANIE and MARTINS, M. (2008). The sociophonetics of Turkish ethnic youth in Berlin. Paper presented at First Arizona Anthropology and Linguistics Conference, May 12, 2008.
- JANSSEN, DIRK P., ROELOFS, ARDI, and LEVELT, WILLEM J. M. (2002). Inflectional frames in language production. *Language and Cognitive Processes* 17: 209–36.
- JAVKIN, HECTOR R., ANTONANZAS-BARROSO, NORMA, and MADDIESON, IAN (1987). Digital inverse filtering for linguistic research. *Journal of Speech and Hearing Research* 30: 122–9.
- JESUS, LUIS M.T. and SHADLE, CHRISTINE H. (2002). A parametric study of the spectral characteristics of European Portuguese fricatives. *Journal of Phonetics* 30: 437–64.
- (2003). Devoicing measures of European Portuguese fricatives, in N. J. Mamede et al. (ed.), *PROPOR 2003, LNAI 2721*. Berlin/Heidelberg: Springer-Verlag, 1–8.
- JILKA, MATTHIAS (2007). Different manifestations and perceptions of foreign accent in intonation, in J. Trouvain and U. Gut (eds.), *Non-native Prosody: Phonetic Description and Teaching Practice*. Berlin: Mouton de Gruyter, 76–96.
- JIN, SHUNDE (1996). An acoustic study of sentence stress in Mandarin Chinese. Ph.D. dissertation, Ohio State University, Columbus.
- JOHNS-LEWIS, CATHERINE (ed.) (1986). *Intonation in Discourse*. London: Croom Helm.
- JOHNSON, CAROLYN E. and WILSON, IAN L. (2002). Phonetic evidence for early language differentiation: Research issues and some preliminary data. *The International Journal of Bilingualism* 6: 271–89.
- JOHNSON, DANIEL E. (2009). Getting off the GoldVarb Standard: Introducing Rbrul for mixed-effects variable rule analysis. *Language and Linguistics Compass* 3(1): 359–83.
- JOHNSON, KEITH (1990). The role of perceived speaker identity in F0 normalization of vowels. *Journal of the Acoustical Society of America* 88: 642–54.
- (1997a). *Acoustic and Auditory Phonetics*, 2nd edn. Cambridge, MA: Blackwell Publishers.
- (1997b). Speech perception without speaker normalization, in K. Johnson and J. Mullennix (eds.), *Talker Variability in Speech Processing*. San Diego: Academic Press, 9–32.
- (1997c). The auditory/perceptual basis for speech segmentation. *Ohio State University Working Papers in Linguistics* 50: 101–13.
- (2004). Massive reduction in conversational American English, in K. Yoneyama and K. Maekawa (eds.), *Spontaneous Speech: Data and Analysis. Proceedings of the 1st Session*

- of the 10th International Symposium. Tokyo: National International Institute for Japanese Language, 29–54.
- (2005). Decisions and mechanisms in exemplar-based phonology, in *UC Berkeley Phonology Lab Annual Report*, 289–311.
- (2006). Resonance in an exemplar-based lexicon: The emergence of social identity and phonology. *Journal of Phonetics* 34: 485–99.
- (2007). Decisions and mechanisms in exemplar-based phonology, in M. J. Sole, P. Beddor, and M. Ohala (eds.), *Experimental Approaches to Phonology. In honor of John Ohala*. Oxford: Oxford University Press, 25–40.
- (2008). *Quantitative Methods in Linguistics*. Malden, MA: Blackwell.
- FLEMMING, EDWARD, and WRIGHT, RICHARD (1993). The hyperspace effect: Phonetic targets are hyperarticulated. *Language* 69: 505–28.
- LADEFOGED, PETER, and LINDAU, MONA (1993). Individual differences in vowel production. *Journal of the Acoustical Society of America* 94: 701–14.
- and MARTIN, JACK (2001). Acoustic vowel reduction in Creek: Effects of distinctive length and position in the word. *Phonetica* 58: 81–102.
- STRAND, ELIZABETH, and D’IMPERIO, MARIAPAOLA (1999). Auditory-visual integration of talker gender in vowel perception. *Journal of Phonetics* 27: 359–84.
- JOHNSON, SUSAN (2006). If you’re “heppy” and you know it, front your /æ/. Oral presentation given at NWAV 36, Columbus, OH.
- JOHNSTONE, BARBARA and BEAN, JUDITH M. (1997). Self-expression and linguistic variation. *Language in Society* 26: 221–46.
- JONES, AMANDA (2002). A lexicon-independent phonological well-formedness effect: Listeners’ sensitivity to inappropriate aspiration in initial /st/ clusters. *UCLA Working Papers in Phonetics* 100: 33–72.
- JONES, DANIEL (1950). *The Phoneme: Its Nature and Use*. Cambridge: Heffer.
- DE JONG, KENNETH J. (1995). The supraglottal articulation of prominence in English: Linguistic stress as localized hyperarticulation. *Journal of the Acoustical Society of America* 97(1): 491–504.
- (2003). Temporal constraints and characterising syllable structuring, in J. Local, R. Ogden, and R. Temple (eds.), *Phonetic Interpretation: Papers in Laboratory Phonology VI*. Cambridge: Cambridge University Press, 253–68.
- (2007). Temporal structure and the nature of syllable-level timing patterns, in J. Cole and J. I. Hualde (eds.), *Laboratory Phonology 9*. Berlin: Mouton de Gruyter, 657–68.
- JONGMAN, ALLARD, WAYLAND, RATREE, and WONG, SERENA (2000). Acoustic characteristics of English fricatives. *Journal of the Acoustic Society of America* 108(3), 1252–63.
- JU, MIN and LUCE, PAUL A. (2006). Representational specificity of within-category phonetic variation in the long-term mental lexicon. *Journal of Experimental Psychology: Human Perception and Performance* 32(1): 120–38.
- JUN, SUN-AH (1994a). The status of lenis stop voicing rule in Korean, in Y.-K. Kim-Renaud (ed.), *Theoretical Issues in Korean Linguistics*. Stanford: CSLI, 101–14.
- (1994b). The domains of laryngeal feature lenition effects in Chonnam Korean, *Ohio State University Working Papers in Linguistics*, 43: 15–20.
- (1995). Asymmetrical prosodic effects on the laryngeal gesture in Korean, in B. Connell and A. Arvaniti (eds.), *Phonology and Phonetic Evidence: Papers in Laboratory Phonology IV*. Cambridge: Cambridge University Press, 235–53.

- JUN, SUN-AH (1996). *The Phonetics and Phonology of Korean Prosody: Intonational Phonology and Prosodic Structure*. New York: Garland Publishing.
- (2003). The effect of phrase length and speech rate on prosodic phrasing, in M. J. Solé, D. Recasens, and J. Romero (eds.), *Proceedings of the 15th International Congress of Phonetic Sciences*. Barcelona: UAB, 483–6.
- (2005a). *Prosodic Typology. The Phonology of Intonation and Phrasing*. Oxford: Oxford University Press.
- (2005b). Korean intonational phonology and prosodic transcription, in S.-A. Jun (ed.), *Prosodic Typology. The Phonology of Intonation and Phrasing*. Oxford: Oxford University Press, 201–29.
- (2007). The intermediate phrase in Korean: Evidence from sentence processing, in T. Riad and C. Gussenhoven (eds.), *Tones and Tunes*, vol. 2. Berlin: Mouton de Gruyter, 143–67.
- JURAFSKY, DAN (2003). Probabilistic modeling in psycholinguistics: Linguistic comprehension and production, in R. Bod, J. Hay, and S. Jannedy (eds.), *Probabilistic Linguistics*. Cambridge, MA: MIT Press, 39–95.
- BELL, ALAN, and GIRAND, CYNTHIA (2002). The role of the lemma in form variation, in C. Gussenhoven and N. Warner (eds.), *Laboratory Phonology 7*. Berlin and New York: Mouton de Gruyter, 1–34.
- GREGORY, MICHELLE, and RAYMOND, WILLIAM D. (2001). Probabilistic relations between words: Evidence from reduction in lexical production, in J. L. Bybee and P. Hopper (eds.), *Frequency and the Emergence of Linguistic Structure*. Amsterdam: John Benjamins, 229–54.
- JUSCZYK, PETER W. (1993). From general to language-specific capacities: The WRAPSA model of how speech perception develops. *Journal of Phonetics* 21: 3–28.
- (1997). *The Discovery of Spoken Language*. Cambridge, MA: MIT Press.
- and ASLIN, RICHARD N. (1995). Infants' detection of the sound patterns of words in fluent speech. *Cognitive Psychology* 29(1): 1–23.
- CUTLER, ANNE, and REDANZ, NANCY J. (1993). Infants' preference for the predominant stress patterns of English words. *Child Development* 64: 675–87.
- FRIEDERICI, ANGELA D., WESSELS, JEANINE, SVENKERUD, VIGDIS, and JUSCZYK, ANN M. (1993). Infants' sensitivity to the sound patterns of native language words. *Journal of Memory and Language* 32: 402–20.
- GOODMAN, MARA B., and BAUMANN, ANGELA (1999). Nine-month-olds' attention to sound similarities in syllables. *Journal of Memory and Language* 40: 62–82.
- HOHNE, ELIZABETH A., and BAUMAN, ANGELA (1999). Infants' sensitivity to allophonic cues for word segmentation. *Perception and Psychophysics* 61: 1465–76.
- HOUSTON, DEREK, and NEWSOME, MARY (1999). The beginnings of word segmentation in English-learning infants. *Cognitive Psychology* 39: 159–207.
- LUCE, PAUL, and CHARLES-LUCE, JAN (1994). Infants' sensitivity to phonotactic patterns in the native language. *Journal of Memory and Language* 33: 630–45.
- SMOLENSKY, PAUL, and ALLOCCO, THERESA (2002). How English-learning infants respond to markedness and faithfulness constraints. *Language Acquisition* 10: 31–73.
- KABAK, BARIS and IDSARDI, WILLIAM J. (2007). Perceptual distortions in the adaptation of English consonant clusters: Syllable structure or consonantal contact constraints? *Language and Speech* 50: 23–52.

- and REVITHIADOU, ANTHI (2006). The phonology of clitic groups: Prosodic recursivity revisited. Paper given at the 13th International Conference on Turkish Linguistics, Uppsala.
- KABURAGI, TOKIHIKO and HONDA, MASAOKI (1996). A model of articulator trajectory formation based on the motor tasks of vocal-tract shapes. *Journal of the Acoustical Society of America* 99: 3154–70.
- KAGAN, JEROME and LEWIS, MICHAEL (1965). Studies of attention in the human infant. *Merrill Palmer Quarterly* 11: 95–127.
- KAGER, RENÉ (1996). On affix allomorphy and syllable counting, in U. Kleinhenz (ed.), *Interfaces in Phonology*. Berlin: Akademie Verlag, 155–71.
- (1999). *Optimality Theory*. Cambridge: Cambridge University Press.
- (2008). Lexical irregularity and the typology of contrast, in K. Hanson and S. Inkelas (eds.), *The Nature of the Word: Essays in Honor of Paul Kiparsky*. Cambridge, MA: MIT Press, 397–432.
- KAHN, DANIEL (1976). Syllable-based generalizations in English phonology. Ph.D. dissertation, MIT, Cambridge, MA. [Published, New York: Garland Press, 1980.]
- KAINADA, EVIA. (2009). The phonetic and phonological nature of prosodic boundaries: Evidence from Modern Greek. Doctoral dissertation, University of Edinburgh.
- KAISER, EDEN, MUNSON, BENJAMIN, LI, FANGFANG, HOLLIDAY, JEFFREY J., BECKMAN, MARY E., EDWARDS, JAN, AND SCHELLINGER, SARAH K. (2009). Why do adults vary in how categorically they rate the accuracy of children’s speech? *Journal of the Acoustical Society of America* 125: 2753, <http://www.ling.ohio-state.edu/~edwards/ASAO9_Kaiser_etal_poster.pdf>, accessed June 14, 2009.
- KALIKOW, D. N., STEVENS, KENNETH N., and ELLIOTT, L.L. (1977). Development of a test of speech intelligibility in noise using sentence materials with controlled word predictability. *Journal of the Acoustical Society of America* 61: 1337–51.
- KALLAYANAMIT, SAOVAPAK (2004). The phonetics and phonology of Thai intonation: Contours, registers, and boundary tones. Ph.D. dissertation, Georgetown University.
- KAMIDE, Y., ALTMANN, G. T. M., and HAYWOOD, S. L. (2003). The time-course of prediction in incremental sentence processing: Evidence from anticipatory eye movements. *Journal of Memory and Language* 49: 133–56.
- KANERVA, JONNI. (1989). Focus and phrasing in Chichewa phonology. Ph.D. dissertation, University of Stanford, Palo Alto.
- KANG, KYOUNG-H. and GUION, SUSAN G. (2006). Phonological systems in bilinguals: Age of learning effects on the stop consonant system of Korean-English bilinguals. *Journal of the Acoustical Society of America* 119: 1672–83.
- KANG, YOONJUNG (2000). The phonetics and phonology of coronal markedness and unmarkedness. Ph.D. dissertation, MIT, Cambridge, MA.
- KAPATSINSKI, VSEVOLOD (2009). Testing theories of linguistic constituency with configural learning: The case of the English syllable. *Language* 85(2): 248–77.
- KAPLAN, AARON F. (2006). Vowel length and coda cluster interactions in Misantla Totonac, in A. Eilam, T. Scheffler, and J. Tauberer (eds.), *Proceedings of of the 29th Annual Penn Linguistics Colloquium*. Penn Working Papers in Linguistics 12(1): 161–74.
- KARLSSON, FRED (1982). *Suomen kielen äänne- ja muotorakenne* [*The Phonological and Morphological Structure of Finnish*]. Helsinki: Werner Söderström Osakeyhtiö.

- KARTTUNEN, LAURI (2006). The insufficiency of paper-and-pencil linguistics: The case of Finnish prosody, ROA-818, < <http://roa.rutgers.edu/files/818-0406/818-KARTTUNEN-0-0.PDF>>, accessed May 22, 2011.
- KARVONEN, DAN (2005). Word prosody in Finnish. Ph.D. dissertation, University of California, Santa Cruz.
- KAWAHARA, HIDEKI, MASUDA-KATSUSE, IKUYO, and DE CHEVEIGNE, ALAIN (1999). Restructuring speech representations using a pitch-adaptive time-frequency smoothing and an instantaneous-frequency-based F0 extraction: Possible role of a repetitive structure in sounds. *Speech Communication* 27: 187–207.
- KAWAHARA, SHIGETO (2011). Experimental approaches in generative phonology, in M. van Oostendorp, C. Ewen, E. Hume, and K. Rice (eds.), *The Blackwell Companion to Phonology*. Malden, MA: Blackwell, 2283–303.
- KAWASAKI, HARUKO (1982). An acoustical basis for universal constraints on sound sequences. Ph.D. dissertation, University of California, Berkeley.
- KAZANINA, NINA, PHILLIPS, COLIN, and IDSARDI, WILLIAM (2006). The influence of meaning on the perception of speech sounds. *Proceedings of the National Academy of Sciences* 103: 11381–6.
- KEATING, PATRICIA A. (1984). Phonetic and phonological representation of consonant voicing. *Language* 60: 286–319.
- (1985). Universal phonetics and the organization of grammars, in V. Fromkin (ed.), *Phonetic Linguistics*. New York: Academic Press, 115–32.
- (1987). A survey of phonological features. *UCLA Working Papers in Phonetics* 66: 124–42.
- (1988). Underspecification in phonetics. *Phonology* 5: 275–92.
- (1990a). Phonetic representations in a generative grammar. *Journal of Phonetics* 18: 321–34.
- (1990b). The window model of coarticulation: Articulatory evidence, in J. Kingston and M. Beckman (eds.), *Papers in Laboratory Phonology I: Between the Grammar and Physics of Speech*. Cambridge: Cambridge University Press, 451–70.
- (1996). The phonetics-phonology interface. *Studia Grammatica* 41: 262–78.
- (2006). Phonetic encoding of prosodic structure, in J. Harrington and M. Tabain (eds.), *Speech Production: Models, Phonetic Processes, and Techniques*, Macquarie Monographs in Cognitive Science. New York and Hove: Psychology Press, 167–86.
- CHO, TAEHONG, FOUGERON, CÉCILE, and HSU, CHAI-SHUNE (2003). Domain-initial articulatory strengthening in four languages, in J. Local, R. Ogden, and R. Temple (eds.), *Phonetic Interpretation: Papers in Laboratory Phonology VI*. Cambridge: Cambridge University Press, 145–63.
- and ESPOSITO, CHRISTINA (2007). Linguistic voice quality. *University of California Working Papers in Phonetics* 105: 85–91.
- KEDROVA, GALINA, ANISIMOV, NIKOLAY, ZAHARAOV, LEONID, and PIROGOV, YURIJ (2008). Magnetic resonance investigation of palatalized stop consonants and spirants in Russian. *Journal of the Acoustical Society of America* 123(5): 3325.
- KELLER, FRANK (2000). Gradience in grammar: Experimental and computational aspects of degrees of grammaticality. Ph.D. dissertation, University of Edinburgh. [ROA-677]
- (2005). Linear Optimality Theory as a model of gradience in grammar, in G. Fanselow, R. V. Féry, and M. Schlesewsky, (eds.), *Gradience in Grammar: Generative Perspectives*. Oxford: Oxford University Press, 270–87.

- and ALEXOPOULOU, T. (2001). Phonology competes with syntax: Experimental evidence for the interaction of word order and accent placement in the realization of information structure. *Cognition* 79(3): 301–72.
- and ASUDEH, ASH (2002). Probabilistic learning algorithms and Optimality Theory. *Linguistic Inquiry* 33(2): 225–44.
- KELLY, JACK B., JUDGE, PETER W., and PHILLIPS, DENNIS P. (1986). Representation of the cochlea in primary auditory cortex of the ferret (*Mustela putorius*). *Hearing Research* 24: 111–15.
- KELSO, J. A. SCOTT, SALTZMAN, ELLIOT L., and TULLER, BETTY (1986). The dynamical perspective on speech production: Data and theory. *Journal of Phonetics* 14: 29–59.
- KEMLER NELSON, DEBORAH G., HIRSH-PASEK, KATHY, JUSCZYK, PETER W., AND CASSIDY, KIMBERLY W. (1989). How the prosodic cues in motherese might assist language learning. *Journal of Child Language* 16: 55–68.
- JUSCZYK, PETER W., MANDEL, DENISE R., MYERS, JAMES, TURK, ALICE, and GERKEN, LOUANN (1995). The headturn preference procedure for testing auditory perception. *Infant Behavior and Development* 18: 111–16.
- KEMPS, RACHÈL, ERNESTUS, MIRJAM, SCHREUDER, ROB, and BAAYEN, R. HARALD (2005). Prosodic cues for morphological complexity. *Memory and Cognition* 33: 430–46.
- KENSTOWICZ, MICHAEL (1996). Quality-sensitive stress. *Rivista di linguistica* 9(1), 157–87. [ROA-33].
- (1997). Uniform exponence: Extension and exemplification, in V. Miglio and B. Morén (eds.), *University of Maryland Working Papers in Linguistics 5: Selected Papers from the Hopkins Optimality Workshop 1997*, 139–54.
- and KISSEBERTH, CHARLES (1977). *Topics in Phonological Theory*. New York: Academic Press.
- — (1979). *Generative Phonology: Description and Theory*. New York: Academic Press.
- KENT, RAYMOND D. and FORNER, LINDA L. (1980). Speech segment duration in sentence recitations by children and adults. *Journal of Phonetics* 8: 157–68.
- KERNAN, KEITH T. and BLOUNT, B. G. (1966). The acquisition of Spanish grammar by Mexican children. *Anthropological Linguistics* 8(9): 1–14.
- KERSWILL, PAUL (1985). A sociophonetic study of connected speech processes in Cambridge English: An outline and some results. *Cambridge Papers in Phonetics and Experimental Linguistics* 4: 25–49.
- (1994). *Dialects Converging: Rural Speech in Urban Norway*. Oxford: Oxford University Press.
- (2002). Koineization and accommodation, in J. K. Chambers, P. Trudgill, and N. Schilling-Estes (eds.), *The Handbook of Language Variation and Change*. Oxford: Blackwell, 669–702.
- TORGERSEN, EIVIND, and FOX, SUE (2008). Reversing “drift”: Innovation and diffusion in the London diphthong system. *Language Variation and Change* 20: 451–91.
- KESSINGER, RACHEL H. and BLUMSTEIN, SHEILA E. (1998). Effects of speaking rate on voice onset time and vowel production: Some implications for perception studies. *Journal of Phonetics* 26: 117–28.
- KESSLER, BRETT and TREIMAN, REBECCA (1997). Syllable structure and the distribution of phonemes in English syllables. *Journal of Memory and Language* 37: 295–311.
- KEUNE, KAREN, ERNESTUS, MIRJAM, VAN HOUT, ROELAND, and BAAYEN, R. HARALD (2005). Social, geographical, and register variation in Dutch: From written ‘mogelijk’ to spoken ‘mok’. *Corpus Linguistics and Linguistic Theory* 1: 183–223.

- KEYSER, SAMUEL J. and KIPARSKY, PAUL (1984). Syllable structure in Finnish phonology, in M. Aronoff and R. T. Oehrle (eds.), *Language Sound Structure. Studies in Phonology Presented to Morris Halle by His Teacher and Students*, Cambridge, MA: MIT Press, 7–31.
- and STEVENS, KENNETH N. (1994). Feature geometry and the vocal tract. *Phonology* 11: 207–36.
- (2006). Enhancement and overlap in the speech chain. *Language* 82: 33–63.
- KHAN, ARFAAN (2006). A sociolinguistic study of Birmingham English: Language variation and change in a multi-ethnic British community. Ph.D. dissertation, Lancaster University.
- KHAN, SAMEER UD DOWLA (2008). Intonational phonology and focus prosody in Bengali. Ph.D. dissertation, UCLA.
- KHATTAB, GHADA (2000). VOT production in English and Arabic bilingual and monolingual children. *Leeds Working Papers in Linguistics* 8: 95–122.
- (2007). Variation in vowel production by English-Arabic bilinguals, in J. I. Hualde and J. Cole (eds.), *Laboratory Phonology* 9. Berlin: Mouton de Gruyter, 383–410.
- KHOUW, EDWARD and CIOCCA, VALTER (2007). Perceptual correlates of Cantonese tones. *Journal of Phonetics* 35: 104–17.
- KIESLING, SCOTT F. (1998). Variation and men's identity in a fraternity. *Journal of Sociolinguistics* 2(1): 69–100.
- KIM, HEEJIN (2006). Speech rhythm in American English: A corpus study. Ph.D. dissertation, University of Illinois at Urbana-Champaign.
- and COLE, JENNIFER (2005). The stress foot as a unit of planned timing: Evidence from shortening in the prosodic phrase. *Proceedings of Interspeech 2005*, Lisbon, Portugal, 2365–8.
- HASEGAWA-JOHNSON, MARK, PERLMAN, ADRIENE, GUNDERSON, JON, HUANG, THOMAS, WATKIN, KENNETH, and FRAME, SIMONE (2008). Dysarthric speech database for universal access research. *Proceedings of the International Conference on Spoken Language Processing (Interspeech '08)*. Brisbane, Australia, September 2008, 1741–4.
- KIM, HYUNSOON (2004). Stroboscopic-Cine MRI data on Korean coronal plosives and affricates: Implications for their place of articulation as alveolar. *Phonetica* 61: 234–51.
- HONDA, KIYOSHI, and MAEDA, SHINJI (2005). Stroboscopic-cine MRI study of the phasing between the tongue and the larynx in the Korean three-way phonation contrast. *Journal of Phonetics* 33: 1–26.
- KIM, JAE-ON and MUELLER, CHARLES W. (1978a). *Factor Analysis: Statistical Methods and Practical Issues*. Beverly Hills, CA: Sage.
- (1978b). *Introduction to Factor Analysis: What It Is and How to Do It*. Beverly Hills, CA: Sage.
- KIM, MI-RYOUNG, BEDDOR, PATRICE S., and HORROCKS, JULIE (2002). The contribution of consonantal and vocalic information to the perception of Korean initial stops. *Journal of Phonetics* 30: 77–100.
- KIM, SAHYANG (2004). The role of prosodic phrasing in Korean word segmentation. Doctoral dissertation, Department of Linguistics, UCLA.
- KINGSTON, JOHN (1990). Articulatory binding, in J. Kingston and M. E. Beckman (eds.), *Papers in Laboratory Phonology I: Between the Grammar and Physics of Speech*. Cambridge: Cambridge University Press, 406–34.
- (1992). The phonetics and phonology of perceptually motivated articulatory covariation. *Language and Speech* 35: 99–113.
- (2005). The phonetics of Athabaskan tonogenesis, in S. Hargus and K. Rice (eds.), *Athabaskan Prosody*. Amsterdam: John Benjamins, 137–84.

- (2007). Segmental influences on Fo: Controlled or automatic? in C. Gussenhoven and T. Riad (eds.), *Tones and Tunes*, vol. 2. Berlin: Mouton de Gruyter, 171–210.
- and BECKMAN, MARY E. (eds.) (1990). *Papers in Laboratory Phonology I: Between the Grammar and Physics of Speech*. Cambridge: Cambridge University Press.
- and DIEHL, RANDY (1994). Phonetic knowledge. *Language* 70: 419–54.
- KIPARSKY, PAUL (1975). What are phonological theories about?, in D. Cohen and J. Wirth (eds.), *Testing Linguistic Hypotheses*. New York: Wiley, 47–78.
- (1981). Vowel harmony. MS, Stanford University, Stanford, CA.
- (1982). Lexical morphology and phonology, in *Linguistics in the Morning Calm: Selected Papers from SICOL-1981*. Linguistic Society of Korea. Seoul, Korea: Hanshin Publishing.
- (1985). Some consequences of Lexical Phonology. *Phonology Yearbook* 2: 85–138.
- (1993). An OT perspective on phonological variation. Handout from Rutgers Optimality Workshop 1993, also presented at NWAWE 1994, Stanford University. Available at <<http://www.stanford.edu/~kiparsky/Papers/nwave94.pdf>>.
- (1995). The phonological basis of sound change, in Goldsmith, J. (ed.), *The Handbook of Phonological Theory*. Cambridge, MA: Blackwell, 640–70.
- (2000). Opacity and cyclicity, *The Linguistic Review* 17: 351–67.
- (2003). Finnish noun inflection, in S. Manninen and D. Nelson (eds.), *Generative Approaches to Finnic and Saami Linguistics*. Stanford, CA: CSLI Publications, 109–61.
- KIRCHHOFF, KATRIN and SCHIMMEL, STEVEN (2005). Statistical properties of infant-directed versus adult-directed speech: Insights from speech recognition. *Journal of the Acoustical Society of America* 117(4): 2238–46.
- KIRCHNER, ROBERT (1999). Preliminary thoughts on phonologization within an exemplar-based speech-processing system, in M. Gordon (ed.), *UCLA Working Papers in Linguistics* (Papers in Phonology 2), 1, 205–31.
- (2004). Consonant lenition, in B. Hayes, R. Kirchner, and D. Steriade, *Phonetically Based Phonology*. Cambridge: Cambridge University Press, ch. 10.
- MOORE, ROGER K., and CHEN, TSUNG-YING (2010). Computing phonological generalization over real speech exemplars. *Journal of Phonetics* 38(4): 540–7.
- and VARELAS, ELENI (2002). A cue-based approach to the phonotactics of Upper Necaxa Totonac. MS, University of Alberta.
- KIRK, CECILIA and DEMUTH, KATHERINE (2005). Asymmetries in the acquisition of word-initial and word-final consonant clusters. *Journal of Child Language* 32(4): 709–34.
- — (2006). Accounting for variability in 2-year-olds' production of coda consonants. *Language Learning and Development* 2: 97–118.
- KISILEVSKY, BARBARA S., HAINS, SYLVIA M. J., LEE, KANG, XIE, XING, HUANG, HEFENG, YE, HAI-HUI, ZHANG, KE, and WANG, ZENGPING (2003). Effects of experience on fetal voice recognition. *Psychological Science* 14: 220–4.
- KISSEBERTH, CHARLES and ABASHEIKH, MOHAMMAD I. (1974). Vowel length in Chi Mwi:ni: A case study of the role of grammar in phonology, in A. Bruck, R. A. Fox, and M. W. LaGaly (eds.), *Papers from the Parasession on Natural Phonology*. Chicago: Chicago Linguistic Society, 193–200.
- KLATT, DENNIS H. (1975). Vowel lengthening is syntactically determined in connected discourse. *Journal of Phonetics* 3: 129–40.
- (1976). Linguistic uses of segmental duration in English: Acoustic and perceptual evidence. *Journal of the Acoustical Society of America* 59: 1208–21.
- (1979). Speech perception: A model of acoustic-phonetic analysis and lexical access. *Journal of Phonetics* 7: 279–312.

- KLATT, DENNIS H. (1980). Software for a Cascade/Parallel Formant Synthesizer. *Journal of the Acoustical Society of America* 67: 971–95.
- (1989). Review of selected models of speech perception, in W. D. Marslen-Wilson (ed.), *Lexical Representation and Process*. Cambridge, MA: MIT Press, 169–226.
- and KLATT, LAURA C. (1990). Analysis, synthesis and perception of voice quality variations among male and female talkers. *Journal of the Acoustical Society of America* 87: 820–56.
- KLUENDER, KEITH R., COADY, JEFFRY A., and KIEFTE, MICHAEL (2003). Sensitivity to change in perception of speech. *Speech Communication* 41(1): 59–69.
- DIEHL, RANDY L., and KILLEEN, PETER R. (1987). Japanese quail can learn phonetic categories. *Science* 237: 1195–7.
- and LOTTO, ANDREW J. (1994). Effects of first formant onset frequency on [-voice] judgments result from general auditory processes not specific to humans. *Journal of the Acoustical Society of America* 95: 1044–52.
- — and HOLT, LORI L. (2005). Contributions of nonhuman animal models to understanding human speech perception, in S. Greenberg and W. Ainsworth (eds.), *Listening to Speech: An Auditory Perspective*. New York: Oxford University Press.
- — and BLOEDEL, SUZI B. (1998). Role of experience for language-specific functional mappings for vowel sounds. *Journal of the Acoustical Society of America* 104: 3568–82.
- KOCHANSKI, GREG, GRABE, ESTHER, COLEMAN, JONATHAN, and ROSNER, B. (2005). Loudness predicts prominence; fundamental frequency lends little. *Journal of the Acoustical Society of America* 118(2): 1038–54.
- SHIH, C., and JING, H. (2003). Quantitative measurement of prosodic strength in Mandarin. *Speech Communication* 41: 625–45.
- KOCHETOV, ALEXEI (1999). A cue-based analysis of the distribution of palatalized stops in Russian, in O. Fujimura, B. D. Joseph, and B. Palek (eds.), *Proceedings of LP '98: Item Order in Language and Speech*, vol. 1. Prague: Karolinum Press, 247–70.
- (2004). Perception of place and secondary articulation contrasts in different syllable positions: Language-particular and language-independent asymmetries. *Language and Speech* 47: 351–82.
- (2006a). Syllable position effects and gestural organization: Evidence from Russian, in L. Goldstein, D. Whalen, and C. Best (eds.), *Laboratory Phonology 8*. Berlin: Mouton de Gruyter, 565–88.
- (2006b). Testing licensing by cue: A case of Russian palatalized coronals. *Phonetica* 63: 113–48.
- (2006c). The role of social factors in the dynamics of sound change: A case study of a Russian dialect. *Language Variation & Change* 18: 99–119.
- (2008). Perception of gestural overlap and self-organizing phonological contrasts, in P. Avery, E. Dresher, and K. Rice (eds.), *Contrast in Phonology: Perception and Acquisition*. Berlin: Mouton de Gruyter, 173–96.
- KOENIG, LAURA L. (2000). Laryngeal factors in voiceless consonant production in men, women, and 5-year-olds. *Journal of Speech, Language, and Hearing Research* 43: 1211–28.
- LUCERO, JORGE C., and PERLMAN, ELIZABETH (2008). Speech production variability in fricatives of children and adults: Results of functional data analysis. *Journal of the Acoustical Society of America* 124(5): 3158–70.
- KOESTER, DIRK and SCHILLER, NIELS. O. (2008). Morphological priming in overt language production: Electrophysiological evidence from Dutch. *NeuroImage* 42: 1622–30.

- KOHLER, KLAUS J. (1983). Prosodic boundary signals in German. *Phonetica* 40: 89–134.
- (1985). F0 in the perception of lenis and fortis plosives. *Journal of the Acoustical Society of America* 78: 21–32.
- (1987). Categorical pitch perception, in U. Viks (ed.), *Proceedings of the 11th International Congress of Phonetic Sciences*, vol. 5, Tallinn, Estonia, August 1–7, 1987, 331–3.
- (1990a). Segmental reduction in connected speech in German: Phonological facts and phonetic explanations, in W. J. Hardcastle and A. Marchal (eds.), *Speech Production and Speech Modelling*. Dordrecht: Kluwer Academic Publishers, 21–33.
- (1990b). Macro and Micro F0 in the synthesis of intonation, in J. Kingston and M. E. Beckman (eds.), *Papers in Laboratory Phonology I: Between Grammar and Physics of Speech*. Cambridge: Cambridge University Press, 115–38.
- (2006). Paradigms in experimental prosodic analysis: From measurements to function, in S. Sudhoff et al. (eds.), *Methods in Empirical Prosody Research*. Berlin and New York: Mouton de Gruyter, 123–52.
- KOHONEN, TEUVO (1984). *Self-organization and Associative Memory*. Berlin: Springer.
- KOIKE, YASUO and HIRANO, MINORU (1973). Glottal-area time function and subglottal-pressure variation. *Journal of the Acoustical Society of America* 54: 1618–27.
- KOMAROVA, NATALIA L. and NOWAK, MARTIN (2001). The evolutionary dynamics of the lexical matrix. *Bulletin of Mathematical Biology* 63: 451–84.
- KONDAUROVA, MARIA and FRANCIS, ALEXANDER L. (2008). The relationship between native allophonic experience with vowel duration and perception of the English tense/lax vowel contrast by Spanish and Russian listeners. *Journal of the Acoustical Society of America* 124(6): 3959–71.
- (forthcoming). The role of selective attention in the acquisition of English tense and lax vowels by native Spanish listeners: Comparison of three training methods. *Journal of Phonetics*.
- KONG, EUN JONG (2009). The development of phonation-type contrasts in plosives: Cross-linguistic perspectives. Ph.D. dissertation, Department of Linguistics, Ohio State University, Columbus.
- KONNO, KIMIO AND MEAD, JERE (1967). Measurement of the separate volume changes of rib cage and abdomen during breathing. *Journal of Applied Physiology* 22: 407–22.
- KOOPMANS-VAN BEINUM, FLORIEN J. (1980). Vowel contrast reduction: An acoustic and perceptual study of Dutch vowels in various speech conditions. Amsterdam: Academische Pers B.V.
- KOREMAN, JACQUES (2006). Perceived speech rate: The effects of articulation rate and speaking style in spontaneous speech. *Journal of the Acoustical Society of America* 119: 582–96.
- KORNAI, ANDRÁS (1991). Formal phonology. Ph.D. dissertation, Stanford University.
- KORNFELD, JUDITH (1971). What initial clusters tell us about a child's speech code. *MIT RLE Quarterly Progress Report* 101: 218–21.
- KOTSINAS, ULLA-BRITT (1998). Language contact in Rinkeby: An immigrant suburb, in J. K. Androutsopoulos and A. Scholz (eds.), *Jugendsprache—langue des jeunes—youth language*. Frankfurt am Main: Peter Lang, 125–48.
- KOVELMAN, IOULIA, SHALINSKY, MARK H., BERENS, MELODY S., and PETITTO, LAURA-ANN (2008). Shining new light on the brain's "bilingual signature": A functional near infrared spectroscopy investigation of semantic processing. *NeuroImage* 39: 1457–71.
- KRAKOW, RENA A. (1989). The articulatory organization of syllables: A kinematic analysis of labial and velic gestures. Ph.D. dissertation, Yale University.

- KRAKOW, RENA A. (1999). Physiological organization of syllables: A review. *Journal of Phonetics* 27: 2–54.
- BEDDOR, PATRICE S., GOLDSTEIN, LOUIS M., and FOWLER, CAROL A. (1988). Coarticulatory influences on the perceived height of nasal vowels. *Journal of the Acoustical Society of America* 83(3): 1146–58.
- KRALJIC, TANYA, BRENNAN, SUSAN E., and SAMUEL, ARTHUR G. (2008). Accommodating variation: Dialects, idiolects, and speech processing. *Cognition* 107(1), 51–81.
- SAMUEL, ARTHUR G., and BRENNAN, SUSAN E. (2008). First impressions and last resorts: How listeners adjust to speaker variability. *Psychological Science* 19(4): 332–8.
- KRANE, MICHAEL H. (2005). Aeroacoustic production of low-frequency unvoiced speech sounds. *Journal of the Acoustical Society of America* 118(1): 410–27.
- KRAUSS, ROBERT M. and PARDO, JENNIFER S. (2006). Speech perception and social behavior: Bridging social psychology and speech science, in P. A. M. van Lange (ed.), *Bridging Social Psychology: Benefits of Transdisciplinary Approaches*. Mahwah, NJ: Lawrence Erlbaum, 273–8.
- KREIMAN, JODY, GERRATT, BRUCE R., and ANTOÑANZAS-BARROSO, NORMA (2007). Measures of the glottal source spectrum. *Journal of Speech, Language, and Hearing Research* 50: 595–610.
- and PAPCUN, GEORGE (1991). Comparing discrimination and recognition of unfamiliar voices. *Speech Communication* 10: 265–75.
- KRIPKE, SAUL (1972). Naming and necessity, in D. Davidson and G. Harman (eds.), *Semantics and Natural Language*. Dordrecht: Reidel, 253–355.
- KROCH, ANTHONY S. (1989). Reflexes of grammar in patterns of language change. *Language Variation and Change* 1: 199–244.
- KRÖGER, BERND J. (1993). A gestural production model and its implications for reduction in German. *Phonetica* 50: 213–33.
- KROLL, JUDITH F., GERFEN, CHIP, and DUSSIAS, PAOLA E. (2008). Laboratory designs and paradigms: Words, sounds, and sentences, in L. Wei and M. Moyer (eds.), *The Blackwell Guide to Research Methods in Bilingualism*. Cambridge, MA: Blackwell Publishers, 108–31.
- and SUNDERMAN, GRETCHEN (2003). Cognitive processes in second language acquisition: The development of lexical and conceptual representations, in C. Doughty and M. Long (eds.), *Handbook of Second Language Acquisition*. Cambridge, MA: Blackwell Publishers, 104–29.
- KRUIJFF-KORBAYOVÁ, IVANA and STEEDMAN, MARK (2003). Discourse and information structure. *Journal of Logic, Language, and Information* 12(3): 249–59.
- KRULL, DIANA (1997). Prepausal lengthening in Estonian: Evidence from conversational speech, in I. Lehiste and J. Ross (eds.), *Estonian Prosody: Papers from a Symposium*. Tallinn: Institute of Estonian Language, 136–48.
- KRUSKAL, J. B. (1964). Nonmetric multidimensional scaling: A numerical method. *Psychometrika* 29: 115–29.
- and WISH, M. (1978). *Multidimensional Scaling*. Newbury Park, CA: Sage.
- KUBOZONO, HARUO (1992). Modeling syntactic effects on downstep in Japanese, in G. J. Docherty and D. R. Ladd (eds.), *Papers in Laboratory Phonology II: Gesture, Segment, Prosody*. Cambridge: Cambridge University Press, 368–88.
- KUHL, PATRICIA K. (1979). Speech perception in early infancy: Perceptual constancy for spectrally dissimilar vowel categories. *Journal of the Acoustical Society of America* 66: 1668–79.

- (1983). Perception of auditory equivalence classes for speech in early infancy. *Infant Behavior and Development* 6(3): 263–85.
- (1991). Human adults and human infants show a “perceptual magnetic effect” for the prototypes of speech categories, monkeys do not. *Perception and Psychophysics* 50: 93–107.
- (1992). Speech prototypes: Studies on the nature, function, ontogeny and phylogeny of the “centers” of speech categories, in Y. Tohkura, E. Vatikiotis-Bateson, and Y. Sagisaka (eds.), *Speech Perception, Production and Linguistic Structure*. Tokyo: Ohmsha, 239–64.
- (1993). Innate predispositions and the effects of experience in speech perception: The native language magnet theory, in B. de Boysson-Bardies, S. de Schonen, P. Jusczyk, P. McNeilage, and J. Morton (eds.), *Developmental Neurocognition: Speech and Face Processing in the First Year of Life*. Dordrecht: Kluwer Academic Publishers, 259–74.
- (2000a). A new view of language acquisition. *Proceedings of the National Academy of Science* 97: 11850–7.
- (2000b). Language, mind, and brain: Experience alters perception, in M. S. Gazzaniga (ed.), *The New Cognitive Neurosciences* (2nd edn). Cambridge, MA: MIT Press, 99–115.
- ANDRUSKI, JEAN E., CHISTOVICH, INNA A., CHISTOVICH, LUDMILLA A., KOZHEVNIKOVA, ELENA V., RYSKINA, VIKTORIA L., STOLYAROVA, ELVIRA I., SUNDBERG ULLA, and LACERDA, FRANCISCO (1997). Cross-language analysis of phonetic units in language addressed to infants. *Science* 277: 684–6.
- CONBOY, BARBARA T., COFFEY-CORINA, SHARON, PADDEN, DENISE, RIVERA-GAXIOLA, MARITZA, and NELSON, TOBEY (2008). Native language magnet theory expanded (NLM-e). *Philosophical Transactions of the Royal Society B* 363: 979–1000.
- — PADDEN, DENISE M., NELSON, TOBEY, and PRUITT, JESSICA (2005). Early speech perception and later language development: Implications for the critical period. *Language Learning and Development* 1: 237–64.
- and IVERSON, PAUL (1995). Linguistic experience and the perceptual magnet effect, in W. Strange (ed.), *Speech Perception and Linguistic Experience: Issues in Cross-Language Research*. Baltimore: York Press, 121–54.
- and MILLER, JAMES D. (1978). Speech perception by the chinchilla: Identification functions for synthetic VOT stimuli. *Journal of the Acoustical Society of America* 63: 905–17.
- and MILLER, JOANNE D. (1975). Speech perception by the chinchilla: Voiced-voiceless distinction in alveolar plosive consonants. *Science* 190: 69–72.
- — and PADDEN, DENISE M. (1983). Enhanced discriminability at the phonetic boundaries for the place feature for macaques. *Journal of the Acoustical Society of America* 71: 1003–10.
- STEVENS, ERIKA, HAYASHI, AKIKO, DEGUCHI, TOSHISADA, KIRITANI, SHIGERU, and IVERSON, PAUL (2006). Infants show a facilitation effect for native language phonetic perception between 6 and 12 months. *Developmental Science* 9: F13–F21.
- TSAO, FENG-MING, and LIU, HUEI-MEI (2003). Foreign-language experience in infancy: Effects of short-term exposure and social interaction on phonetic learning. *Proceedings of the National Academy of Sciences* 100: 9096–101.
- WILLIAMS, KAREN A., LACERDA, FRANCISCO, STEVENS, KENNETH N., and LINDBLOM, BJÖRN (1992). Linguistic experience alters phonetic perception in infants by 6 months of age. *Science* 255: 606–8.
- and MELTZOFF, ANDREW N. (1991). Cross-modal speech perception in adults and infants using nonspeech auditory stimuli. *Journal of Experimental Psychology: Human Perception and Performance* 17: 829–40.

- KUHN, THOMAS (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.
- KÜHNERT, BARBARA, HOOLE, PHILIP, and MOOSHAMMER, CHRISTINE (2006). Gestural overlap and C-center in selected French consonant clusters, in *Proceedings of the 7th International Seminar on Speech Production*, 327–34.
- and NOLAN, FRANCIS (1999). The origin of coarticulation, in W. J. Hardcastle and N. Hewlett (eds.), *Coarticulation: Theory, Data and Techniques*. Cambridge: Cambridge University Press, 7–30.
- KUNZE, LUVERNE H. (1964). Evaluation of methods of estimating sub-glottal air pressure. *Journal of Speech and Hearing Research* 7: 151–64.
- KUPERMAN, VICTOR, ERNESTUS, MIRJAM, and BAAYEN, R. HARALD (2008). Frequency distributions of uniphones, diphones and triphones in spontaneous speech. *Journal of the Acoustical Society of America* 124: 3897–908.
- KUTAS, MARTA and VAN PETTEN, CYMA K. (1994). Psycholinguistics electrified: Event-related brain potential investigations, in M. A. Gernsbacher (ed.), *Handbook of Psycholinguistics*. San Diego: Academic Press, 83–143.
- and KLUENDER, ROBERT (2006). Psycholinguistics electrified II: 1994–2005, in M. A. Gernsbacher and M. J. Traxler (eds.), *Handbook of Psycholinguistics*, 2nd edn. New York: Elsevier, 659–724.
- KUZLA, CLAUDIA, CHO, TAEHONG, and ERNESTUS, MIRJAM (2007). Prosodic strengthening of German fricatives in duration and assimilatory devoicing. *Journal of Phonetics* 35: 301–20.
- LABOV, WILLIAM (1963). The social motivation of a sound change. *Word* 19: 273–309.
- (1966). *The Social Stratification of English in New York City*. Washington DC: Center for Applied Linguistics.
- (1969). Contraction, deletion, and inherent variability of the English copula. *Language* 45: 715–62.
- (1972a). *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.
- (1972b). Some principles of linguistic methodology. *Language in Society* 1: 97–120.
- (1973). Where do grammars stop? In R. W. Shuy (ed.), *Sociolinguistics: Current trends and prospects*. 23rd annual round table (Monograph Series on Languages and Linguistics, 25), 43–88.
- (1981). Resolving the Neogrammarian hypothesis. *Language* 57: 267–308.
- (1989a). The limitations of context: Evidence from misunderstandings in Chicago, in *Papers from the 25th Annual Regional Meeting of the Chicago Linguistic Society, Part 2: Parasession on Language in Context*. Chicago: Chicago Linguistic Society, 171–200.
- (1989b). The exact description of the speech community: Short-a in Philadelphia, in R. Fasold and D. Schiffrin (eds.), *Language Change and Variation*. Amsterdam: Benjamins, 1–57.
- (1990). The intersection of sex and social class in the course of linguistic change. *Language Variation and Change* 2: 205–54.
- (1994). *Principles of Linguistic Change, vol. 1: Internal Factors*. Oxford: Blackwell.
- (1997). Resyllabification, in F. Hinskens, R. van Hout, and L. Wetzels (eds.), *Variation, Change and Phonological Theory*. Amsterdam/Philadelphia: John Benjamins, 145–79.
- (2001). *Principles of Linguistic Change: Social Factors*. Oxford: Blackwell.
- (2002). Driving Forces in Linguistic Change. Paper presented at the 2002 International Conference on Korean Linguistics, August 2, 2002. Seoul National University. Available at <<http://www.ling.upenn.edu/~wlabov/Papers/DFLC.htm>>.

- (2004). Quantitative analysis of linguistic variation, in U. Ammon, N. Dittmar, K. J. Mattheier, and P. Trudgill (eds.), *Sociolinguistics: An International Handbook of the Science of Language and Society*, vol. 1, 2nd edn. Berlin: Mouton de Gruyter, 6–21.
- (2006). A sociolinguistic perspective on sociophonetic research. *Journal of Phonetics* 34: 500–15.
- ASH, SHARON, and BOBERG, CHARLES (2006). *Atlas of North American English: Phonetics, Phonology and Sound Change*. Berlin: Mouton de Gruyter.
- and HARRIS, W. (1986). De facto segregation of black and white vernaculars, in D. Sankoff (ed.), *Diversity and Diachrony*. Philadelphia: John Benjamins, 1–25.
- YAEGER, MALCAH, and STEINER, RICHARD (1972). *A Quantitative Study of Sound Change in Progress*. Philadelphia: US Regional Survey.
- LACERDA, FRANCISCO (1998). An exemplar-based account of emergent phonetic categories. *Journal of the Acoustical Society of America* 103: 2980.
- LACHS, LORIN, MCMICHAEL, KIP, and PISONI, DAVID (2003). Speech perception and implicit memory: Evidence for detailed episodic encoding, in J. S. Bowers and C. J. Marsolek (eds.), *Rethinking Implicit Memory*. Oxford: Oxford University Press. 215–35.
- LADD, D. ROBERT (1980). *The Structure of Intonational Meaning: Evidence from English*. Bloomington: Indiana University Press.
- (1983). Phonological features of intonational peaks. *Language* 59: 721–59.
- (1996). *Intonational Phonology*. Cambridge: Cambridge University Press.
- (2006). Segmental anchoring of pitch movements: Autosegmental association or gestural coordination? *Italian Journal of Linguistics* 18(1): 19–38.
- (2008). *Intonational Phonology (2nd edition)*. Cambridge: Cambridge University Press.
- FAULKNER, DAN, FAULKNER, HANNEKE, and SCHEPMAN, ASTRID (1999). Constant “segmental anchoring” of F0 movements under changes in speech rate. *Journal of the Acoustical Society of America* 106: 1543–54.
- MENNEN, INNEKE, and SCHEPMAN, ASTRID (2000). Phonological conditioning of peak alignment in rising pitch accents in Dutch. *Journal of the Acoustical Society of America* 107(5): 2685–95.
- and MORTON, RACHEL (1997). The perception of intonational emphasis: Continuous or categorical? *Journal of Phonetics* 25: 313–42.
- and SCHEPMAN, ASTRID (2003). Sagging transitions between high-pitch accents in English: Experimental evidence. *Journal of Phonetics* 31: 81–112.
- and SCOBIE, JAMES M. (2003). External sandhi as gestural overlap? Counter-evidence from Sardinian, in J. Local, R. Ogden, and R. Temple (eds.), *Phonetic Interpretation: Papers in Laboratory Phonology VI*. Cambridge: Cambridge University Press, 164–82.
- and SILVERMAN, KIM (1984). Vowel intrinsic pitch in connected speech. *Phonetica* 41: 31–40.
- VERHOEVEN, JO, and JACOBS, KAREN (1994). Influence of adjacent pitch accents on each other’s perceived prominence: two contradictory effects. *Journal of Phonetics* 22: 87–99.
- LADEFOGED, PETER (1962). Sub-glottal activity during speech, in *Proceedings of the 4th International Congress of Phonetic Sciences*, Helsinki, 1961. The Hague: Mouton & Co., 73–91.
- and MADDIESON, IAN (1996). *The Sounds of the World’s Languages*. Oxford: Blackwell Publishers.
- LAEUFER, CHRISTIANE (1992). Patterns of voicing conditioned vowel duration in French and English. *Journal of Phonetics* 20: 411–40.

- LAHIRI, ADITI and BLUMSTEIN, SHEILA E. (1984). A re-evaluation of the feature “coronal.” *Journal of Phonetics* 12: 133–45.
- and FIKKERT, PAULA (1999). Trisyllabic shortening in English: Past and present. *English Language and Linguistics* 3: 229–67.
- GEWIRTH, L., and BLUMSTEIN, SHEILA E. (1984). A reconsideration of acoustic invariance for place of articulation in diffuse stop consonants: Evidence from a cross-language study. *Journal of the Acoustical Society of America* 76: 391–404.
- and KRAEHEMANN, ASTRID (2004). On maintaining and extending contrasts: Notker’s Anlautgesetz. *Transactions of the Philological Society* 102: 1–55.
- and MARSLÉN-WILSON, WILLIAM D. (1991). The mental representation of lexical form: A phonological approach to the recognition lexicon. *Cognition* 38: 245–94.
- (1992). Lexical processing and phonological representation, in G. Docherty and D. R. Ladd (eds.), *Papers in Laboratory Phonology II: Gesture, Segment, Prosody*. Cambridge: Cambridge University Press, 229–54.
- and PLANK, FRANS (2009). What linguistics universals can be true of, in S. Scalise, E. Magni, and A. Bisetto (eds.), *Universals of Language Today*. Berlin: Springer, 31–58.
- and REETZ, HENNING (2002). Underspecified recognition, in C. Gussenhoven and N. Warner (eds.), *Laboratory Phonology 7*. Berlin: Mouton, 637–75.
- (2010). Distinctive features: Phonological underspecification in representation and processing. *Journal of Phonetics* 38: 44–59.
- WETTERLIN, ALLISON, and JÖNSSON-STEINER, ELISABET (2005). Lexical specification of tone in North Germanic. *Nordic Journal of Linguistics* 28: 61–96.
- LAKOFF, GEORGE (1970). Global rules. *Language* 46: 627–39.
- LAMBRECHT, KNUD (1994). *Information Structure and Sentence Form*. Cambridge: Cambridge University Press.
- LANE, LISA (2000). Trajectories of linguistic variation: Emergence of a dialect. *Language Variation and Change* 12: 267–94.
- LANIRAN, YETUNDE O. (1992). Intonation in tone languages: The phonetic implementation of tones in Yorùbá. Ph.D. dissertation, Cornell University.
- and CLEMENTS, G. N. (2003). Downstep and high raising: Interacting factors in Yoruba tone production. *Journal of Phonetics* 31(2): 203–50.
- LASS, ROGER (1984). Vowel system universals and typology: Prologue to theory. *Phonology Yearbook* 1: 75–111.
- LATTNER, SONJA, MAESS, BURKHARD, WANG, YUNHUA, SCHAUER, MICHAEL, ALTER, KAI, and FRIEDERICI, ANGELA D. (2003). Dissociation of human and computer voices in the brain: Evidence for a preattentive gestalt-like perception. *Human Brain Mapping* 20(1): 13–21.
- LAUDAN, LARRY (1983). *Science and values*. Berkeley and Los Angeles: University of California Press.
- (1996). *Beyond Positivism and Relativism: Theory, Method, and Evidence*. Boulder, CO: Westview Press.
- LAVE, JEAN and WEGNER, ETIENNE (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge and New York: Cambridge University Press.
- LAVOIE, LISA and COHN, ABIGAIL C. (1999). Sesquisyllables of English: The structure of vowel-liquid syllables, in J. J. Ohala, Y. Hasegawa, M. Ohala, D. Granville, and A. Bailey (eds.), *Proceedings of the 14th International Congress of Phonetic Sciences*. Berkeley: Linguistics Department, University of California, 109–12.

- LAWSON, ELEANOR, STUART-SMITH, JANE, and SCOBIE, JAMES M. (2008). Articulatory insights into language variation and change: Preliminary findings from an ultrasound study of derhoticization in Scottish English. *University of Pennsylvania Working Papers in Linguistics* 14(2).
- LAWSON, ROBERT (2009). Sociolinguistic constructions of identity among urban adolescents in Glasgow. Ph.D. dissertation, University of Glasgow.
- LEACH, LAURA and SAMUEL, ARTHUR G. (2007). Lexical configuration and lexical engagement: When adults learn new words. *Cognitive Psychology* 55: 306–53.
- LEATHER, JONATHAN (1983). Speaker normalization in perception of lexical tone. *Journal of Phonetics* 11: 373–82.
- LEBEN, WILLIAM (1973). Suprasegmental phonology. Ph.D. dissertation, Massachusetts Institute of Technology, Cambridge, MA.
- (1978). The representation of tone, in V. Fromkin (ed.), *Tone: A Linguistic Survey*. New York: Academic Press, 177–220.
- LECANUET, JEAN-PIERRE, GRANIER-DEFERRE, CAROLYN, and BUSNEL, MARIE-CLAIRE (1991). Prenatal familiarization, in G. Piérait-Le Bonniec and M. Dolitsky (eds.), *From Basic Language to Discourse Bases*. Amsterdam: John Benjamin, 31–44.
- — JACQUET, A. Y., CAPPONI, I., and LEDRU, L. (1993). Prenatal discrimination of a male and female voice uttering the same sentence. *Early Development and Parenting* 2: 217–28.
- LEE, CHAO-YANG (2001). Lexical tone in spoken word recognition: A view from Mandarin Chinese. Ph.D. dissertation, Brown University.
- LEE, SUNGBOK, POTAMIANOS, ALEXANDROS, and NARYANAN, SHRIKANTH (1999). Acoustics of children's speech: Developmental changes of temporal and spectral parameters. *Journal of the Acoustical Society of America* 105: 1455–68.
- LEE, YONGEUN and GOLDRICK, MATTHEW (2008). The emergence of sub-syllabic representations. *Journal of Memory and Language* 59: 155–68.
- LEECH, ROBERT, HOLT, LORI L., DEVLIN, JOSEPH T., and DICK, FREDERICK (2009). Expertise with nonspeech sounds recruits speech-sensitive cortical regions. *Journal of Neuroscience* 29: 5234–89.
- LEGENDRE, GÉRALDINE, MIYATA, YOSHIRO, and SMOLENSKY, PAUL (1990). Harmonic Grammar—A formal multilevel connectionist theory of linguistic well-formedness: Theoretical foundations. *Proceedings of the 12th Annual Conference of the Cognitive Science Society*. Hillsdale, NJ: Erlbaum, 388–95.
- — — — — SORACE, ANTONELLA, and SMOLENSKY, PAUL (2006). The Optimality Theory–Harmonic Grammar connection, in P. Smolensky and G. Legendre (eds.), *The Harmonic Mind: From Neural Computation to Optimality-Theoretic Grammar*, vol. 2. Cambridge, MA: MIT Press, 339–402.
- LEHISTE, ILSE (1960). An acoustic-phonetic study of internal open juncture. *Phonetica* 5 (Suppl.), 1–54.
- (1970). *Suprasegmentals*. Cambridge, MA: MIT Press.
- (1972). The timing of utterances and linguistic boundaries. *Journal of the Acoustical Society of America* 51(6): 2018–24.
- — — — — and PETERSON, GORDON E. (1961). Some basic considerations in the analysis of intonation. *Journal of the Acoustical Society of America* 33: 419–25.
- LEHRER, ADRIENNE (2007). Blendalicious, in J. Munat (ed.), *Lexical Creativity, Texts and Contexts*. Amsterdam: John Benjamins, 115–36.

- LEHTOLA, HEIDI, TAMMINEN, HENNA, PELTOLA, MAIJA S., and AALTONEN, OLLI (2007). Vowel identification in balanced bilinguals. *Proceedings of the 16th International Congress of Phonetic Sciences*, 793–6.
- LENNEBERG, E. H. (1967). *Biological Foundations of Language*. New York: Wiley.
- LENZO, KEVIN (2009). The CMU pronouncing dictionary, <<http://www.speech.cs.cmu.edu/cgi-bin/cmudict>>, accessed March 13, 2009.
- LESKOVEC, JURE, BACKSTROM, LARS, and KLEINBERG, JON (2009). Meme-tracking and the dynamics of the news cycle, in J. F. Elder IV, F. Fogelman-Soulié, P. Flach, and M. Zaki, (eds.), *Proceedings of the 15th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*. Association for Computing Machinery.
- LEVELT, CLARA C. (1995). Segmental structure of early words: Articulatory frames or phonological constraints, in *The Proceedings of the Twenty-seventh Annual Child Language Research Forum*. Stanford: CSLI, 19–27.
- SCHILLER, NIELS O., and LEVELT, WILLEM J. (2000). The acquisition of syllable types. *Language Acquisition* 8: 237–64.
- LEVELT, WILLEM. J. M. (1989). *Speaking. From Intention to Articulation*. Cambridge, MA: MIT Press.
- PRAAMSTRA, PETER, MEYER, ANTJE S., HELENIUS, PAIVI, and SALMELIN, RIITTA (1998). An MEG study of picture naming. *Journal of Cognitive Neuroscience* 10: 553–67.
- ROELOFS, ARDO, and MEYER, ANTJE S. (1999). A theory of lexical access in speech production. *Behavioral and Brain Sciences* 22: 1–75.
- and SCHILLER, NIELS O. (1998). Is the syllable frame stored? *Behavioral and Brain Sciences* 21: 520.
- and WHEELDON, LINDA R. (1994). Do speakers have access to a mental syllabary? *Cognition* 50: 239–69.
- LEVITT, ANDREA and UTMAN, JENNIFER A. (1992). From babbling towards the sound systems of English and French: A longitudinal two-case study. *Journal of Child Language* 19: 19–49.
- LEVITT, HARRY (1971). Transformed up-down methods in psychoacoustics. *Journal of the Acoustical Society of America* 49: 467–77.
- LEVY, ERIKA S. and STRANGE, WINIFRED (2008). Perception of French vowels by American English adults with and without French language experience. *Journal of Phonetics* 36: 141–57.
- LEVY, ROGER and JAEGER, T. FLORIAN (2007). Speakers optimize information density through syntactic reduction. *Proceedings of the Twentieth Annual Conference on Neural Information Processing Systems*. Vancouver, Canada, December 4–7, 2006.
- LI, CHARLES N. and THOMPSON, SANDRA A. (1978). Tone acquisition, in V. Fromkin (ed.), *Tone: A Linguistic Survey*. New York: Academic Press, 271–84.
- LI, FANGFANG (2005). The production and perception of dental vs. retroflex sibilants in the Songyuan dialect of Northeastern Mandarin Chinese. Poster presented in NWAV 35, November 2005, New York.
- EDWARDS, JAN, and BECKMAN, MARY E. (2009). Contrast and covert contrast: The phonetic development of voiceless sibilant fricatives in English and Japanese toddlers. *Journal of Phonetics* 37: 111–24.
- KONG, EUN JONG, BECKMAN, MARY E., and EDWARDS, JAN (2008). Adult acoustics and developmental patterns for gender-marked phonetic variants in Mandarin fricatives and Japanese stops. Poster presented at the 11th Conference of Laboratory Phonology, Wellington, New Zealand, June 30, 2008.

- MAYS, CHANELLE, SKORNIKOVA, OKSANA, and BECKMAN, MARY E. (2009). Gendered production of sibilants in the Songyuan dialect of Mandarin Chinese. Poster presented at the Annual Meeting of the Linguistic Society of America, San Francisco, January 8–11, 2009.
- MUNSON, BENJAMIN, EDWARDS, JAN, YONEYAMA, KIYOKO, and HALL, KATHLEEN C. (2011). Language specificity in the perception of voiceless sibilant fricatives in English and Japanese: Implications for cross-language differences in speech-sound development. *Journal of the Acoustical Society of America* 129: 999–1011.
- LI, M., KAMBHAMETTU, CHANDRA, and STONE, MAUREEN (2005). Automatic contour tracking in ultrasound images. *Clinical Linguistics and Phonetics* 19(6/7): 545–54. EdgeTrak available at <<http://speech.maryland.edu/software.html>>.
- LI, WEIJUN and YANG, YUFANG (2009). Perception of prosodic hierarchical boundaries in Mandarin Chinese sentences. *Neuroscience* 158(4): 1416–25.
- LI, XIAOQING, YANG, YUFANG, and HAGOORT, PETER (2008). Pitch accent and lexical tone processing in Chinese discourse comprehension: An ERP study. *Brain Research* 1222: 192–200.
- LIBERMAN, ALVIN M. (1957). Some results of research on speech perception: A critical review. *Psychological Review* 72: 275–309.
- COOPER, FRANK S., SHANKWEILER, DAVID P., and STUDDERT-KENNEDY, MICHAEL (1967). Perception of the speech code. *Psychological Review* 74: 431–61.
- HARRIS, KATHERINE S., HOFFMAN, H. S., and GRIFFITH, BELVER C. (1957). The discrimination of speech sounds within and across phoneme boundaries. *Journal of Experimental Psychology* 54(5): 358–68.
- and MATTINGLY, IGNATIUS G. (1985). The motor theory of speech perception revised. *Cognition* 21: 1–36.
- (1989). A specialization for speech perception. *Science* 245: 489–94.
- and WHALEN, DOUGLAS H. (2000). On the relation of speech to language. *Trends in Cognitive Sciences* 4: 187–96.
- LIBERMAN, MARK Y. (1978). The intonational system of English. Ph.D. dissertation, MIT, Cambridge, MA.
- and PIERREHUMBERT, JANET B. (1984). Intonational invariance under changes in pitch range and length, in M. Aronoff and R. T. Öhrle (eds.), *Language Sound Structure*. Cambridge, MA: MIT Press, 157–233.
- and PRINCE, ALAN (1977). On stress and linguistic rhythm. *Linguistic Inquiry* 8: 249–336.
- and STREETER, LYNN A. (1978). Use of nonsense-syllable mimicry in the study of prosodic phenomena. *Journal of the Acoustical Society of America* 63: 231–3.
- LICKLEY, ROBIN J., SCHEPMAN, ASTRID, and LADD, D. ROBERT (2005). Alignment of “phrase accent” lows in Dutch falling-rising questions: Theoretical and methodological implications. *Language and Speech* 48: 157–83.
- LICKLITER, ROBERT and HONEYCUTT, HUNTER (2003). Developmental dynamics: Toward a biologically plausible evolutionary psychology. *Psychological Bulletin* 129(6): 819–35.
- LIEBERMAN, EREZ, MICHEL, JEAN-BAPTISTE, JACKSON, JOE, TANG, TINA, and NOWAK, MARTIN A. (2007). Quantifying the evolutionary dynamics of language. *Nature* 449: 713.
- LIEBERMAN, PHILIP (1967). *Intonation, Perception, and Language*. Cambridge, MA: MIT Press.

- LIEVEN, ELENA V. M. (1994). Cross-linguistic and cross-cultural aspects of language addressed to children, in C. Gallaway and B. J. Richards (eds.), *Input and Interaction in Language Acquisition*. Cambridge: Cambridge University Press, 56–73.
- LILJENCANTS, JOHAN and LINDBLOM, BJÖRN (1972). Numerical simulation of vowel quality systems: The role of perceptual contrast. *Language* 48: 839–62.
- LIMPERT, ECKERT, STAHEL, WERNER A., and ABBT, MARCUS (2001). Log-normal distributions across the sciences: Keys and clues. *Bioscience* 51: 341–52.
- LIN, HWEI-B. and REPP, BRUNO (1989). Cues to the perception of Taiwanese tones. *Language and Speech* 32: 25–44.
- LIN, YING and MIELKE, JEFF (2008). Discovering place and manner features: What can be learned from acoustic and articulatory data?, in J. Tauberer, A. Eilam, and L. MacKenzie (eds.), *Penn Working Papers in Linguistics* 14.1: 241–54.
- LINDBLOM, BJÖRN (1963). Spectrographic study of vowel reduction. *Journal of the Acoustical Society of America* 35: 1773–81.
- (1968). Temporal organization of syllable production. Speech Transmission Laboratory, Quarterly Progress Status Report No. 2–3, 1–5.
- (1986). Phonetic universal in vowel systems, in J. J. Ohala and J. J. Jaeger (eds.), *Experimental Phonology*. Orlando, FL: Academic Press, 13–43.
- (1990). Explaining phonetic variation: A sketch of the H and H theory, in A. Marchal and W. Hardcastle (eds.), *Speech Production and Speech Modelling*, NATO ASI Series. Dordrecht: Kluwer Academic Publishers, 403–40.
- (1992). Phonological units as adaptive emergents of lexical development, in C. A. Ferguson, L. Menn, and C. Stoel-Gammon (eds.), *Phonological Development: Models, Research, Implications*. Timonium, MD: York Press, 131–63.
- (2003). Patterns of phonetic contrast: Towards a unified explanatory framework, in *Proceedings of the 15th International Congress of Phonetic Sciences*, Barcelona, 39–42.
- and ENGSTRAND, OLLE (1989). In what sense is speech quantal? *Journal of Phonetics* 17: 107–22.
- GUION, SUSAN, HURA, SUSAN, MOON, SEUNG-JAE, and WILLERMAN, RAQUEL (1995). Is sound change adaptive? *Rivista di Linguistica* 7: 5–36.
- LUBKER, JAMES, and GAY, THOMAS (1979). Formant frequencies of some fixed-mandible vowels and a model of speech motor programming by predictive simulation. *Journal of Phonetics* 7: 147–61.
- MACNEILAGE, PETER, and STUDDERT-KENNEDY, MICHAEL (1984). Self-organizing processes and the explanation of phonological universals, in B. Butterworth, B. Comrie, and O. Dahl (eds.), *Explanations for Language Universals*. Berlin: Mouton, 181–203.
- and MADDIESON, IAN (1988). Phonetic universals in consonant systems, in L. M. Hyman and C. N. Li (eds.), *Language, Speech, and Mind: Studies in Honor of Victoria A. Fromkin*. London: Routledge, 62–80.
- and STUDDERT-KENNEDY, MICHAEL (1967). On the rôle of formant transitions in vowel recognition. *Journal of the Acoustical Society of America* 42: 830–43.
- and SUNDBERG, JOHAN (1971). Acoustical consequences of lip, tongue, jaw, and larynx movement. *Journal of the Acoustical Society of America* 50: 1166–79.
- LINDFIELD, KIMBERLY C., WINGFIELD, ARTHUR, and GOODGLASS, HAROLD (1999). The role of prosody in the mental lexicon. *Brain and Language* 68(1–2): 312–17.
- LING, FENG and LI, BAoyu (2008). A pilot study on the perception space of lexical tones. *Proceedings of the 8th Phonetics Conference of China and the International Symposium on Phonetic Frontiers*. Beijing, China, April 18–20.

- LINGUISTIC DATA CONSORTIUM (2004). Meeting Room Careful Transcription Guidelines, technical report version 1.2, January 16, 2004.
- (2009), Rapid Transcription Guidelines, <<http://www ldc.upenn.edu/Transcription/quick-trans/index.html>>, accessed April 20, 2009.
- LISKER, LEIGH (1986). “Voicing” in English: A catalogue of acoustic features signaling /b/ versus /p/ in trochees. *Language and Speech* 29: 3–11.
- and ABRAMSON, ARTHUR S. (1964). A cross-language study of voicing in initial stops: Acoustical measurements. *Word* 20: 384–422.
- (1970). The voicing dimension: Some experiments in comparative phonetics, in *Proceedings of the 6th International Congress of Phonetic Sciences*, Prague, 1967. Prague: Academia.
- LIU, CHANG and KEWLEY-PORT, DIANE (2004). STRAIGHT: a new speech synthesizer for vowel formant discrimination. *Acoustical Research Letters Online (ARLO)*, 5, 31–6.
- LIU, FANG and XU, YI (2005). Parallel encoding of focus and interrogative meaning in Mandarin intonation. *Phonetica* 62: 70–87.
- LIU, HUEI-MEI, KUHL, PATRICIA K., and TSAO, FENG-MING (2003). An association between mothers’ speech clarity and infants’ speech discrimination skills. *Developmental Science* 6: F1–F10.
- LIU, RAN and HOLT, LORI L. (2011). Neural changes associated with nonspeech category learning parallel those of speech category acquisition, *Journal of Cognitive Neuroscience* 23: 683–98.
- LIU, SIYUN and SAMUEL, ARTHUR (2004). Perception of Mandarin lexical tones when F0 information is neutralized. *Language and Speech* 47: 109–38.
- LIU, YANG, SHRIBERG, ELIZABETH, STOLCKE, ANDREAD, HILLARD, DUSTIN, OSTENDORF, MARI, and HARPER, MARY (2006). Enriching speech recognition with automatic detection of sentence boundaries and disfluencies. *IEEE Transactions on Audio, Speech, and Language Processing* 14(5): 1526–40.
- LIVELY, SCOTT E., LOGAN, JOHN S., and PISONI, DAVID B. (1993). Training Japanese listeners to identify English /r/ and /l/ II: The role of phonetic environment and talker variability in learning new perceptual categories. *Journal of the Acoustical Society of America* 94(3): 1242–55.
- LIVESCU, KAREN, BEZMAN, ARI, BORGES, NASH, YUNG, LISA, CETIN, OZGUN, FRANKEL, JOE, KING, SIMON, MAGIMAI-DOSS, MATHEW, CHI, XUEMIN, and LAVOIE, LISA (2007). Manual transcription of conversational speech at the articulatory feature level. *Acoustics, Speech and Signal Processing* 4: 953–6.
- LLAMAS, CARMEN, MULLANY, LOUISE, and STOCKWELL, PETER (eds.) (2006). *The Routledge Companion to Sociolinguistics*. London: Routledge.
- LOCAL, JOHN K. (2003). Variable domains and variable relevance: Interpreting phonetic exponents. *Journal of Phonetics* 31: 321–39.
- (2007). Phonetic detail and the organisation of talk-in-interaction, in W. J. Barry and J. Trouvain (eds.), *16th International Congress of Phonetic Sciences*. Saarbrücken, 1–10, Paper ID 1785, <<http://www.icphs2007.de/>>.
- LOCKE, JOHN L. and PEARSON, D. M. (1992). Vocal learning and the emergence of phonological capacity, in C. A. Ferguson, L. Menn, and C. Stoel-Gammon (eds.), *Phonological Development: Models, Research, Implications*. Timonium, MD: York Press, 91–129.
- LOEVENBRUCK, HÉLÈNE, COLLINS, MICHAEL J., BECKMAN, MARY E., KRISHNAMURTHY, ASHOK K., and AHALT, STANLEY C. (1999). Temporal coordination of articulatory gestures in consonant clusters and sequences of consonants, in O. Fujimura, B. D. Joseph,

- and B. Palek (eds.), *Proceedings of the 1998 Linguistics and Phonetics Conference*. Prague: Karolinum Press, 547–73.
- LÖFQVIST, ANDERS (2005). Lip kinematics in long and short stop and fricative consonants. *Journal of the Acoustical Society of America* 117: 858–78.
- BAER, THOMAS, MCGARR, NANCY S., and STORY, ROBIN S. (1989). The cricothyroid muscle in voicing control. *Journal of the Acoustical Society of America* 85: 1314–21.
- and GRACCO, VINCENT. (1999). Interarticulator programming in VCV sequences: Lip and tongue movements. *Journal of the Acoustical Society of America* 105: 1864–76.
- (2002). Control of oral closure in lingual stop consonant production. *Journal of the Acoustical Society of America* 111(6): 2811–27.
- LOGAN, JOHN S., LIVELY, SUSAN E., and PISONI, DAVID (1991). Training Japanese listeners to identify English /r/ and /l/: A first report. *Journal of the Acoustical Society of America* 89: 874–86.
- LOGIOS LEXICON TOOL (2009). <<http://www.speech.cs.cmu.edu/tools/lextool.html>>, accessed March 13, 2009.
- LOMBARDI, LINDA (1999). Positional faithfulness and voicing assimilation in Optimality Theory. *Natural Language and Linguistic Theory* 17: 267–302.
- LOTTO, ANDREW J. (2000). Language acquisition as complex category formation. *Phonetica* 57: 189–96.
- HICKOK, GREGORY S., and HOLT, LORI L. (2009). Reflections on mirror neurons and speech perception. *Trends in Cognitive Science* 13: 110–14.
- KLUENDER, KEITH R., and HOLT, LORI L. (1997). Perceptual compensation for coarticulation by Japanese quail (*Coturnix coturnix japonica*). *Journal of the Acoustical Society of America* 102(2): 1134–40.
- (1998). Depolarizing the perceptual magnet effect. *Journal of the Acoustical Society of America* 103: 3648–55.
- (2000). Effects of language experience on organization of vowel sounds, in M. Broe and J. Pierrehumbert (eds.), *Papers in Laboratory Phonology V: Acquisition and the Lexicon*. Cambridge: Cambridge University Press, 218–26.
- SATO, MOMOKO, and DIEHL, RANDY L. (2004). Mapping the task for the second-language learner: The case of Japanese acquisition of /r/ and /l/, in J. Slifka, S. Manuel, and M. Matthies (eds.), *From Sound to Sense: 50+ Years of Discoveries in Speech Communication*.
- LU, QIMING, KORNISS, G., and SZYMANSKI, BOLESŁAW K. (2009). The naming game in social networks: Community formation and consensus engineering. *Journal of Economic Interaction and Coordination* 4: 221–35.
- LUCE, PAUL A. (1986). Neighborhoods of words in the mental lexicon. Research on Speech Perception, Tech. Rep. No. 6, Bloomington, Indiana.
- GOLDINGER, STEPHEN D., AUER, EDWARD T., and VITEVITCH, MICHAEL S. (2000). Phonetic priming, neighborhood activation, and PARSYN. *Perception & Psychophysics* 62(3): 615–25.
- and LARGE, NATHAN R. (2001). Phonotactics, density, and entropy in spoken word recognition. *Language and Cognitive Processes* 16: 565–81.
- and MCLENNAN, CONOR T. (2005). Spoken word recognition: The challenge of variation, in D. B. Pisoni and R. E. Remez (eds.), *The Handbook of Speech Perception*. Oxford: Blackwell, 591–609.

- and PISONI, DAVID B. (1998). Recognizing spoken words: The neighborhood activation model. *Ear and Hearing* 19: 1–36.
- LUCK, STEVEN J. (2005). *An Introduction to the Event-Related Potential Technique*. Cambridge, MA: MIT Press.
- LUCY, JOHN A. (1996). The linguistics of ‘color,’ in C. Hardin and L. Maffi (eds.), *Color categories in thought and language*. Cambridge: Cambridge University Press, 320–46.
- LÜTKENHÖNER, B. and POEPEL, D. (2011). From tones to speech: Magnetoencephalographic studies, in J. A. Winer and C. E. Schreiner (eds.), *The Auditory Cortex*. Berlin: Springer, 597–615.
- MACAULAY, RONALD (1991). *Locating Dialect in Discourse: The Language of Men and Bonnie Lassies in Ayr*. Oxford: Oxford University Press.
- MACEACHERN, MARGARET R. (1999). *Laryngeal Cooccurrence Restrictions*. New York: Garland.
- MACK, MOLLY (1990). Phonetic transfer in a French-English bilingual child, in P. Nelde (ed.), *Languages, Attitudes and Language Conflict*. Bonn: Dummler, 107–24.
- MACKEY, DONALD G. (1970). Spoonerisms: The structure of errors in the serial order of speech. *Neuropsychologia* 8: 323–50.
- MACKEY, IAN R. A., FLEGE, JAMES E., and IMAI, S. (2006). Evaluating the effects of chronological age and sentence duration on degree of perceived foreign accent. *Applied Psycholinguistics* 27: 157–83.
- MEADOR, DIANE, and FLEGE, JAMES E. (2001). The identification of English consonants by native speakers of Italian. *Phonetica* 58: 103–25.
- MACKEN, MARLYS A. and BARTON, DAVID (1980). The acquisition of the voicing contrast in English: A study of voice onset time in word-initial stop consonants. *Journal of Child Language* 7: 41–74.
- MACLAGAN, MARGARET and HAY, JENNIFER (2007). Getting fed up with our feet: Contrast maintenance and the New Zealand English “short” front vowel shift. *Language Variation and Change* 19: 1–25.
- MACLEOD, ANDREA N. and STOEL-GAMMON, CAROL (2005). Are bilinguals different? What VOT tells us about simultaneous bilinguals. *Journal of Multilingual Communication Disorders* 3: 118–27.
- MACMILLAN, NEIL A., BRAIDA, L. D., and GOLDBERG, R. F. (1987). Central and peripheral effects in the perception of speech and non-speech sounds, in M. E. H. Schouten (ed.), *The Psychophysics of Speech Perception*. Dordrecht: Martinus Nijhoff, 28–45.
- and CREELMAN, C. DOUGLAS (1991). *Detection Theory: A User’s Guide*. New York: Cambridge University Press.
- MACNEILAGE, PETER F. (1980). The control of speech production, in G. Yeni-Komshian, J. Kaveanagh, and C. A. Ferguson (eds.), *Child Phonology Vol. 1: Production*. New York: Academic Press, 9–21.
- and DAVIS, BARBARA L. (1990). Motor explanations of babbling and early speech patterns, in M. Jeannerod (ed.), *Attention and Performance XIII: Motor Representation and Control*. Hillsdale, NJ: Lawrence Erlbaum, 567–82.
- — (2000). On the origin of internal structure of word forms. *Science* 288: 527–31.
- — KINNEY, ASHLYNN, and MATYEAR, CHRISTINE L. (2000). The motor core of speech: A comparison of serial organization patterns in infants and language. *Child Development* 71(1): 153–63.

- MACWHINNEY, BRIAN (2000). *The CHILDES Project: Tools for Analyzing Talk. Vol. 2: The Database*, 3rd edn. Mahwah, NJ: Lawrence Erlbaum Associates.
- MADDIESON, IAN (1984). *Patterns of Sounds*. Cambridge: Cambridge University Press.
- (1985). Phonetic cues to syllabification, in V. A. Fromkin (ed.), *Phonetic Linguistics: Essays in Honor of Peter Ladefoged*. Orlando: Academic Press, 203–21.
- and LADEFOGED, PETER (1993). Phonetics of partially nasal consonants, in M. Huffman and R. Krakow (eds.), *Nasals, Nasalization, and the Velum (Phonetics and Phonology 5)*. San Diego: Academic Press, 251–301.
- MÁDY, KATALIN and BEER, AMBROS (2007). Articulatory parameters in consonant production after tumour surgery: A real-time MRI investigation. *Archives of Acoustics* 32: 135–45.
- MAEDA, SHINJI (1991). On articulatory and acoustic variabilities. *Journal of Phonetics* 19: 321–31.
- MAESS, BURKHARD, FRIEDERICI, ANGELA D., DAMIAN, MARKUS, MEYER, ANTJE S., and LEVELT, WILLEM J. M. (2002). Semantic category interference in overt picture naming: Sharpening current density localization by PCA. *Journal of Cognitive Neuroscience* 14: 455–63.
- MAGEN, HARRIET S. (1997). The extent of vowel-to-vowel coarticulation in English. *Journal of Phonetics* 25: 187–205.
- MAGNUSON, JAMES S., McMURRAY, BOB, TANENHAUS, MICHAEL K., and ASLIN, RICHARD N. (2003). Lexical effects on compensation for coarticulation: The ghost of Christmash past. *Cognitive Science* 27(2): 285–98.
- and NUSBAUM, HOWARD C. (2007). Acoustic differences, listener expectations, and the perceptual accommodation of talker variability. *Journal of Experimental Psychology: Human Perception and Performance* 33(2): 391–409.
- MAINDONALD, JOHN H. and BRAUN, JOHN (2003). *Data Analysis and Graphics Using R—An Example-based Approach*. Cambridge: Cambridge University Press.
- MAIR, SHEILA J. and SHADLE, CHRISTINE H. (1996). The voiced/voiceless distinction in fricatives: EPG, acoustic and aerodynamic data. *Proceedings of the Institute of Acoustics* 18(9): 163–70.
- MAKASHAY, MATTHEW J. and JOHNSON, KEITH (1998). Surveying auditory space using vowel formant data. *Proceedings of the Joint Meeting of the International Conference Acoustics and the Acoustical Society of America (Acoustical Society of America)*, 2037–8.
- MALHOTRA, SHVETA and LOMBER, STEPHEN G. (2007). Sound localization during homotopic and heterotopic bilateral cooling deactivation of primary and nonprimary auditory cortical areas in the cat. *Journal of Neurophysiology* 97: 26–43.
- MALSHEEN, BATHSHEBA J. (1980). Two hypotheses for phonetic clarification in the speech of mothers to children, in G. H. Yeni-Komshian, J. F. Kavanaugh, and C. A. Ferguson (eds.), *Child Phonology*, vol. 2. San Diego, CA: Academic Press, 173–84.
- MAN, VICKY C. H. (2002). Focus effects on Cantonese tones: An acoustic study. *Proceedings of the 1st International Conference on Speech Prosody*. Aix-en-Provence, France, 467–70.
- MANDEL, DENISE R., JUSCZYK, PETER W., and PISONI, DAVID B. (1995). Infants' recognition of the sound patterns of their own names. *Psychological Science* 6: 315–18.
- MANN, VIRGINIA A. (1980). Influence of preceding liquid on stop-consonant perception. *Perception and Psychophysics* 28: 407–12.
- and REPP, BRUNO H. (1980). Influence of vocalic context on perception of the [ʃ] vs. [s] distinction. *Perception and Psychophysics* 28: 213–28.

- MANNING, CHRISTOPHER and SCHÜTZE, HINRICH (1999). *Foundations of Statistical Natural Language Processing*. Cambridge, MA: MIT Press.
- MANUEL, SHARON, Y. (1990). The role of contrast in limiting vowel-to-vowel coarticulation in different languages. *Journal of Acoustical Society of America* 88: 1286–98.
- (1999). Cross-language studies: Relating language-particular coarticulation patterns to other language-particular facts, in W. J. Hardcastle and N. Hewlett (eds.), *Coarticulation: Theory, Data and Techniques*. Cambridge: Cambridge University Press, 179–98.
- MARCHAL, ALAIN (1988). Coproduction: Evidence from EPG data. *Speech Communication* 7: 287–95.
- MARCHMAN, VIRGINIA and BATES, ELIZABETH (1994). Continuity in lexical and morphological development: A test of the critical mass hypothesis. *Journal of Child Language* 21: 339–66.
- MAREAN, G. CAMERON, WERNER, LYNNE A., and KUHL, PATRICIA K. (1992). Vowel categorization by very young infants. *Developmental Psychology* 28: 396–405.
- MARIAN, VIORICA and SPIVEY, MICHAEL (2003a). Competing activation in bilingual language processing: Within- and between-language competition. *Bilingualism* 6: 97–115.
- (2003b). Bilingual and monolingual processing of competing lexical items. *Applied Psycholinguistics* 24: 173–93.
- MARIN, STEFANIA and POUPLIER, MARIANNE (2008). Organization of complex onsets and codas in American English: Evidence for a competitive coupling model, in R. Sock, S. Fuchs, and Y. Laprie (eds.), *Proceedings of the 8th International Seminar on Speech Production*. Strasbourg: INRIA, 437–40, <<http://issp2008.loria.fr/proceedings.html>>.
- MARKEL, JOHN D. and GRAY, AUGUSTINE H. (1976). *Linear Prediction of Speech*. Berlin: Springer.
- MARKRAM, HENRY (2006a). The Blue Brain Project. *Nature Reviews Neuroscience* 7: 153–60.
- (2006b). Dendritic object theory: A theory of the neural code where 3D electrical objects are formed across dendrites by neural microcircuits. Swiss Society for Neuroscience: Abstract H11.
- MARSLÉN-WILSON, WILLIAM D. (1987). Functional parallelism in spoken word recognition. *Cognition* 25(1–2): 71–102.
- (ed.) (1989). *Lexical Representation and Process*. Cambridge, MA: MIT Press.
- NIX, ANDY, and GASKELL, GARETH (1995). Phonological variation in lexical access: Abstractness, inference and English place assimilation. *Language and Cognitive Processes* 10: 285–308.
- TYLER, LORRAINE K., WAKSLER, RACHELLE, and OLDER, LIANNE (1994). Morphology and meaning in the English mental lexicon. *Psychological Review* 101: 3–33.
- and WARREN, PAUL (1994). Levels of perceptual representation and process in lexical access: Words, phonemes, and features. *Psychological Review* 101: 653–75.
- MARTIN, JAMES G. and BUNNELL, H. TIMOTHY (1982). Perception of anticipatory coarticulation effects in vowel-stop consonant-vowel sequences. *Journal of Experimental Psychology: Human Perception and Performance* 8: 473–88.
- MARTINS, PAULA, CARBONE, INÊS, PINTO, ALDA, SILVA, AUGUSTO, and TEIXEIRA, ANTÓNIO (2008). European Portuguese MRI-based speech production studies. *Speech Communication* 50: 925–52.
- MÁRTONY, JANOS (1965). Studies of the voice source. *Speech Trans. Lab. Q. Prog. Stat. Rep.* 1. Stockholm: Royal Institute of Technology, 4–9.

- MASAKOWSKI, YVONNE and FIFER, WILLIAM P. (1994). The effects of maternal speech on foetal behavior. International Conference on Infant Studies, Paris.
- MASCARÓ, JOAN (1996). External allomorphy as emergence of the unmarked, in J. Durand and B. Laks (eds.), *Current Trends in Phonology: Models and Methods*. European Studies Research Institute, University of Salford, 473–83.
- MASSARO, DOMINIC (1998). *Perceiving Talking Faces: From Speech Perception to a Behavioral Principle*. Cambridge, MA: MIT Press.
- MATIN, ETHEL, SHAO, K. C., and BOFF, KENNETH R. (1993). Saccadic overhead: Information processing time with and without saccades. *Perception and Psychophysics* 53: 372–80.
- MATTHEWS, PETER H. (1997). *The Concise Oxford Dictionary of Linguistics*. Oxford: Oxford University Press.
- MATTHIES, MELANIE L., SVIRSKY, MARIO A., LANE, HARLAN L., and PERKELL, JOSEPH P. (1994). A preliminary study of the effects of cochlear implants on the production of sibilants. *Journal of the Acoustical Society of America* 96(3): 1367–73.
- MATTOCK, KAREN, POLKA, LINDA, RVACHEW, SUSAN, and KREHM, MADELAINE (2010). The first steps in word learning are easier when the shoes fit: Comparing monolingual and bilingual infants. *Developmental Science* 13: 229–43.
- MATTYS, SVEN L. (2004). Stress versus coarticulation: Toward an integrated approach to explicit speech segmentation. *Journal of Experimental Psychology: Human Perception and Performance* 30: 397–408.
- and JUSCZYK, PETER W. (2001). Phonotactic cues for segmentation of fluent speech by infants. *Cognition* 78: 91–121.
- and LISS, JULIE M. (2008). On building models of spoken-word recognition: When there is as much to learn from natural “oddities” as artificial normality. *Perception and Psychophysics* 70: 1235–42.
- WHITE, LAURENCE, and MELHORN, JAMES F. (2005). Integration of multiple speech segmentation cues: A hierarchical framework. *Journal of Experimental Psychology: General* 134: 477–500.
- MAX PLANCK INSTITUTE FOR PSYCHOLINGUISTICS ONLINE EXPERIMENTS (2009). <<http://www.mpi.nl/cgi-bin/exp/default.pl>>, accessed March 13, 2009.
- MAX, LUDO and CARUSO, ANTHONY J. (1997). Acoustic measures of temporal intervals across speaking rates: Variability of syllable- and phrase-level relative timing. *Journal of Speech, Language, and Hearing Research* 40: 1097–110.
- MAY, JANET (1976). Vocal tract normalization for /s/ and /ʃ/. Haskins Laboratories: Status Report on Speech Research SR-48, 67–73.
- MAYE, JESSICA (2000). Learning speech sound categories on the basis of distributional information. Doctoral dissertation, University of Arizona.
- and GERKEN, LOUANN (2000). Learning phoneme categories without minimal pairs, in S. Howel, S. Fisch, and T. Keith-Lucas (eds.), *Proceedings of the 24th Annual Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press, 522–33.
- WEISS, DANIEL J., and ASLIN, RICHARD N. (2008). Statistical phonetic learning in infants: Facilitation and feature generalization. *Developmental Science* 11(1): 122–34.
- WERKER, JANET F., and GERKEN, LOUANN (2002). Infant sensitivity to distributional information can affect phonetic discrimination. *Cognition* 82: B101–B111.
- MAYO, CATHERINE, SCOBIE, JAMES, HEWLETT, NIGEL, and WATERS, D. (2003). The influence of phonemic awareness development on acoustic cue weighting in children’s speech perception. *Journal of Speech, Language, and Hearing Research* 46: 1184–96.

- MAYO, LYNN H., FLORENTINE, MARY, and BUUS, SØREN (1997). Age of second-language acquisition and perception of speech in noise. *Journal of Speech, Language, and Hearing Research* 40: 686–93.
- MAYR, R. and ESCUDERO, PAOLA (2010). Explaining individual variation in L2 perception: Rounded vowels in English learners of German. *Bilingualism, Language and Cognition* 13(3): 279–97.
- MCALLISTER, R. (1978). Temporal asymmetry in labial coarticulation. Working Papers, Institute of Linguistics, Stockholm University 35, 1–29.
- MCCAFFERTY, KEVIN (1998) Shared accents, divided speech community? Change in Northern Ireland English. *Language Variation and Change* 10: 97–121.
- MCCANDLISS, BRUCE D., FIEZ, JULIE A., PROTOPAPAS, ATHANASSIOS, CONWAY, MARY, and MCCLELLAND, JAY L. (2002). Success and failure in teaching the r-l contrast to Japanese adults: predictions of a hebbian model of plasticity and stabilization in spoken language perception. *Cognitive, Affective, and Behavioral Neuroscience* 2: 89–108.
- MCCARTHY, JOHN J. (1985). *Formal Problems in Semitic Phonology and Morphology*. New York: Garland Press.
- (1988). Feature geometry and dependency: A review. *Phonetica* 45: 84–108.
- (1994) The phonetics and phonology of Semitic pharyngeals, in P. Keating (ed.), *Phonological Structure and Phonetic Form: Papers in Laboratory Phonology III*. Cambridge: Cambridge University Press, 191–233.
- (2005). Taking a free ride in morphonemic learning. *Catalan Journal of Linguistics* 4: 19–55. ROA 683.
- (2008). *Doing Optimality Theory*. Malden, MA: Blackwell Publishing.
- and TAUB, ALISON (1992). Review of Paradis and Prunet (1991). *Phonology* 9: 363–370.
- MCCAWLEY, JAMES D. (1967). Sapir's phonologic representation. *International Journal of American Linguistics* 33(2): 106–11.
- (1968). *The Phonological Component of a Grammar of Japanese*. The Hague: Mouton.
- (1978). What is a tone language?, in V. Fromkin (ed.), *Tone: A Linguistic Survey*. New York: Academic Press, 113–32.
- MCCLELLAND, JAMES L. and ELMAN, JEFFREY L. (1986). The TRACE model of speech perception. *Cognitive Psychology* 18: 1–86.
- FIEZ, JULIE A., and MCCANDLISS, BRUCE D. (2002). Teaching the /r/-/l/ discrimination to Japanese adults: Behavioral and neural aspects. *Physiology and Behavior* 77: 657–62.
- MIRMAN, DANIEL, and HOLT, LORI L. (2006). Are there interactive processes in speech perception? *Trends in Cognitive Sciences* 10(8): 363–9.
- and RUMELHART, DAVID E. (1986). A distributed model of human learning and memory, in J. L. McClelland, D. E. Rumelhart, and the PDP Research Group, *Parallel Distributed Processing: Explorations in the Microstructure of Cognition. Volume 2: Psychological and Biological Models*. Cambridge, MA: MIT Press, 170–215.
- MCCRARY, KRISTIE M. (2004). Reassessing the role of the syllable in Italian phonology. Ph.D. dissertation, UCLA.
- MCDONOUGH, JOYCE (2003). *The Navajo Sound System*. Dordrecht: Kluwer Academic Publishers.
- and WOOD, V. (2008). The stop contrasts of the Athabaskan languages. *Journal of Phonetics* 36: 427–49.
- MCENERY, TONY and WILSON, ANDREW (2001). *Corpus Linguistics*. Edinburgh: Edinburgh University Press.

- McGOWAN, RICHARD S. and NITTROUER, SUSAN (1988). Differences in fricative production between children and adults: Evidence from an acoustic analysis of /S/ and /s/. *Journal of the Acoustical Society of America* 83: 229–32.
- McGURK, HARRY and MACDONALD, JOHN (1976). Hearing lips and seeing voices. *Nature* 264: 746–8.
- McKENNA, GORDON (1988). Vowel duration in the Standard English of Scotland. Unpublished M.Litt. thesis, University of Edinburgh.
- McLENNAN, CONOR T. (2007). Challenges facing a complementary-systems approach to abstract and episodic speech perception. *Proceedings of the 16th International Congress of Phonetic Sciences*. Saarbrücken, 67–70.
- and LUCE, PAUL A. (2005). Examining the time course of indexical specificity effects in spoken word recognition. *Journal of Experimental Psychology: Learning, Memory and Cognition* 31: 306–21.
- — and CHARLES-LUCE, JAN (2003). Representation of lexical form. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 29: 539–53.
- McMAHON, APRIL (1994). *Understanding Language Change*. Cambridge University Press: Cambridge.
- FOULKES, PAUL, and TOLFREE, LAURA (1994). Gestural representation and lexical phonology. *Phonology* 11: 277–316.
- McMURRAY, BOB and ASLIN, RICHARD N. (2004). Anticipatory eye movements reveal infants' auditory and visual categories. *Infancy* 6: 203–29.
- — (2005). Infants are sensitive to within-category variation in speech perception. *Cognition* 95: B15–B26.
- — TANENHAUS, MICHAEL K., SPIVEY, MICHAEL J., and SUBIK, D. (2008). Gradient sensitivity to within-category variation in words and syllables. *Journal of Experimental Psychology: Human Perception and Performance* 34: 1609–31.
- — and TOSCANO, JOSEPH (2009). Statistical learning of phonetic categories: Computational insights and limitations. *Developmental Science* 12(3): 369–78.
- COLE, JENNIFER S., and MUNSON, CHEYENNE (2011). Features as an emergent product of perceptual parsing: Evidence from vowel-to-vowel coarticulation. Invited chapter for R. Ridouane and G. N. Clement (eds.), *Where Do Features Come From? The Nature and Sources of Phonological Primitives*. Elsevier: North-Holland Linguistic Series.
- HORST, JESSICA, TOSCANO, JOSEPH, and SAMUELSON, LARISSA (2009). Towards an integration of connectionist learning and dynamical systems processing: Case studies in speech and lexical development, in J. Spencer, M. Thomas, and J. McClelland (eds.), *Toward a Unified Theory of Development: Connectionism and Dynamic Systems Theory Reconsidered*. London: Oxford University Press.
- and JONGMAN, ALLARD (2011). What information is necessary for speech categorization? Harnessing variability in the speech signal by integrating cues computed relative to expectations. *Psychological Review* 118(2): 219–46.
- KOVACK-LESH, KRISTINE, GOODWIN, DRESDEN, and MCECHRON, WILLIAM D. (in preparation). Separating phonetic categories in infant directed speech: Intentional enhancement or hyperarticulation?
- and SPIVEY, MICHAEL J. (2000). The categorical perception of consonants: the interaction of learning and processing. *Proceedings of the Chicago Linguistics Society* 34(2): 205–20.

- TANENHAUS, MICHAEL K., and ASLIN, RICHARD N. (2002). Gradient effects of within-category phonetic variation on lexical access. *Cognition* 86(2): B33–B42.
- ——— (2009). Within-category VOT affects recovery from “lexical” garden-paths: Evidence against phoneme-level inhibition. *Journal of Memory and Language* 60(1): 65–91.
- MCQUEEN, JAMES M. (1998). Segmentation of continuous speech using phonotactics. *Journal of Memory and Language* 39: 21–46.
- (2005). Speech perception, in K. Lamberts and R. Goldstone (eds.), *The Handbook of Cognition*. London: Sage Publications, 255–75.
- and CUTLER, ANNE (1997). Cognitive processes in speech perception, in W. J. Hardcastle and J. Laver (eds.), *The Handbook of Phonetic Sciences*. Oxford: Blackwell, 566–85.
- ——— (1998). Morphology in word recognition, in A. Spencer and A. M. Zwicky (eds.), *The Handbook of Morphology*. Oxford: Blackwell, 406–27.
- ——— and NORRIS, DENNIS (2006). Phonological abstraction in the mental lexicon. *Cognitive Science* 30: 1113–26.
- and VIEBAHN, MALTE C. (2007). Tracking recognition of spoken words by tracking looks to printed words. *Quarterly Journal of Experimental Psychology* 60(5): 661–71.
- MEAD, JERE (1969). Volume displacement body plethysmograph for respiratory measurements in human subjects. *Journal of Applied Physiology* 15: 736–40.
- MEHL, MATTHIAS R. and PENNEBAKER, JAMES W. (2003). The sounds of social life: A psychometric analysis of students’ daily social environments and natural conversations. *Journal of Personality and Social Psychology* 84: 857–70.
- MEHLER, JACQUES, DOMMERGUES, JEAN-YVES, FRAUENFELDER, ULI, and SEGUI, JUAN (1981). The syllable’s role in speech segmentation. *Journal of Verbal Learning and Verbal Behavior* 20: 298–305.
- JUSCZYK, PETER, LAMBERTZ, GHISLAINE, HALSTED, NILOFAR, BERTONCINI, JOSIANE, and AMIEL-TISON, CLAUDINE (1988). A precursor of language acquisition in young infants. *Cognition* 29: 143–78.
- MEHTA, GITA, and CUTLER, ANNE (1988). Detection of target phonemes in spontaneous and read speech. *Language and Speech* 31: 135–56.
- MEIJER, PAUL J. A. (1996). Suprasegmental structures in phonological encoding: The CV structure. *Journal of Memory and Language* 35: 840–53.
- MÉNARD, LUCIE, AUBIN, JÉRÔME, BRISEBOIS, AMÉLIE, and THIBEAULT, MÉLANIE (2007). A study of the development of speech motor control using ultrasound recordings. Talk presented at Ultrafest IV, New York University, September 28–29, 2007.
- and DEMUTH, KATHERINE (in preparation). Articulatory gestures in targeting word-final consonants.
- SCHWARTZ, JEAN-LUC, and BOË, LOUISE-JEAN (2004). The role of the vocal tract morphology in speech development: Perceptual targets and sensori-motor maps for French synthesized vowels from birth to adulthood. *Journal of Speech, Language, and Hearing Research* 47: 1059–80.
- MENDOZA-DENTON, NORMA (2002). Language and Identity, in J. K. Chambers, P. Trudgill, and N. Schilling-Estes (eds.), *The Handbook of Language Variation and Change*. Oxford: Blackwell, 475–99.
- (2007). Sociolinguistic extensions of Exemplar Theory, in J. Cole and J. Hualde (eds.), *Laboratory Phonology* 9. Berlin: Mouton de Gruyter, 443–54.
- (2008). *Homegirls: Language and Cultural Practice among Latina Youth Gangs*. London: Blackwell.

- MENDOZA-DENTON, NORMA, HAY, JENNIFER, and JANNEDY, STEFANIE (2003). Probabilistic sociolinguistics: Beyond variable rules, in R. Bod, J. Hay, and S. Jannedy (eds.), *Probability Theory in Linguistics*. Cambridge, MA: MIT Press, 97–138.
- MERTENS, PIET (2004). The prosogram: Semi-automatic transcription of prosody based on a tonal perception model, in *Proceedings of Speech Prosody 2004*, Nara (Japan), 23–26 March.
- MERZENICH, MICHAEL M., KAAS, JON H., and ROTH, G. LINN (1976). Auditory cortex in the grey squirrel: Tonotopic organization and architectonic fields. *Journal of Comparative Neurology* 166: 387–401.
- MESTER, ARMIN (1994). The quantitative trochee in Latin. *Natural Language and Linguistic Theory* 12: 1–61.
- MESTHRIE, RAJEND (1992). *English in Language Shift: The History, Structure, and Sociolinguistics of South African Indian English*. Cambridge: Cambridge University Press.
- METSALA, JAMIE and WALLEY, AMANDA (1998). Spoken vocabulary growth and the segmental restructuring of lexical representations: Precursors to phonemic awareness and early reading ability, in J. L. Metsala and L. C. Ehri (eds.), *Word Recognition in Beginning Literacy*. Mahwah, NJ: Erlbaum, 89–120.
- METZ, DALE E., WHITEHEAD, ROBERT L., and PETERSON, DONALD H. (1980). An optical-illumination system for high-speed laryngeal cinematography. *Journal of the Acoustical Society of America* 67: 719–21.
- MEYER, ANTJE S. (1990). The time course of phonological encoding in language production: The encoding of successive syllables of a word. *Journal of Memory and Language* 29: 524–45.
- (1991). The time course of phonological encoding in language production: Phonological encoding inside a syllable. *Journal of Memory and Language* 30: 69–89.
- (1992). Investigation of phonological encoding through speech error analyses: Achievements, limitations, and alternatives. *Cognition* 42: 181–211.
- and SCHRIEFERS, HERBERT (1991). Phonological facilitation in picture-word interference experiments: Effects of stimulus onset asynchrony and types of interfering stimuli. *Journal of Experimental Psychology: Learning, Memory and Cognition* 17: 1146–60.
- SLEIDERINK ASTRID M., and LEVELT, WILLIAM J. M. (1998). Viewing and naming objects: Eye movements during noun phrase production. *Cognition* 66(2): B25–B33.
- MEYER, MARTIN, STEINHAUER, KARSTEN, ALTER, KAI, FRIEDERICI, ANGELA D., and VON CRAMON, D. YVES (2004). Brain activity varies with modulation of dynamic pitch variance in sentence melody. *Brain and Language* 89: 277–89.
- MEYERHOFF, MIRIAM (2006). *Introducing Sociolinguistics*. London: Routledge.
- and NAGY, NAOMI (eds.) (2008). *Social Lives in Language: The Sociolinguistics of Multilingual Speech Communities. Celebrating the Work of Gillian Sankoff*. Amsterdam and Philadelphia: John Benjamins.
- MIELKE, JEFF (2005). Modeling distinctive feature emergence, in J. Alderete, C.-H. Han, and A. Kochetov (eds.), *Proceedings of the 24th West Coast Conference on Formal Linguistics*. Somerville, MA: Cascadilla Proceedings Project, 281–9.
- (2007). Multiple mechanisms of change and influence: Comments on Harrington, Gussenhoven, Gow and McMurray, and Munson, in J. Cole and J. I. Hualde (eds.), *Laboratory Phonology 9*. Berlin: Mouton de Gruyter, 229–40.
- (2008). *The Emergence of Distinctive Features*. Oxford: Oxford University Press.

- (2009). Accepting unlawful variation and unnatural classes: A model of phonological generalization, in R. van de Vijver, C. Féry, and F. Kügler, *Variation and Gradience in Phonetics and Phonology*. Berlin: Mouton de Gruyter, 17–42.
- (forthcoming). Phonologization and the typology of feature behaviour, in A. Yu, (ed.), *Phonologization*. Oxford: Oxford University Press.
- BAKER, ADAM, and ARCHANGELI, DIANA (2006). Forever young: Inaudible /r/ allophony resists conventionalization. Talk presented at the Linguistic Society of America 80, Albuquerque, NM. <<http://dingo.sbs.arizona.edu/~apilab/presentations/LSA2006rtalk.pdf>>, accessed March 15, 2009.
- — (2010). Variability and homogeneity in American English: /r/ allophony and /s/ retraction, in C. Fougerson, B. Kühnert, M. D'Imperio, and N. Vallée (eds.), *Laboratory Phonology 10*. Berlin: Mouton de Gruyter, 699–729.
- — and RACY, SUMAYYA (2005). Palatron: a technique for aligning ultrasound images of the tongue and palate. *Coyote Papers* 14: 97–108.
- MILLER, AMANDA (2008). Click cavity formation and dissolution in IsiXhosa: Viewing clicks with high-speed ultrasound, in R. Sock, S. Fuchs, and Y. Laprie (eds.), *Proceedings of the 8th International Seminar on Speech Production*. Strasbourg, 137–40.
- BRUGMAN, JOHANNA, SANDS, BONNIE, NAMASEB, LEVI, EXTER, MATS, and COLLINS, CHRIS (2009). Differences in airstream and posterior place of articulation among N|uu clicks. *Journal of the International Phonetic Association* 39, 129–61.
- and FINCH, KENNETH (2011). Corrected high-speed anchored ultrasound with software alignment. *Journal of Speech, Language, and Hearing Research* 54, 471–86.
- NAMASEB, LEVI, and ISKAROUS, KHALIL (2007). Tongue body constriction differences in click types, in J. Cole and J. I. Hualde (eds.), *Laboratory Phonology 9*. New York: Mouton de Gruyter, 643–56.
- MILLER, GEORGE A. and NICELY, PATRICIA E. (1955). An analysis of perceptual confusions among some English consonants. *Journal of the Acoustical Society of America* 27: 338–52.
- MILLER, JOANNE L. (1997). Internal structure of phonetic categories. *Language and Cognitive Processes* 12: 865–9.
- and DEXTER, EMILY R. (1988). Effects of speaking rate and lexical status on phonetic perception. *Journal of Experimental Psychology: Human Perception and Performance* 14: 369–78.
- and EIMAS, PETER D. (1996). Internal structure of voicing categories in early infancy. *Perception & Psychophysics* 58(8): 1157–67.
- and VOLAITIS, LYDIA E. (1989). Effect of speaking rate on the perceptual structure of a phonetic category. *Perception & Psychophysics* 46(6): 505–12.
- MILLOTTE, SÉVERINE, WALES, ROGER, and CHRISTOPHE, ANNE (2007). Phrasal prosody disambiguates syntax. *Language and Cognitive Processes* 22(6): 898–909.
- MILROY, J. and MILROY, LESLEY (1985). Linguistic change, social network and speaker innovation. *Journal of Linguistics* 21: 339–84.
- — (1993). Mechanisms of change in urban dialects: The role of class, social network and gender. *International Journal of Applied Linguistics* 3(1): 57–78.
- MILROY, LESLEY (1987a). *Language and Social Networks*, 2nd edn. Oxford: Blackwell.
- (1987b). *Observing and Analysing Natural Language*. Oxford: Blackwell.
- and GORDON, MATTHEW (2003). *Sociolinguistics: Method and Interpretation*. Oxford: Blackwell.

- MIRMAN, DANIEL, DIXON, JAMES A., and MAGNUSON, JAMES S. (2008). Statistical and computational models of the visual world paradigm: Growth curves and individual differences. *Journal of Memory and Language* 59: 475–94.
- HOLT, LORI L., and MCCLELLAND, JAY L. (2004). Categorization and discrimination of nonspeech sounds: Differences between steady-state and rapidly-changing acoustic cues. *Journal of the Acoustical Society of America* 116: 1198–207.
- MCCLELLAND, JAY L., and HOLT, LORI L. (2006). Interactive activation and Hebbian learning produce lexically guided tuning of speech perception. *Psychonomic Bulletin and Review* 13: 958–65.
- MITCHELL, THOMAS (1997). *Machine Learning*. New York: McGraw-Hill.
- MITCHENER, W. GARRETT (2003). Bifurcation analysis of the fully symmetric language dynamical equation. *Journal of Mathematical Biology* 46(3): 265–85.
- and NOWAK, MARTIN A. (2004). Chaos and Language. *Proceedings of the Royal Society B: Biological Sciences*, vol. 271: 701–4.
- MITTERER, HOLGER and BLOMERT, LEO (2003). Coping with phonological assimilation in speech perception: Evidence for early compensation. *Perception and Psychophysics* 65: 956–69.
- CSÉPE, VALÉRIA, and BLOMERT, LEO (2006). The role of perceptual integration in the perception of assimilation word forms. *Quarterly Journal of Experimental Psychology* 59: 1395–424.
- — HONBOLYGO, FERENC, and BLOMERT, LEO (2006). The recognition of phonologically assimilated words does not depend on specific language experience. *Cognitive Science* 30: 451–79.
- and ERNESTUS, MIRJAM (2006). Listeners recover /t/s that speakers reduce: Evidence from /t/-lenition in Dutch. *Journal of Phonetics* 34: 73–103.
- — (2008). The link between speech perception and production is phonological and abstract: Evidence from the shadowing task. *Cognition* 109: 168–73.
- and MCQUEEN, JAMES M. (2009). Processing reduced word-forms in speech perception using probabilistic knowledge about speech production. *Journal of Experimental Psychology: Human Perception and Performance* 35: 244–63.
- YONEYAMA, KUMIKO, and ERNESTUS, MIRJAM (2008). How we hear what is hardly there: Mechanisms underlying compensation for /t/-reduction in speech comprehension. *Journal of Memory and Language* 59: 133–52.
- MITZENMACHER, MICHAEL (2004). A brief history of generative models for power law and lognormal distributions. *Internet Mathematics* 1(2): 226–51.
- MIXDORFF, HANSJÖRG, LUKSANEYANAWIN, SUDAPORN, FUJISAKI, HIROYA, and CHARNVIVIT, PATAVEE (2002). Perception of tone and vowel quality in Thai. Paper presented at the 7th International Conference on Spoken Language Processing, Denver, Colorado, September 2002.
- MIYAWAKI, KANIKA, STRANGE, WINIFRED, VERBRUGGE, ROBERT, LIBERMAN, ALVIN L., JENKINS, JAMES J., and FUJIMURA, OSAMU (1975). An effect of linguistic experience: The discrimination of [r] and [l] by native speakers of Japanese and English. *Perception and Psychophysics* 18: 331–40.
- MOHAMMAD, M., SINAN, T., and MOHAMMAD, B. (2006). Articulatory models of Arabic vowels computed from magnetic resonance images. *Kuwait Journal of Science and Engineering* 33: 69–79.

- MOHANAN, K. P. (1991). On the bases of radical underspecification. *Natural Language and Linguistic Theory* 9: 285–325.
- and MOHANAN, T. (1986). Lexical phonology of the consonant system of Malayalam. *Linguistic Inquiry* 15: 575–602.
- MOLFESE, DENNIS L., KEY, FONARYOVA A. P., MAGUIRE, MANDY J., DOVE, GUY O., and MOLFESE, VICTORIA J. (2005). Event-related evoked potentials (ERPs) in speech perception, in D. B. Pisoni and R. E. Remez (eds.), *The Handbook of Speech Perception*. Malden, MA: Blackwell, 99–120.
- MONAHAN, PHILIP J., HWANG, SO-ONE, and IDSARDI, WILLIAM J. (2009) (under revision). Predicting speech: Neural correlates of voicing mismatch using MEG. *Brain Research*.
- and IDSARDI, WILLIAM J. (2010). Auditory sensitivity to formant ratios: Toward an account of vowel normalization. *Language and Cognitive Processes* 25: 808–39.
- DE SOUZA, KEVIN, and IDSARDI, WILLIAM J. (2008). Neuromagnetic evidence for the auditory restoration of fundamental pitch. *PLoS One* 3: e2900.
- MOON, CHRISTINE, COOPER, ROBIN P., and FIFER, WILLIAM P. (1993). Two-day-olds prefer their native language. *Infant Behavior and Development* 16(4): 495–500.
- MOORE, CORINNE A. (1992). The correspondence of vocal-tract resonance with volumes obtained from magnetic-resonance images. *Journal of Speech and Hearing Research* 35: 1009–23.
- and JONGMAN, ALLARD (1997). Speaker normalization in the perception of Mandarin Chinese tones. *Journal of the Acoustical Society of America* 102: 1864–77.
- MOORE, ROGER K. (2007). Spoken language processing: Piecing together the puzzle. *Speech Communication* 49: 418–35.
- and MAIER, VIKTORIA (2006). Preserving fine phonetic detail using episodic memory: Automatic speech recognition with MINERVA2. *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken.
- MOOSHAMMER, CHRISTINE and GENG, CHRISTIAN (2008). Acoustic and articulatory manifestations of vowel reduction in German. *Journal of the International Phonetic Association* 38: 117–36.
- HOOLE, PHILIP, and KÜHNERT, BARBARA (1995). On loops. *Journal of Phonetics* 23: 3–21.
- MORAN, MICHAEL J. (1993). Final consonant deletion in African American children speaking black English. *Language, Speech, and Hearing Services in Schools* 24: 161–6.
- MORÉN, BRUCE and ZSIGA, ELIZABETH (2006). The lexical and post-lexical phonology of Thai tones. *Natural Language and Linguistic Theory* 24: 113–78.
- MORETON, ELLIOTT (2002). Structural constraints in the perception of English stop-sonorant clusters. *Cognition* 84: 55–71.
- (2008). Analytic bias and phonological typology. *Phonology* 25: 83–127.
- FENG, GARY, and SMITH, JENNIFER L. (2008). Syllabification, sonority, and perception: New evidence from a language game, in R. L. Edwards, P. J. Midtlyng, C. L. Sprague, and K. G. Stensrud (eds.), *Proceedings of the Chicago Linguistic Society (CLS 41)*, vol. 1 (main session), 341–55.
- and THOMAS, ERIK R. (2007). Origins of Canadian raising in voiceless-coda effects: A case study in phonologization, in J. Cole and J. I. Hualde (eds.), *Papers in Laboratory Phonology* 9. Berlin: Mouton de Gruyter, 37–64.
- MORGAN, JANE L. and WHEELDON, LINDA R. (2003). Syllable monitoring in internally and externally generated English words. *Journal of Psycholinguistic Research* 32: 269–96.

- MORRIS, RICHARD E. (1998). Stylistic variation in Spanish phonology. Ph.D. dissertation, Ohio State University.
- MORRISON, GEOFF S. (2006). L1 & L2 production and perception of English and Spanish vowels: A statistical modelling approach. Doctoral dissertation, University of Alberta, Edmonton, Alberta, Canada.
- MORSE, PHILLIP A. and SNOWDON, CHARLES T. (1975). An investigation of categorical speech discrimination by rhesus monkeys. *Perception and Psychophysics* 17: 9–16.
- MOSKOWITZ, BREYNE A. (1973). On the status of vowel shift in English, in T. E. Moore (ed.), *Cognitive Development and the Acquisition of Language*. New York: Academic Press, 223–60.
- MOULINES, ERIC and CHARPENTIER, FRANCIS (1990). Pitch-synchronous waveform processing techniques for text-to-speech synthesis using diphones. *Speech Communication* 9: 453–67.
- MOWREY, RICHARD A. and MACKEY, IAN R. A. (1990). Phonological primitives: Electromyographic speech error evidence. *Journal of the Acoustical Society of America* 88: 1299–312.
- and PAGLIUCA, WILLIAM (1995). The reductive character of articulatory evolution. *Rivista di Linguistica* 7: 37–124.
- MRAYATI, MOHAMAD, CARRÉ, RENÉ, and GUÉRIN, B. (1988). Distinctive region and modes: A new theory of speech production. *Speech Communication* 7: 257–86.
- MÜCKE, D., GRICE, MARTINE, BECKER, JOHANNES, and HERMES, ANNE (2009). Sources of variation in tonal alignment: Evidence from acoustic and kinematic data. *Journal of Phonetics* 37(3): 321–38.
- — — — — BAUMANN, STEFAN (2006). Articulatory and acoustic correlates of prenuclear and nuclear accents, in R. Hoffmann and H. Mixdorff (eds.), *Proceedings of Speech Prosody 2006*. Dresden: TUDpress Verlag der Wissenschaften GmbH, 297–300.
- and HERMES, ANNE (2007). Phrase boundaries and peak alignment: An acoustic and articulatory study, in *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, 997–1000.
- NAM, HOSUNG, PRIETO, PILAR, and GOLDSTEIN, LOUIS (2009). Coupling of tone and constriction gestures in Catalan and German. Poster presented at PaPI 09 [Phonetics and Phonology in Iberia], Las Palmas de Gran Canaria, June 17–19, 2009.
- MULLENIX, JOHN W., PISONI, DAVID B., and MARTIN, CHRISTOPHER S. (1989). Some effects of talker variability on spoken word recognition. *Journal of the Acoustical Society of America* 85: 365–78.
- MÜLLER, JOHANNES (1851). *Manuel de Physiologie*. (Trans. from German by A.-J.-L. Jourdan.) Paris: Chez J.-B. Baillière.
- MUNAT, JUDITH. (ed.) (2007). *Lexical Creativity, Texts and Contexts*. Amsterdam: John Benjamins.
- MUNHALL, KEVIN, FOWLER, CAROL, HAWKINS, SARAH, and SALTZMAN, ELLIOT (1992). “Compensatory shortening” in monosyllables of spoken English. *Journal of Phonetics* 20: 225–39.
- KAWATO, MITSUO, and VATIKIOTIS-BATESON, ERIC (2000). Coarticulation and physical models of speech production, in M. Broe and J. Pierrehumbert (eds), *Papers in Laboratory Phonology V: Acquisition and the Lexicon*. Cambridge: Cambridge University Press, 9–28.
- and LÖFQVIST, ANDERS (1992). Gestural aggregation in speech: Laryngeal gestures. *Journal of Phonetics* 20: 111–26.

- MUNRO, MURRAY J. and DERWING, T. M. (1995). Processing time, accent, and comprehensibility in the perception of native and foreign-accented speech. *Language and Speech* 38: 289–306.
- MUNSON, BENJAMIN (2001). Phonological pattern frequency and speech production in children and adults. *Journal of Speech, Language, and Hearing Research* 44: 778–92.
- (2004). Variability in /s/ production in children and adults: Evidence from dynamic measures of spectral mean. *Journal of Speech, Language, and Hearing Research* 47: 58–69.
- (2009). Gender biases in fricative perception, revisited. Oral presentation given at the 2009 meeting of the Linguistic Society of America, San Francisco, CA. <http://www.tc.umn.edu/~munso005/LSA2009_Munson.pdf>, accessed on June 13, 2009.
- (2010). Levels of phonological abstraction and knowledge of socially motivated speech-sound variation: A review, a proposal, and a commentary on the papers by Clopper, Pierrehumbert, and Tamati, Drager, Foulkes, Mack, and Smith, Hall, and Munson. *Laboratory Phonology* 1: 157–78.
- BAYLIS, ADRIANE L., KRAUSE, MIRIAM O., and YIM, DONGSUN (2010). Representation and access in phonological impairment, in C. Fougeron, M. D’Imperio, N. Vallee, and B. Kühnert (eds.), *Laboratory Phonology 10*. New York: Mouton de Gruyter, 381–404.
- EDWARDS, JAN, and BECKMAN, MARY 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.
- — SCHELLINGER, SARAH K., BECKMAN, MARY E., and MEYER, MARIE K. (2009). Deconstructing phonetic transcription: Covert contrast, perceptual bias, and an extraterrestrial view of Vox Humana. Accepted, pending revisions, in *Clinical Linguistics and Phonetics*.
- KAISER, EDEN, and URBERG CARLSON, KARI (2008). Assessment of children’s speech production 3: Fidelity of responses under different levels of task delay. Poster presented at the 2008 ASHA Convention, Chicago, 20–2. <http://www.tc.umn.edu/~munso005/MunsonKaiserUrberg-Carlson_Final.pdf>, accessed June 4, 2009.
- KURTZ, BETH A., and WINDSOR, JAN (2005). The influence of vocabulary size, phonotactic probability, and wordlikeness on nonword repetitions of children with and without specific language impairment. *Journal of Speech, Language, and Hearing Research* 48: 1033–47.
- LI, FANGFANG, YONEYAMA, KIYOKO, HALL, KATHLEEN C., BECKMAN, MARY E., EDWARDS, JAN, and SUNAWATARI, YUKI (2008). Sibilant fricatives in English and Japanese: Different in production or in perception? Oral presentation given at the annual meeting of the Linguistic Society of America, Chicago, IL.
- MUTHUSAMY, YESHWANT K., COLE, RONALD A., and OSHIKA, BEATRICE T. (1992). The OGI multi-language telephone speech corpus. *Proceedings of the International Conference on Spoken Language Processing*, Banff, Alberta, Canada, October 1992, 895–8.
- MYERS, EMILY B. and BLUMSTEIN, SHEILA E. (2008). The neural bases of the lexical effect: An fMRI investigation. *Cerebral Cortex* 18: 278–88.
- MYERS, JAMES and GUY, GREGORY (1997). Frequency effects in Variable Lexical Phonology. *University of Pennsylvania Working Papers in Linguistics* 4(1): 215–27.
- MYERS, SCOTT (1987). Vowel shortening in English. *Natural Language and Linguistic Theory* 5: 485–518.
- (1996). Boundary tones and the phonetic implementation of tone in Chichewa. *Studies in African Linguistics* 25: 29–60.

- MYERS, SCOTT (2000). Boundary disputes: The distinction between phonetics and phonological sound patterns, in N. Burton-Roberts, P. Carr, and G. Docherty (eds.), *Phonological Knowledge: Conceptual and Empirical Issues*. Oxford: Oxford University Press, 245–72.
- and HANSEN, BENJAMIN (2006). The origin of vowel-length neutralization in vocoid sequences. *Phonology* 22: 317–44.
- (2007). The origin of vowel length neutralization in final position: Evidence from Finnish speakers. *Natural Language and Linguistic Theory* 25: 157–93.
- NÄÄTÄNEN, RISTO, GAILLARD, ANTHONY W. K., MÄNTYSALO, SIRKKA (1978). Early selective attention effects on voluntary and involuntary attention. *Acta Psychologica* 42: 313–29.
- LEHTOKOSKI, ANNE, LENNES, MIETTA, CHEOUR, MARIE, HUOTILAINEN, MINNA, IIVONEN, ANTTI, VAINIO, MARTTI, ALKU, PAAVO, ILMONIEMI, RISTO J., LUUK, AAVO, ALLIK, JÜRI, SINKKONEN, JANNE, and ALHO, KIMMO (1997). Language-specific phoneme representations revealed by electric and magnetic brain responses. *Nature* 385: 432–4.
- PAAVILAINEN, PETRI, RINNE, TEEMU, and KIMMO ALHO, K. (2007). The mismatch negativity (MMN) in basic research of central auditory processing: A review. *Clinical Neurophysiology* 118: 2544–90.
- NAGY, NAOMI and REYNOLDS, WILLIAM (1997). Optimality Theory and variable word-final deletion in Faetar, *Language Variation and Change* 9: 37–55.
- NAKAI, SATSUKI, KUNNARI, SARI, TURK, ALICE, SUOMI, KARI, and YLITALO, RIIKKA (2009). Utterance-final lengthening and quantity in Northern Finnish. *Journal of Phonetics* 37: 29–45.
- NAKAMURA, MASANOBU, IWANO, KOJI, and FURUI, SADAOKI (2007). Differences between acoustic characteristics of spontaneous and read speech and their effects on speech recognition performance. *Computer Speech and Language* 22: 171–84.
- NAKATANI, CHRISTINE H., HIRSCHBERG, JULIA, and GROSZ, BARBARA J. (1995). Discourse structure in spoken language: Studies on speech corpora. *Proceedings of the AAAI Spring Symposium on Empirical Methods in Discourse Interpretation and Generation*.
- NAKATANI, L. H. and DUKES, K. D. (1977). Locus of segmental cues for word juncture. *Journal of the Acoustical Society of America* 62(3): 714–19.
- NAM, HOSUNG. (2007). Syllable-level intergestural timing model: Split-gesture dynamics focusing on positional asymmetry and moraic structure, in J. Cole and J. I. Hualde (eds.), *Laboratory Phonology 9*. Berlin: Mouton de Gruyter, 483–506.
- GOLDSTEIN, LOUIS, and SALTZMAN, ELLIOT (2009). Self-organization of syllable structure: A coupled oscillator model, in F. Pellegrino, E. Marisco, and I. Chitoran (eds.), *Approaches to Phonological Complexity*. Berlin and New York: Mouton de Gruyter, 299–328.
- NARAYANAN, SHIRIKANTH, NAYAK, KRISHNA, LEE, SUNGBOK, SETHY, ABHINAV, and BYRD, DANI (2004). An approach to real-time magnetic resonance imaging for speech production. *Journal of the Acoustical Society of America* 115: 1771–6.
- NATALE, MICHAEL (1975). Convergence of mean vocal intensity in dyadic communication as a function of social desirability. *Journal of Personality and Social Psychology* 32: 790–804.
- NAZZI, THIERRY, BERTONCINI, JOSIANE, and MEHLER, JACQUES (1998). Language discrimination by newborns: Towards an understanding of the role of rhythm. *Journal of Experimental Psychology: Human Perception and Performance* 24: 756–66.
- IAKIMOVA, GALINA, BERTONCINI, JOSIANE, FREDONIE, SEVERINE, and ALCANTARA, CARMELA (2006). Early segmentation of fluent speech by infants acquiring French:

- Emerging evidence for crosslinguistic differences. *Journal of Memory and Language* 54: 283–99.
- JUSCZYK, PETER W., and JOHNSON, ELIZABETH K. (2000). Language discrimination by English-learning 5-month-olds: Effect of rhythm and familiarity. *Journal of Memory and Language* 43: 1–19.
- NEAREY, TERRANCE M. (1981). The psychological reality of phonological representations: Experimental evidence, in T. Myers, J. Laver, and J. Anderson (eds.), *The Cognitive Representation of Speech, Advances in Psychology*, vol. 7. Amsterdam: North-Holland, 359–69.
- and HOGAN, JOHN. T. (1986). Phonological contrast in experimental phonetics: Relating distributions of measurements in production data to perceptual categorization curves, in J. Ohala and J. J. Jaeger (eds.), *Experimental Phonology*. New York: Academic Press, 141–61.
- NEEDHAM, AMY and BAILLARGEON, RENE (1998). Effects of prior experience in 4.5-month-old infants' object segregation. *Infant Behavior and Development* 21: 1–24.
- NESPOR, MARINA and VOGEL, IRENE (1986). *Prosodic Phonology*. Dordrecht: Foris.
- (1989). On clashes and lapses. *Phonology* 6: 69–116.
- NETTLE, DANIEL (1999). Using social impact theory to simulate language change. *Lingua* 108: 95–117.
- NEU, HELENE (1980). Ranking of constraints on /t,d/ deletion in American English: A statistical analysis, in W. Labov (ed.), *Locating Language in Time and Space*. New York: Academic Press, 37–54.
- NEWMAN, ROCHELLE S. (2003). Using links between speech perception and speech production to evaluate different acoustic metrics: A preliminary report. *Journal of the Acoustical Society of America* 113(5): 2850–60.
- (2005). The cocktail party effect in infants revisited: Listening to one's name in noise. *Developmental Psychology* 41(2), 352–62.
- RATNER, NAN B., JUSCZYK, ANN M., JUSCZYK, PETER W., and DOW, KATHY A. (2006). Infants' early ability to segment the conversational speech signal predicts later language development: A retrospective analysis. *Developmental Psychology* 42(4), 643–55.
- SAWUSCH, JAMES, and LUCE, PAUL (1997). Lexical neighborhood effects in phonetic processing. *Journal of Experimental Psychology: Human Perception and Performance* 23(3): 873–89.
- NGUYEN, HANH THI and MACKEN, MARLYS (2008). Factors affecting the production of Vietnamese tone: A study of American learners. *Studies in Second Language Acquisition* 30: 49–77.
- NGUYEN, NOËL, WAUQUIER, SOPHIE, and TULLER, BETTY (2009). The dynamical approach to speech perception: From fine phonetic detail to abstract phonological categories, in F. Pellegrino, E. Marsico, I. Chitoran, and C. Coupé (eds.), *Approaches to Phonological Complexity*. Berlin: Mouton de Gruyter.
- NÍ CHASAIDE, AILBHE and GOBL, CHRISTER (1993). Contextual variation of the vowel voice source as a function of adjacent consonants. *Language and Speech* 36: 303–30.
- NIEBUHR, OLIVER (2003). Perceptual study of timing variables in F0 peaks. *Proceedings of the 15th International Congress of Phonetic Sciences*, Barcelona, Spain, 1225–8.
- (2008). Identification of highly reduced words by differential segmental lengthening. Presentation at the First Nijmegen Speech Reduction Workshop, MPI, Nijmegen, The Netherlands.

800 REFERENCES

- NIEDZIELSKI, NANCY A. (1999). The effect of social information on the perception of sociolinguistic variables. *Journal of Language and Social Psychology* 18: 62–85.
- NIELSEN, KUNIKO Y. (2007). Implicit phonetic imitation is constrained by phonemic contrast. *Proceedings of the 16th International Congress of Phonetic Sciences*. Saarbrücken, Germany, 1961–4.
- VAN NIEROP, D. J. P. J., POLS, L. C. W., and PLOMP, R. (1973). Frequency analysis of Dutch vowels from 25 female speakers. *Acustica* 29: 110–18.
- NISSENBAUM, JOHN, HILLMAN, ROBERT E., KOBLE, JAMES B., CURTIN, HUGH D., HALLE, MORRIS, and KIRSCH, JOHN E. (2002). High speed MRI of laryngeal gestures during speech production. Presentation at the Acoustical Society of America, Pittsburgh, PA, June.
- NITISAROJ, RATTIMA (2006). Effects of stress and speaking rate on Thai tones. Ph.D. dissertation, Georgetown University.
- NITTROUER, SUSAN (1992). Age-related differences in perceptual effects of formant transitions within syllables and across syllable boundaries. *Journal of Phonetics* 20: 351–82.
- (1995). Children learn separate aspects of speech production at different rates: Evidence from spectral moments. *Journal of the Acoustical Society of America* 97: 520–30.
- (1996). The discriminability and perceptual weighting of some acoustic cues to speech perception by three-year-olds. *Journal of Speech and Hearing Research* 39: 278–97.
- (2004). The role of temporal and dynamic signal components in the perception of syllable-final stop voicing by children and adults. *Journal of the Acoustical Society of America* 115: 1777–90.
- ESTEE, SANDY, LOWENSTEIN, JOANNA H., and SMITH, JENNIFER (2005). The emergence of mature gestural patterns in the production of voiceless and voiced word-final stops. *Journal of the Acoustical Society of America* 117: 351–64.
- and MILLER, MARNIE E. (1997). Predicting developmental shifts in perceptual weighting schemes. *Journal of the Acoustical Society of America* 101: 2253–66.
- and STUDDERT-KENNEDY, MICHAEL (1987). The role of coarticulatory effects on the perception of fricatives by children and adults. *Journal of Speech and Hearing Research* 30: 319–29.
- and MCGOWAN, RICHARD S. (1989). The emergence of phonetic segments: Evidence from the spectral structure of fricative-vowel syllables spoken by children and adults. *Journal of Speech and Hearing Research* 32: 120–32.
- NOLAN, FRANCIS (1992). The descriptive role of segments: Evidence from assimilation, in G. J. Docherty and D. R. Ladd (eds.), *Papers in Laboratory Phonology II: Gesture, Segment, Prosody*. Cambridge: Cambridge University Press, 261–80.
- HOLST, T., and KÜHNERT, BARBARA (1996). Modelling [s] to [ʃ] assimilation in English. *Journal of Phonetics* 24, 113–37.
- NOLTE, JOHN (2009). *The Human Brain: An Introduction to its Functional Anatomy*, 6th edn. Philadelphia, PA: Mosby.
- NOOTEBOOM, SIEB G. (1969). The tongue slips into pattern, in A. G. Sciarone, A. J. von Essen, and A. A. van Raad (eds.), *Nomen: Leyden Studies in Linguistics and Phonetics*. The Hague: Mouton, 114–32.
- (1972). Production and perception of vowel duration: A study of durational properties in Dutch. Ph.D. dissertation, University of Utrecht.
- and QUENÉ, HUGO (2008). Self-monitoring versus feedback: A new attempt to find the main cause of lexical bias in phonological speech errors. *Journal of Memory and Language* 58: 837–61.

- NORRIS, DENNIS and MCQUEEN, JAMES M. (2008). Shortlist B: A Bayesian model of continuous speech recognition. *Psychological Review* 115: 357–95.
- and CUTLER, ANNE (2000). Merging information in speech recognition: Feedback is never necessary. *Behavioral and Brain Sciences* 23: 299–370.
- (2003). Perceptual learning in speech. *Cognitive Psychology* 47: 204–38.
- NOSOFSKY, ROBERT M. (1986). Attention, similarity, and the identification-categorization relationship. *Journal of Experimental Psychology: General* 115: 39–57.
- (1988). Exemplar-based accounts of relations between classification, recognition, and typicality. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 14: 700–8.
- NOWAK, MARTIN (2000). The basic reproductive ratio of a word, the maximum size of a lexicon. *Journal of Theoretical Biology* 204(2): 179–89.
- NUSBAUM, HOWARD, PISONI, DAVID, and DAVIS, C. K. (1984). Sizing up the Hoosier Mental Lexicon: Measuring the familiarity of 20,000 words. *Research on Speech Perception Progress*, Report No. 10, 357–76.
- NYGAARD, LYNNE C. (2005). Perceptual integration of linguistic and nonlinguistic properties of speech, in D. B. Pisoni and R. E. Remez (eds.), *The Handbook of Speech Perception*. Oxford: Blackwell, 390–414.
- O’CONNOR, J. D. and ARNOLD, GORDON F. (1961/1973). *Intonation of Colloquial English*. London: Longman.
- OAKES, LISA M., COPPAGE, DEBORAH J., and DINGEL, ANGELA (1997). By land or by sea: The role of perceptual similarity in infants’ categorization of animals. *Developmental Psychology* 33(3): 396–407.
- OBLESER, JONAS, LAHIRI, ADITI, and EULITZ, CARSTEN (2003). Auditory-evoked magnetic field codes place of articulation in timing and topography around 100 milliseconds post syllable onset. *Neuroimage* 20: 1839–47.
- (2004). Magnetic brain response mirrors extraction of phonological features from spoken vowels. *Journal of Cognitive Neuroscience* 16: 31–9.
- OCHS, ELINOR (1986). From feelings to grammar: A Samoan case study, in B. Schieffelin and E. Ochs (eds.), *Language Socialization across Cultures*. Cambridge: Cambridge University Press, 251–71.
- ODDEN, DAVID (1992). Simplicity of underlying representation as motivation for underspecification. *Ohio State University Working Papers in Linguistics* 41: 83–100.
- (1995). Tone: African languages, in J. Goldsmith (ed.), *The Handbook of Phonology*. Oxford: Blackwell, 444–75.
- (2002). The verbal tone system of Zina Kotoko, in B. K. Schmidt, D. Odden, and A. Holmberg (eds.), *Aspects of Zina Kotoko Grammar*. München: Lincom Europa.
- (2005). *Introducing Phonology*. Cambridge: Cambridge University Press.
- OGDEN, RICHARD (2006). Phonetics and social action in agreements and disagreements. *Journal of Pragmatics* 38: 1752–75.
- HAWKINS, SARAH, HOUSE, JILL, HUCKVALE, MARK, LOCAL, JOHN K., CARTER, PAUL, DANKOVICOVÁ, JANA, and HEID, SEBASTIAN (2000). ProSynth: An integrated prosodic approach to device-independent, natural-sounding speech synthesis. *Computer Speech and Language* 14: 177–210.
- and LOCAL, JOHN K. (1994). Disentangling autosegments from prosodies: A note on the misrepresentation of a research tradition in phonology. *Journal of Linguistics* 30: 477–98.
- and ROUTARINNE, SARA (2005). The communicative functions of final rises in Finnish intonation. *Phonetica* 62: 160–75.

- OGLESBEE, ERIC and DE JONG, KENNETH J. (2007). Searching for best exemplars in multidimensional stimulus spaces. *Journal of the Acoustical Society of America* 122: EL101–EL106.
- OHALA, JOHN J. (1974). Experimental historical phonology, in J. Anderson and C. Jones (eds.), *Historical Linguistics II: Theory and description in Phonology (Proceedings of the First International Conference on Historical Linguistics, Edinburgh 2nd-7th September 1973)*, North-Holland Linguistics Series, vol 12b. Amsterdam: North-Holland, 353–87.
- (1977). The physiology of stress, in L. M. Hyman (ed.), *Studies in Stress and Accent*, Southern California Occasional Papers in Linguistics. Los Angeles: University of Southern California, 145–68.
- (1978). Production of tone, in Victoria Fromkin (ed.), *Tone: A Linguistic Survey*. New York: Academic Press, 5–39.
- (1981a). The listener as a source of sound change, in C. S. Masek, R. A. Hendrick, and M. F. Miller (eds.), *Papers from the Parasession on Language and Behavior*. Chicago: Chicago Linguistic Society 178–203.
- (1981b). Speech timing as a tool in phonology. *Phonetica* 38: 204–12.
- (1983). The origin of sound patterns in vocal tract constraints, in P. F. MacNeilage (ed.), *The Production of Speech*. New York: Springer, 189–216.
- (1986). Consumer's guide to evidence in phonology, *Phonology Yearbook* 3: 3–26.
- (1990a). Respiratory activity in speech, in W. J. Hardcastle and A. Marchal (eds.), *Speech Production and Speech Modeling*. Dordrecht: Kluwer Academic Press, 23–53.
- (1990b). The phonetics and phonology of aspects of assimilation, in J. Kingston and M. E. Beckman (eds.), *Papers in Laboratory Phonology I: Between the Grammar and Physics of Speech*. Cambridge: Cambridge University Press, 258–75.
- (1990c). There is no interface between phonetics and phonology. A personal view. *Journal of Phonetics* 18: 153–71.
- (1992a). What's cognitive, what's not, in sound change, in G. Kellermann and M. D. Morrissey (eds.), *Diachrony within Synchrony: Language History and Cognition*, Duisburger Arbeiten zur Sprach und Kulturwissenschaft 14. Frankfurt am Main: Peter Lang Verlag, 309–55.
- (1992b). Alternatives to the sonority hierarchy for explaining segmental sequential constraints. *Proceedings of the Chicago Linguistic Society (CLS 26)*, vol. 2: *Parasession on the Syllable in Phonetics and Phonology*, 319–38.
- (1993a). Coarticulation and phonology. *Language and Speech* 36: 155–70.
- (1993b). The phonetics of sound change, in C. Jones (ed.), *Historical Linguistics: Problems and Perspectives*. London: Longman, 237–78.
- (1995). The perceptual basis of some sound patterns, in B. Connell and A. Arvaniti (eds.), *Phonology and Phonetic Evidence: Papers in Laboratory Phonology IV*. Cambridge: Cambridge University Press, 87–92.
- (1996). Speech perception is hearing sounds, not tongues. *Journal of the Acoustical Society of America* 99(3): 1718–25.
- (1997). The relation between phonetics and phonology, in W. J. Hardcastle and J. Laver, *Handbook of Phonetic Sciences*. Oxford: Blackwell, 674–94.
- (2008). The emergent syllable, in B. L. Davis and K. Zajdó (eds.), *The Syllable in Speech Production*. New York: Lawrence Erlbaum, 179–86.
- and AMADOR, M. (1981). Spontaneous nasalization. *Journal of the Acoustical Society of America* 69: S54–S55 (abstract).

- and BUSÀ, MARIA GRAZIA (1995). Nasal loss before voiceless fricatives: A perceptually-based sound change. *Rivista di Linguistica* 7: 125–44.
- and EUKEL, BRIAN W. (1987). Explaining the intrinsic pitch of vowels, in R. Channon and L. Shockey (eds.), *In Honor of Ilse Lehiste*. Dordrecht: Foris, 207–15.
- and EWAN, WILLIAM. G. (1972). Speed of pitch change. *Journal of the Acoustical Society of America* 53: 345.
- and JAEGER, JERI J. (eds.) (1986). *Experimental Phonology*. Orlando, FL: Academic Press.
- and KAWASAKI, HARUKO (1984). Prosodic phonology and phonetics. *Phonology Yearbook* 1: 113–27.
- and OHALA, MANJARI (1995). Speech perception and lexical representation: The role of vowel nasalization in Hindi and English, in B. Connell and A. Arvaniti (eds.), *Phonology and Phonetic Evidence: Papers in Laboratory Phonology IV*. Cambridge: Cambridge University Press, 41–60.
- ÖHMAN, SVEN (1966). Coarticulation in VCV utterances: Spectrographic measurements. *Journal of the Acoustical Society of America* 39: 151–68.
- (1967). A numerical model of coarticulation. *Journal of the Acoustical Society of America* 41(2): 310–20.
- OKOBI, ANTHONY O. (2006). Acoustic correlates of word stress in American English. Ph.D. thesis, Massachusetts Institute of Technology, Cambridge, MA. <<http://hdl.handle.net/1721.1/36350>>.
- OLLER, D. KIMBROUGH (1973). The effect of position in utterance on speech segment duration in English. *Journal of the Acoustical Society of America* 54: 1235–47.
- (1980). The emergence of the sounds of speech in infancy, in G. Yeni-Komshian, J. Kavanagh, and C. Ferguson (eds.), *Child Phonology I: Production*. New York: Academic Press.
- ONISHI, KRISTINE H., CHAMBERS, KYLE E., and FISHER, CYNTHIA (2002). Learning phonotactic constraints from brief auditory experience. *Cognition* 83: B13–B23.
- VAN OOSTENDORP, MARC (1997). Style registers in conflict resolution, in F. Hinskens, R. van Hout, and L. Wetzels (eds.), *Variation, Change and Phonological Theory*. Amsterdam and Philadelphia: John Benjamins, 207–29.
- OPPENHEIM, GARY M. and DELL, GARY S. (2008). Inner speech slips exhibit lexical bias, but not the phonemic similarity effect. *Cognition* 106: 528–37.
- OSTENDORF, MARI, PRICE, PATTI, and SHATTUCK-HUFNAGEL, STEFANIE (1995). The Boston University radio news corpus. Boston University Technical Report ECS-95-001.
- — — (1996). Boston University Radio Speech Corpus, Linguistic Data Consortium, Philadelphia.
- OTA, MITSUHIKO (1999). Phonological theory and the acquisition of prosodic structure: Evidence from child Japanese. Unpublished doctoral dissertation, Georgetown University, Washington DC.
- (2006). Input frequency and word truncation in child Japanese: Structural and lexical effects. *Language and Speech* 49: 261–95.
- HARTSUIKER, ROBERT J., and HAYWOOD, SARAH L. (2009). The KEY to the ROCK: Near-homophony in nonnative visual word recognition. *Cognition* 111: 263–9.
- OUDEYER, PIERRE-YVES (2005a). The self-organization of speech sounds. *Journal of Theoretical Biology* 233: 435–49.

- OUDEYER, PIERRE-YVES (2005b). How phonological structures can be culturally selected for learnability. *Adaptive Behavior* 13: 269–80.
- (2006). *Self-Organization in the Evolution of Speech*. Oxford: Oxford University Press.
- PADGETT, JAY (1995). *Stricture in Feature Geometry*. Stanford: CLSI.
- (2003). The emergence of contrastive palatalization in Russian, in Eric Holt (ed.), *Optimality Theory and Language Change*. Dordrecht: Kluwer Academic Press, 307–35.
- and TABAIN, M. (2005). Adaptive dispersion theory and phonological vowel reduction in Russian. *Phonetica* 62: 14–54.
- PAGEL, MARK, ATKINSON, QUENTIN D., and MEADE, ANDREW (2007). Frequency of word-use predicts rates of lexical evolution throughout Indo-European history. *Nature* 449: 717–21.
- PALLIER, CHRISTOPHE, BOSCH, LAURA, and SEBASTIÁN-GALLÉS, NÚRIA (1997). A limit on behavioral plasticity in speech perception. *Cognition* 64: B9–B17.
- COLOMÉ, ANGELS, and SEBASTIÁN-GALLÉS, NÚRIA (2001). The influence of native-language phonology on lexical access: Exemplar-based versus abstract lexical entries. *Psychological Science* 12: 445–9.
- PALMERI, THOMAS J., GOLDINGER, STEPHEN D., and PISONI, DAVID B. (1993). Episodic encoding of voice attributes and recognition memory for spoken words. *Journal of Experimental Psychology: Learning, Memory and Cognition* 19: 309–28.
- PAN, HO-HSIEN (1994). *The acquisition of Taiwanese (Amoy) initial stops*. Ph.D. dissertation, Ohio State University.
- (2007a). Focus and Taiwanese unchecked tones, in C. Lee, M. Gordon, and D. Büring (eds.), *Topic and Focus: Cross-linguistic Perspectives on Meaning and Intonation*. Dordrecht: Springer, 195–213.
- (2007b). Initial strengthening of lexical tones in Taiwanese, in T. Riad and C. Gussenhoven (eds.), *Tones and Tunes*, vol. 2. Berlin: Mouton de Gruyter, 271–91.
- PANAGOS, JOHN M., QUINE, MARY E., and KLICH, RICHARD J. (1979). Syntactic and phonological influences on children's production. *Journal of Speech and Hearing Research* 22: 841–8.
- PANTEV, CHRISTO, HOKE, M., LÜTKENHÖNER, BERND, and LEHNERTZ, KLAUS (1989). Tonotopic organization of the auditory cortex: Pitch versus frequency representation. *Science* 246: 486–8.
- PAOLILLO, JOHN C. (2000). A probabilistic model for Optimality Theory. *Indiana Working Papers in Linguistics* 2.1.
- (2002). *Analyzing Linguistic Variation: Statistical Models and Methods*. Stanford: CLSI.
- PARDO, JENNIFER S. (2006). On phonetic convergence during conversational interaction. *Journal of the Acoustical Society of America* 119: 2382–93.
- and FOWLER, CAROL A. (1997). Perceiving the causes of coarticulatory acoustic variation: Consonant voicing and vowel pitch. *Perception and Psychophysics* 59(7): 1141–52.
- and REMEZ, ROBERT E. (2006). The perception of speech, in M. J. Traxler, A. Gernsbacher, and M. Ann (eds.), *The Handbook of Psycholinguistics*, 2nd edn. Cambridge, MA: Elsevier, 201–48.
- PARK, HAEIL and IVERSON, GREGORY (2009). Neural correlates of phonological representation and markedness. MS, University of Wisconsin, Milwaukee and University of Maryland Center for the Advanced Study of Language.

- PARK, HANYONG and DE JONG, KENNETH J. (2008). Perceptual category mapping between English and Korean prevocalic obstruents: Evidence from mapping effects on second language identification skills. *Journal of Phonetics* 36: 704–23.
- PARUSH, AVRAHAM and OSTRY, DAVID (1993). Lower pharyngeal wall coarticulation in VCV syllables. *Journal of the Acoustical Society of America* 94(2): 715–22.
- PASCUAL-LEONE, ALVARO, DAVEY, NICK, ROTHWELL, JOHN, WASSERMANN, ERIC M., and PURI, BESANT K. (2002). *Handbook of Transcranial Magnetic Stimulation*. London: Hodder Arnold.
- PATEL, ANIRUDDH D. and BALABAN, EVAN (2001). Human pitch perception is reflected in the timing of stimulus-related cortical activity. *Nature Neuroscience* 4: 839–44.
- (2004). Human auditory cortical dynamics during perception of long acoustic sequences: Phase tracking of carrier frequency by the auditory steady-state response. *Cerebral Cortex* 14: 35–46.
- PATER, JOE (2000). Nonuniformity in English stress: The role of ranked and lexically specific constraints. *Phonology* 17: 237–74.
- (2003). The perceptual acquisition of Thai phonology by English speakers: Task and stimulus effects. *Second Language Research* 19: 209–23.
- (2004). Bridging the gap between receptive and productive development with minimally violable constraints, in R. Kager, J. Pater, and W. Zonneveld (eds.), *Constraints in Phonological Acquisition*. Cambridge University Press, Cambridge, 219–44.
- (2006). The locus of exceptionality: Morpheme-specific phonology as constraint indexation, in L. Bateman and A. Werle (eds.), *UMOP: Papers in Optimality Theory III*. Amherst, MA: GLSA, 1–36.
- (2009a). Morpheme-specific phonology: Constraint indexation and inconsistency resolution, in S. Parker (ed.), *Phonological Argumentation: Essays on Evidence and Motivation*. London: Equinox Publishing, 123–54.
- (2009b). Weighted constraints in generative linguistics. *Cognitive Science* 33: 999–1035.
- STAGER, CHRISTINE L., and WERKER, JANET F. (2004). The lexical acquisition of phonological contrasts. *Language* 80(3): 361–79.
- PATRICK, PETER (2002). The speech community, in J. Chambers, P. Trudgill, and N. Schilling-Estes (eds.), *Handbook of Language Variation and Change*. Oxford: Blackwell, 573–97.
- PATTERSON, MICHELLE L. and WERKER, JANET F. (2002). Infants' ability to match dynamic information in the face and voice. *Journal of Experimental Child Psychology* 81: 93–115.
- PAYNE, ELINOR, POST, BRECHTJE, PRIETO, PILAR, VANRELL, MARIA DEL MAR, and ASTRUC, LLUÏSA (forthcoming). Measuring child rhythm. *Language and Speech*.
- PELL, MARC. D. (2005). Nonverbal emotion priming: evidence from the “facial affect decision task.” *Journal of Nonverbal Behavior* 29(1): 45–73.
- PELTOLA, MAIJA. S., KUNTOLA, MINNA, TAMMINEN, HENNA, HAMALAINEN, HEIKKI, AALTONEN, OLLI (2005). Early exposure to non-native language alters preattentive vowel discrimination. *Neuroscience Letters* 388: 121–5.
- TAMMINEN, HENNA, LEHTOLA, HEIDI, and AALTONEN, OLLI (2007). Balanced bilinguals have one intertwined phonological system, in *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, 1865–8.
- PENG, SHU-HUI (1997). Production and perception of Taiwanese tones in different tonal and prosodic contexts. *Journal of Phonetics* 25: 371–400.

- PEPERKAMP, SHARON (1997). *Prosodic Words*. HIL Dissertations 34. The Hague: Holland Academic Graphics.
- and DUPOUX, EMMANUEL (2007). Learning the mapping from surface to underlying representations in an artificial language, in J. Cole and J. I. Hualde (eds.), *Change in Phonology (LabPhon 9)*. Berlin and New York: Mouton de Gruyter, 315–28.
- SKORUPPA, KATRIN, and DUPOUX, EMMANUEL (2006). The role of phonetic naturalness in phonological rule acquisition, in D. Bammann, T. Magnitskaia, and C. Zaller (ed.), *Proceedings of the 30th Annual Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press, 464–75.
- PERKELL, JOSEPH S. (1986). Coarticulation strategies: Preliminary implications of a detailed analysis of lower lip protrusion movements. *Speech Communication* 5: 47–68.
- and COHEN, MARC H. (1989). An indirect test of the quantal nature of speech in the production of the vowels /i/, /a/ and /u/. *Journal of Phonetics* 17: 123–33.
- MATTHIES, MELANIE L., LANE, HARLAN, GUENTHER, FRANK H., WILHELMS-TRICARICO, REINER, WOZNIAK, JANE, and GUIOD, PETER (1997). Speech motor control: Acoustic goals, saturation effects, auditory feedback and internal models. *Speech Communication* 22: 227–50.
- SVIRSKY, MARIO A., and JORDAN, MICHAEL I. (1993). Trading relations between tongue-body raising and lip rounding in production of the vowel /u/: A pilot “motor equivalence” study. *Journal of the Acoustical Society of America* 93(5): 2948–61.
- PERRACHIONE, TYLER K., LEE, JIYEON, HA, LOUISA Y. Y., and WONG, PATRICK C. M. (2011). Learning a novel phonological contrast depends on interactions between individual differences and training paradigm design. *Journal of the Acoustical Society of America* 130: 461–72.
- PERRET, CYRIL (2007). La syllabe comme unité de traitement en production verbale orale et écrite. Doctoral dissertation, Université Blaise Pascal, Clermont-Ferrand.
- PERRIER PASCAL, OSTRY, DAVID J., and LABOISSIÈRE, RAFAEL (1996). The equilibrium point hypothesis and its application to speech motor control. *Journal of Speech, Language, and Hearing Research* 39: 365–78.
- PAYAN, YOHAN, ZANDIPOUR, MAJID, and PERKELL, JOSEPH (2003). Influences of tongue biomechanics on speech movements during the production of velar stop consonants: A modeling study. *Journal of the Acoustical Society of America* 114(3): 1582–99.
- PETERS, ANN M. and MENN, LISE (1993). False starts and filler syllables: Ways to learn grammatical morphemes. *Language* 69: 742–77.
- PETERSON, GORDON E. and BARNEY, HAROLD L. (1952). Control methods used in the study of vowels. *Journal of the Acoustical Society of America* 24(2): 175–84.
- PETRONE, CATERINA (2008). From targets to tunes: Nuclear and prenuclear contribution in the identification of intonation contours in Italian. Ph.D. dissertation, Laboratoire de Parole et Langage, Université de Provence.
- and LADD, D. ROBERT (2007). Sentence-domain effects on tonal alignment in Italian?, in *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, Germany, August 6–10, 2007, 1253–6.
- PHILLIPS, BETTY S. (1984). Word frequency and the actuation of sound change. *Language* 60: 320–42.
- (1994). Southern English glide deletion revisited. *American Speech* 69: 115–27.

- (2001). Lexical diffusion, lexical frequency, and lexical analysis, in J. L. Bybee and P. Hopper (eds.), *Frequency and the Emergence of Linguistic Structure*. Amsterdam: John Benjamins, 123–36.
- (2006). *Word Frequency and Lexical Diffusion*. Basingstoke: Palgrave Macmillan.
- PHILLIPS, COLIN (2001). Levels of representation in the electrophysiology of speech perception. *Cognitive Science* 25: 711–31.
- MARANTZ, ALEC, MCGINNIS, MARTHA, PESETSKY, DAVID, WEXLER, KENNETH, YELLIN, ELRON, POEPEL, DAVID, ROBERTS, TIMOTHY, and ROWLEY, HOWARD (1995). Brain mechanisms of speech perception: A preliminary report. *MIT Working Papers in Linguistics* 26: 125–63.
- PELLATHY, THOMAS, and MARANTZ, ALEC (2000). Phonological feature representations in auditory cortex. MS, University of Delaware and MIT.
- — — — YELLIN, ELRON, WEXLER, KENNETH, POEPEL, DAVID, MCGINNIS, MARTHA, and ROBERTS, TIMOTHY (2000). Auditory cortex accesses phonological categories: An MEG mismatch study. *Journal of Cognitive Neuroscience* 12: 1038–55.
- PHONETIC ALPHABETS (2009). Retrieved March 13, 2009 from Wikipedia, <http://en.wikipedia.org/wiki/Category:Phonetic_alphabets>.
- PICANÇO, GESSIANE (2005). Mundurukú: Phonetics, phonology, synchrony, diachrony. Ph.D. dissertation, University of British Columbia.
- PIERREHUMBERT, JANET B. (1980). The phonology and phonetics of English intonation. Ph.D. dissertation, Massachusetts Institute of Technology, Cambridge, MA.
- (1981). Synthesizing intonation. *Journal of the Acoustical Society of America* 70: 985–95.
- (1990a). On the value of reductionism and formal explicitness in phonological models: Comments on Ohala's paper, in J. Kingston and M. E. Beckman (eds.), *Papers in Laboratory Phonology I: Between the Grammar and Physics of Speech*. Cambridge: Cambridge University Press, 276–9.
- (1990b). Phonological and phonetic representation. *Journal of Phonetics* 18: 375–94.
- (1993). Dissimilarity in the Arabic verbal roots. *Proceedings of the 23rd Meeting of the Northeastern Linguistic Society, Graduate Student Association*, U. Mass. Amherst. 367–81.
- (1994a). Syllable structure and word structure: A study of triconsonantal clusters in English, in P. A. Keating (ed.), *Phonological Structure and Phonetic Form: Papers in Laboratory Phonology III*. Cambridge: Cambridge University Press, 168–88.
- (1994b). Knowledge of variation, in K. Beals, J. Denton, R. Knippen, L. Melnar, H. Suzuki, and E. Zeinfeld (eds.), *Papers from the 30th Meeting of the Chicago Linguistics Society. Vol. 2. Papers from the Parasession on Variation*, 232–56.
- (2001a). Exemplar dynamics: Word frequency, lenition and contrast, in J. Bybee and P. Hopper (eds.), *Frequency and the Emergence of Linguistic Structure*. Amsterdam: John Benjamins, 137–58.
- (2001b). Stochastic phonology. *Glott International* 5/6: 195–207.
- (2001c). Why phonological constraints are so coarse-grained, in J. McQueen and A. Cutler (eds.), *Language and Cognitive Processes* 16: 691–8.
- (2002). Word-specific phonetics, in C. Gussenhoven and N. Warner (eds.), *Papers in Laboratory Phonology 7*. Berlin: Mouton de Gruyter, 101–40.
- (2003a). Phonetic diversity, statistical learning, and acquisition of phonology. *Language and Speech* 46(2–3): 115–54.

- PIERREHUMBERT, JANET B. (2003b). Probabilistic phonology: Discrimination and robustness, in R. Bod, J. Hay, and S. Jannedy (eds.), *Probability Theory in Linguistics*. Cambridge, MA: MIT Press, 177–228.
- (2006a). The next toolkit. *Journal of Phonetics* 34(6): 516–30.
- (2006b). The statistical basis of an unnatural alternation, in L. M. Goldstein, D. H. Whalen, and C. T. Best (eds.), *Laboratory Phonology 8*. Berlin: Mouton de Gruyter, 81–106.
- and BECKMAN, MARY E. (1988). *Japanese Tone Structure*. Cambridge, MA: MIT Press.
- and LADD, D. ROBERT (2000). Conceptual foundations of phonology as a laboratory science, in N. Burton-Roberts, P. Carr, and G. J. Docherty (eds.), *Phonological Knowledge: Conceptual and Empirical Issues*. Oxford: Oxford University Press, 273–303. [Reprinted, this volume.]
- BENT, TESSA, MUNSON, BENJAMIN, BRADLOW, ANNE, and BAILEY, MICHAEL (2004). The influence of sexual orientation on vowel production. *Journal of the Acoustical Society of America* 116(4): 1905–8.
- and CLOPPER, CYNTHIA (2010). What is LabPhon? And where is it going? in C. Fougeron, B. Kühnert, M. D’Imperio, and N. Vallée (eds.), *Laboratory Phonology 10*. Berlin: Mouton, 113–32.
- and HIRSCHBERG, JULIA (1990). The meaning of intonational contours in the interpretation of discourse, in P. Cohen, J. Morgan, and M. Pollack (eds.), *Intentions in Communication*. Cambridge, MA: MIT Press, 271–311.
- and NAIR, RAMI (1995). Word Games and Syllable Structure. *Language and Speech* 38: 77–114.
- and STEELE, SUSAN A. (1989). Categories of tonal alignment in English. *Phonetica* 46: 181–96.
- and TALKIN, DAVID (1992). Lenition of /h/ and glottal stop, in G. J. Docherty and D. R. Ladd (eds.), *Papers in Laboratory Phonology II: Gesture, Segment, Prosody*. Cambridge: Cambridge University Press, 90–117.
- PIKE, KENNETH L. (1945). *The Intonation of American English*. Ann Arbor: University of Michigan Press.
- (1948). *Tone Languages*. Ann Arbor: University of Michigan Press.
- PINHEIRO, JOSE C. and BATES, DOUGLAS M. (2000). *Mixed-effects Models in S and S-PLUS*. New York: Springer.
- PINKER, STEVEN (1984). *Language Learnability and Language Development*. Cambridge, MA: Harvard University Press.
- (1989). *Learnability and Cognition: The Acquisition of Argument Structure*. Cambridge, MA: MIT Press.
- and PRINCE, ALAN (1988). On language and connectionism: Analysis of a parallel distributed processing model of language acquisition. *Cognition* 28: 73–193.
- PISKE, THORSTEN, MACKAY, IAN R. A., and FLEGE, JAMES E. (2001). Factors affecting degree of foreign accent in an L2: A review. *Journal of Phonetics* 29: 191–215.
- PISONI, DAVID B. (1977). Identification and discrimination of the relative onset time of two component tones: Implications for voicing perception in stops. *Journal of the Acoustical Society of America* 61: 1352–61.
- (1993). Long-term memory in speech perception: Some new findings on talker variability, speaking rate and perceptual learning. *Speech Communication* 13: 109–25.

- ASLIN, RICHARD N., PEREY, A. J., and HENNESSY, B. L. (1982). Some effects of laboratory training on identification and discrimination of voicing contrasts in stop consonants. *Journal of Experimental Psychology: Human Perception and Performance* 8: 297–314.
- and LIVELY, SCOTT E. (1995). Variability and invariance in speech perception: A new look at some old problems in perceptual learning, in W. Strange (ed.), *Speech Perception and Linguistic Experience: Issues in Cross-Language Research*. Baltimore: York Press, 433–59.
- — and LOGAN, JOHN S. (1994). Perceptual learning of nonnative speech contrasts: Implications for theories of speech perception, in J. C. Goodman and H. C. Nusbaum (eds.), *The Development of Speech Perception: The Transition from Speech Sounds to Spoken Words*. Cambridge, MA: MIT Press, 121–66.
- PITRELLI, JOHN F., BECKMAN, MARY E., and HIRSCHBERG, JULIA (1994). Evaluation of prosodic transcription labeling reliability in the ToBI framework, in *Proceedings of the International Conference on Spoken Language Processing*, Yokohama, Japan, 123–6.
- PITT, MARK A. (2009). How are pronunciation variants of spoken words recognized? A test of generalization to newly learned words. *Journal of Memory and Language* 61(1): 19–36.
- DILLEY, LAURA, JOHNSON, KEITH, KIESLING, SCOTT, RAYMOND, WILLIAM, HUME, ELIZABETH, and FOSLER-LUSSIER, ERIC (2007). Buckeye Corpus of Conversational Speech (2nd release), <<http://www.buckeyecorpus.osu.edu>>. Columbus, OH: Department of Psychology, Ohio State University (Distributor).
- JOHNSON, KEITH, HUME, ELIZABETH, KIESLING, SCOTT, and RAYMOND, WILLIAM (2005). The Buckeye Corpus of Conversational Speech: Labeling conventions and a test of transcriber reliability. *Speech Communication* 45: 90–5.
- PLAUT, DAVID C. and KELLO, CHRISTOPHER T. (1999). The emergence of phonology from the interplay of speech comprehension and production: a distributed connectionist approach, in B. MacWhinney (ed.), *The Emergence of Language*. Mahwah, NJ: Erlbaum, 381–415.
- PLUG, LEENDERT (2005). From words to actions: The phonetics of *Eigenlijk* in two communicative contexts. *Phonetica* 62: 131–45.
- PLUYMAEKERS, MARK, ERNESTUS, MIRJAM, and BAAYEN, R. HARALD (2005). Articulatory planning is continuous and sensitive to informational redundancy. *Phonetica* 62: 146–59.
- — — — and BOOIJ, GEERT (2006). The role of morphology in fine phonetic detail: The case of Dutch *-igheid*, in C. Fougeron et al. (eds.), *Laboratory Phonology 10*. Berlin: Mouton, 53–4.
- — — — — (2010). Morphological effects on fine phonetic detail: The case of Dutch *-igheid**, in C. Fougeron, B. Kühnert, M. D’Imperio, and N. Vallée (eds.), *Laboratory Phonology 10*. Berlin: Walter de Gruyter, 511–31.
- PODESVA, ROBERT J. (2006). Phonetic detail in sociolinguistic variation: Its linguistic significance and role in the construction of social meaning. Ph.D. dissertation, Stanford University.
- (2007). Phonation type as a stylistic variable: The use of falsetto in constructing a persona. *Journal of Sociolinguistics* 11: 478–504.
- (2008). Three sources of stylistic meaning. *Texas Linguistic Forum. Proceedings of the Symposium about Language and Society, Austin* 15, 51: 1–10.
- POEPPEL, DAVID (1996). A critical review of PET studies of phonological processing. *Brain and Language* 55: 317–51.

- POEPPEL, DAVID (2008). The cartographic imperative: Confusing localization and explanation in human brain mapping, in H. Bredekamp, M. Bruhn, and G. Werner (eds.), *Bildwelten des Wissens 6.1: Ikonographie des Gehirns*. Berlin: Akademie Verlag Berlin.
- PHILLIPS, COLIN, YELLIN, ELRON, ROWLEY, HOWARD, ROBERTS, TIMOTHY, and MARANTZ, ALEC (1997). Processing of vowels in supratemporal auditory cortex. *Neuroscience Letters* 221: 145–8.
- POLIVANOV, EVGENIJ. D. (1931). La perception des sons d'une langue étrangère. *Travaux du Cercle Linguistique de Prague* 4: 79–96. [English translation: The subjective nature of the perceptions of language sounds, in E. D. Polivanov (1974), *Selected Works: Articles on General Linguistics*. The Hague: Mouton, 223–37.]
- POLKA, LINDA (1991). Cross-language speech perception in adults: Phonemic, phonetic, and acoustic contributions. *Journal of the Acoustical Society of America* 89: 2961–77.
- (1992). Characterizing the influence of native experience on adult speech perception. *Perception and Psychophysics* 52: 37–52.
- (1995). Linguistic influences in adult perception of non-native vowel contrasts. *Journal of the Acoustical Society of America* 97(2): 1286–96.
- COLANTONIO, CONNIE, and SUNDARA, MEGHA (2001). A cross-language comparison of /d/~/D/ discrimination: Evidence for a new developmental pattern. *Journal of the Acoustical Society of America* 109: 2190–201.
- and WERKER, JANET F. (1994). Developmental changes in perception of non-native vowel contrasts. *Journal of Experimental Psychology: Human Perception and Performance* 20: 421–35.
- POPLACK, SHANA (2001). *African American English in the diaspora*. Malden, MA: Blackwell.
- and TAGLIAMONTE, SALI (1991). African American English in the diaspora: Evidence from Old-Line Nova Scotians. *Language Variation and Change* 3: 301–39.
- (1999). The grammaticization of *going to* in (African American) English. *Language Variation and Change* 11: 315–42.
- PORT, ROBERT (2007a). How are words stored in memory? Beyond phones and phonemes. *New Ideas in Psychology* 25: 143–70.
- (2007b). The problem of speech patterns in time, in M. G. Gaskell (ed.), *The Oxford Handbook of Psycholinguistics*. Oxford: Oxford University Press, 503–14.
- PORTAL FOR PSYCHOLOGICAL EXPERIMENTS ON LANGUAGE (2009). <<http://www.surf.to/experiments>>, accessed March 13, 2009.
- POSER, WILLIAM J. (1984). The phonetics and phonology of tone and intonation in Japanese. Ph.D. dissertation, MIT, Cambridge, MA.
- POST, BRECHTJE (1999). Restructured phonological phrases in French: Evidence from clash resolution. *Linguistics* 37: 41–63.
- (2000). *Tonal and Phrasal Structures in French Intonation*. The Hague: Holland Academic Graphics.
- (2011). The multi-faceted relation between phrasing and intonation in French, in C. Lleo and C. Gabriel (eds.), *Hamburger Studies in Multilingualism 10: Intonational Phrasing at the Interfaces: Cross-Linguistic and Bilingual Studies in Romance and Germanic*. Amsterdam: John Benjamins, 44–74.
- D'IMPERIO, MARIAPAOLA, and GUSSENHOVEN, CARLOS (2007). Fine phonetic detail and intonational meaning. *Proceedings of the International Congress of Phonetic Sciences* 16, Saarbrücken, 191–6.

- PAYNE, ELINOR, PRIETO, PILAR, VANRELL, MARIA DEL MAR, and ASTRUC, LLUÏSA (forthcoming). A multisystemic model of rhythm development.
- POTISUK, SIRIPONG, GANDOUR, JACKSON, and HARPER, MARY (1997). Contextual variations in trisyllabic sequences of Thai tones. *Phonetica* 54: 22–42.
- POUPLIER, MARIANNE (2003a). Units of phonological encoding: Empirical evidence. Ph.D. dissertation, Yale University.
- (2003b). The dynamics of error, in M.-J. Solé, D. Recasens, and J. Romero (eds.), *Proceedings of the 15th International Congress of Phonetic Sciences*, Barcelona, 2245–8.
- (2007). Tongue kinematics during utterances elicited with the SLIP technique. *Language and Speech* 50: 311–41.
- (2008). The role of a coda consonant as error trigger in repetition tasks. *Journal of Phonetics* 36: 114–40.
- and GOLDSTEIN, LOUIS (2005). Asymmetries in the perception of speech production errors. *Journal of Phonetics* 33: 47–75.
- and HARDCASTLE, WILLIAM (2005). A re-evaluation of the nature of speech errors in normal and disordered speakers. *Phonetica* 62: 227–43.
- PREBERGEN, BENJAMIN K. (2004). The psychological reality of phonaesthemes. *Language* 80: 290–311.
- PRIETO, PILAR (1998). The scaling of the L tone line in Spanish downstepping contours. *Journal of Phonetics* 26: 261–82.
- (2005). Syntactic and eurhythmic constraints on phrasing decisions in Catalan. *Studia Linguistica* (Special issue on Boundaries in Intonational Phonology, ed. M. Horne and M. van Oostendorp) 59: 194–222.
- D'IMPERIO, MARIAPAOLA, and GILI FIVELA, BARBARA (2005). Pitch accent alignment in Romance: Primary and secondary associations with metrical structure. *Language and Speech* (special issue on Variation in Intonation, ed. P. Warren) 48(4): 359–96.
- MÜCKE, DORIS, BECKER, JOHANNES, and GRICE, MARTINE (2007). Coordination patterns between pitch movements and oral gestures in Catalan, in *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, Germany, August 6–10, 2007, 989–92.
- VAN SANTEN, JAN, and HIRSCHBERG, JULIA (1995). Tonal alignment patterns in Spanish. *Journal of Phonetics* 23: 429–51.
- and TORREIRA, FRANCISCO (2007). The segmental anchoring hypothesis revisited. Syllable structure and speech rate effects on peak timing in Spanish. *Journal of Phonetics* 35(4): 473–500.
- TORRES-TAMARIT, FRANCESC J., and VANRELL, MARIA DEL MAR (2008). The role of tonal scaling in distinguishing intonational categories in Catalan. Paper presented at the Third TIE Conference on Tone and Intonation, Lisbon, September 15–17, 2008.
- PRINCE, ALAN S. (1990). Quantitative consequences of rhythmic organization, in M. Ziolkowski, M. Noske, and K. Deaton (eds.), *Papers from the Chicago Linguistic Society* 26(2): 355–98.
- (2002a). Entailed ranking arguments [ROA-500].
- (2002b). Arguing optimality [ROA-562].
- (2006). Implication and impossibility in grammatical systems: What it is and how to find it [ROA-880].
- (2007). The pursuit of theory, in P. de Lacy (ed.), *The Cambridge Handbook of Phonology*. Cambridge: Cambridge University Press, 33–60.

- PRINCE and SMOLENSKY, PAUL (1993/2004). *Optimality Theory: Constraint Interaction in Generative Grammar*. Technical Report CU-CS-696-93, Department of Computer Science, University of Colorado at Boulder, and Technical Report TR-2, Rutgers Center for Cognitive Science, Rutgers University, New Brunswick, NJ, April 1993. [Published: Oxford: Blackwell, 2004].
- PULGRAM, ERNST (1970). *Syllable, Word, Nexus, Cursus*. Berlin and New York: Mouton.
- PULLEYBLANK, D. (1994). Underlying mora structure. *Linguistic Inquiry* 25(2): 344–53.
- PULLUM, GEOFFREY (1991). *The great Eskimo vocabulary hoax*. Chicago: University of Chicago Press.
- PULVERMÜLLER, FRIEDEMANN (1999). Words in the brain's language. *Behavioral and Brain Sciences* 22: 253–336.
- (2002). *Neuroscience of Language: On Brain Circuits of Words and Serial Order*. Cambridge: Cambridge University Press.
- and SHTYROV, YURY (2006). Language outside the focus of attention: The mismatch negativity as a tool for studying higher cognitive processes. *Progress in Neurobiology* 79: 49–71.
- — ILLMONIEMI, RISTO J., and MARSLÉN-WILSON, WILLIAM (2006). Tracking speech comprehension in space and time. *Neuroimage* 31: 1297–305.
- PUTNAM, HILARY (1973). Meaning and reference. *Journal of Philosophy* 7: 699–711.
- (1978). *Meaning and the Moral Sciences*. London: Routledge, and Kegan Paul.
- PYCHA, ANNE, NOWAK, PAWEŁ, SHIN, EURIE, and SHOSTED, RYAN (2003). Phonological rule-learning and its implications for a theory of vowel harmony, in G. Garding and M. Tsujimura (eds.), *Proceedings of WCCFL* 22. Somerville, MA: Cascadilla Press, 423–35.
- QUENÉ, HUGO (1992). Integration of acoustic-phonetic cues in word segmentation, in M. E. H. Schouten (ed.), *The Auditory Processing of Speech: From Sounds to Words*. Berlin: Mouton de Gruyter, 349–55.
- and VAN DEN BERGH, HUUB (2008). Examples of mixed-effects modelling with crossed random effects and with binomial data. *Journal of Memory and Language* 59(4): 413–25.
- QUINE, W. V. O. (1954/1966). The scope and language of science. Reprinted in *The Ways of Paradox and Other Essays*. New York: Random House, 215–232.
- (1960). *Word and Object*. Cambridge, MA: MIT Press.
- (1961). *From a Logical Point of View*. 2nd edn. Cambridge, MA: Harvard University Press.
- QUINN, PAUL C., EIMAS, PETER D., and ROSENKRANTZ, STACEY L. (1993). Evidence for representations of perceptually similar natural categories by 3-month-old and 4-month-old infants. *Perception* 22(4): 463–75.
- R DEVELOPMENT CORE TEAM (2010). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, <<http://www.R-project.org>>.
- RABINER, LAWRENCE R. (1989). A tutorial on hidden Markov Models and selected applications in speech recognition. *Proceedings of the IEEE* 77: 257–86.
- RAMMAGE, LINDA, MORRISON, MURRAY D., NICHOL, HAMISH, and PULLAN, BRUCE (2001). *Management of the Voice and Its Disorders*, 2nd edn. Australia: Cengage Learning.
- RAMPTON, BEN (1995). *Crossing: Language and Ethnicity among Adolescents*. London: Longman.
- RAMUS, FRANCK, HAUSER, MARC D., MILLER, CORY, MORRIS, DYLAN, and MEHLER, JACQUES (2000). Language discrimination by human newborns and by cotton-top tamarin monkeys. *Science* 288: 349–51.

- PEPERKAMP, SHARON, CHRISTOPHE, ANNE, JACQUEMOT, CHARLOTTE, KOUIDER, SID, and DUPOUX, EMMANUEL (2010). A psycholinguistic perspective on the acquisition of phonology, in C. Fougeron, B. Kühnert, M. D'Imperio, and N. Vallée (eds.), *Laboratory Phonology 10*. Berlin: Mouton De Gruyter, 311–40.
- RANBOM, LARISSA and CONNINE, CYNTHIA (2007). Lexical representation of phonological variation in spoken word recognition. *Journal of Memory and Language* 57: 273–98.
- RAPOSO, ANA, MOSS, HELEN E., STAMATAKIS, EMMANUEL A., and TYLER, LORRAINE K. (2009). Modulation of motor and premotor cortices by actions, action words, and action sentences. *Neuropsychologia* 47: 388–96.
- RAPP, BRENDA and GOLDRICK, MATTHEW (2000). Discreteness and interactivity in spoken word production. *Psychological Review* 107(3): 460–99.
- (2006). Speaking words: Contributions of cognitive neuropsychological research. *Cognitive Neuropsychology* 23: 39–73.
- RATHCKE, TAMARA and HARRINGTON, JONATHAN (2007). The phonetics and phonology of high and low tones in two falling fo-contours in standard German. *Interspeech 2007*, Antwerp.
- RAUBER, ANDREIA S., ESCUDERO, PAOLA, BION, RICARDO, and BAPTISTA, BARBARA O. (2005). The interrelation between the perception and production of English vowels by native speakers of Brazilian Portuguese. *Proceedings of Interspeech*, 2913–16.
- RAUSCHECKER, JOSEF P. and TIAN, BIAO (2000). Mechanisms and streams for processing of “what” and “where” in auditory cortex. *Proceedings of the National Academy of Sciences* 97: 11800–6.
- RAYMOND, WILLIAM D., DAUTRICOURT, ROBIN, and HUME, ELIZABETH (2006). Word-medial /t,d/ deletion in spontaneous speech: Modeling the effects of extra-linguistic, lexical, and phonological factors. *Language Variation and Change* 18: 55–97.
- REAL, FLORENCIA and GRIFFITHS, THOMAS L. (2009). The evolution of linguistic frequency distribution: Relating regularization to inductive biases through iterated learning. *Cognition* 111: 317–28.
- RECASENS, DANIEL (2002). An EMA study of VCV coarticulatory direction. *Journal of the Acoustical Society of America* 111(6): 2828–41.
- (2007). Patterns of CVC coarticulatory direction according to the DAC model, in P. Prieto, J. Mascaró, and M.J. Solé (eds.), *Segmental and Prosodic Issues in Romance Phonology*. Amsterdam: John Benjamins, 25–40.
- and ESPINOSA, ALINA (2006). Dispersion and variability of Catalan vowels. *Speech Communication* 48: 645–66.
- (2009). Dispersion and variability in Catalan five and six peripheral vowel systems. *Speech Communication* 51: 240–58.
- REDFORD, MELISSA A. and DIEHL, RANDY L. (1999). The relative perceptual distinctiveness of initial and final consonants in CVC syllables. *Journal of the Acoustical Society of America* 106: 1555–65.
- and MIKKULAINEN, RISTO (2007). Rate effects on structure in a source-filter model of phonological development. *Language* 83: 737–69.
- REETZ, HENNING (2000). Automatic speech recognition with features. Habilitationsschrift, Universität des Saarlandes, Saarbrücken.
- (2003). Underspecified phonological features for lexical access, in W. J. Barry and J. Koreman, with K. Kirchhoff (eds.), *Phonus* 5. Saarbrücken: Institute of Phonetics, Saarland University, 161–73.

- REINHOLT PETERSEN, NIELS (1978). Intrinsic fundamental frequency of Danish vowels. *Journal of Phonetics* 6: 177–89.
- REMEZ, ROBERT (2005). Perceptual organization of speech, in David B. Pisoni and R. Remez (eds.), *Handbook of Speech Perception*. Oxford: Blackwell, 28–50.
- REMIJSEN, BERT and GILLEY, LEOMA (2008). Why are three-level vowel length systems rare? Insights from Dinka (Luanyjang dialect). *Journal of Phonetics* 36(2): 318–44.
- and VAN HEUVEN, VINCENT (1999). Categorical pitch dimensions in Dutch: Diagnostic test, in J. J. Ohala, Y. Hasagawa, M. Ohala, D. Granville, and A. C. Bailey (eds.), *Proceedings of the 14th International Congress of Phonetic Sciences*. San Francisco: University of California, 1865–8.
- REPP, BRUNO H. (1981a). Auditory and phonetic trading relations between acoustic cues in speech perception: Preliminary results. Haskins Laboratory Status Report on Speech Research, SR-67/68, 165–89.
- (1981b). Perceptual equivalence of two kinds of ambiguous speech stimuli. *Bulletin of the Psychonomic Society* 18: 12–14.
- (1984). Categorical perception: Issues, methods, findings, in N. J. Lass (ed.), *Speech and Language, Advances in Basic Research and Practice*. Orlando: Academic Press, 243–335.
- LIBERMAN, ALVIN M., ECCARDT, THOMAS, and PESETSKY, DAVID (1978). Perceptual integration of acoustic cues for stop, fricative, and affricate manner. *Journal of Experimental Psychology: Human Perception and Performance* 4: 621–37.
- and LIN, HWEI-BING (1990). Integration of segmental and tonal information in speech perception: A cross-linguistic study. *Journal of Phonetics* 18: 481–95.
- RESTLE, FRANK (1955). A theory of discrimination learning. *Psychological Review* 62(1): 11–19.
- REYNOLDS, WILLIAM T. (1994). Variation and phonological theory. Ph.D. dissertation, Department of Linguistics, University of Pennsylvania.
- RIALLAND, ANNIE (1994). The phonology and phonetics of extrasyllabicity in French, in P. A. Keating (ed.), *Phonological Structure and Phonetic Form: Papers in Laboratory Phonology III*. Cambridge: Cambridge University Press, 136–159.
- (2001). Anticipatory raising in downstep realization: Evidence for preplanning in tone production, in S. Kaji (ed.), *Proceedings of the Symposium on Cross-linguistic Studies of Tonal Phenomena: Tonogenesis, Typology, and Related Topics*, vol. 3. Tokyo, Japan, 301–22.
- and SOMÉ, PENU A. (2000). Dagara downstep: How speakers get started, in V. Carstens and F. Parkinson (eds.), *Trends in African Linguistics*. Trenton, NJ: Africa World Press, 251–63.
- RICHARDS, DOUGLAS S., FRENTZEN, BARBARA, GERHARDT, KENNETH J., MCCANN, MARY E., and ABRAMS, ROBERT M. (1992). Sound levels in the human uterus. *Obstetrics and Gynecology* 80(2): 186–90.
- RICKFORD, JOHN R. (1986). The need for new approaches to social class analysis in sociolinguistics. *Language and Communication* 6(3): 215–21.
- (1999). *African American Vernacular English: Features, Evolution, Educational Implications*. Malden, MA: Blackwell.
- and McNAIR-KNOX, FAY (1994). Addressee- and topic-influenced style shift, in D. Biber and E. Finegan (eds.), *Sociolinguistic Perspectives on Register*. Oxford: Oxford University Press, 235–76.
- RIDOUANE, RACHID (2003). Geminate vs. singleton stops in Berber: An acoustic, fiberoptic and photoglottographic study. *Proceedings of the 15th International Congress of Phonetic Sciences*, Barcelona, 1743–6.

- RIEHL, ANASTASIA (2003). American English flapping: Perceptual and acoustic evidence against paradigm uniformity with phonetic features. *Working Papers of the Cornell Phonetics Laboratory* 15: 271–337.
- RIETVELD, TONI and GUSSENHOVEN, CARLOS (1995). Aligning pitch targets in speech synthesis: Effects of syllable structure. *Journal of Phonetics* 23: 375–85.
- RINEY, TIMOTHY, TAKAGI, NAOYUKI, OTA, KAORI, and UCHIDA, YOKO (2007). The intermediate degree of VOT in Japanese initial voiceless stops. *Journal of Phonetics* 35: 439–43.
- RINGEN, CATHERINE and HEINÄMÄKI, ORVOKKI (1999). Variation in Finnish vowel harmony: An OT account. *Natural Language and Linguistic Theory* 17: 303–37.
- RIORDAN, CAROL J. (1977). Control of vocal tract length in speech. *Journal of the Acoustical Society of America* 62: 998–1002.
- RIZZOLATTI, GIACOMO and ARBIB, MICHAEL A. (1998) Language within our grasp. *Trends in Neurosciences* 21(5): 188–94.
- ROARK, BRIAN and DEMUTH, KATHERINE (2000). Prosodic constraints and the learner's environment: A corpus study, in C. S. Howell, S. A. Fish, and T. Keith-Lucas (eds.), *Proceedings of the 24th Annual Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press, 597–608.
- ROBERTS, JULIE (1997). Acquisition of variable rules: A study of (-t, d) deletion in preschool children. *Journal of Child Language* 24: 351–72.
- ROBERTS, TIMOTHY P. L., FLAGG, ELISSA J., and GAGE, NICOLE M. (2004). Vowel categorization induces departure of M100 latency from acoustic prediction. *Neuroreport* 15: 1679–82.
- and POEPEL, DAVID (1996). Latency of auditory evoked M100 as a function of tone frequency. *Neuroreport* 7: 1138–40.
- ROELOFS, ARDI and MEYER, ANTJE S. (1998). Metrical structure in planning the production of spoken words. *Journal of Experimental Psychology: Learning, Memory and Cognition* 24: 922–39.
- ROENGPITYA, RUNGPAT (2007). The variations, quantification, and generalizations of Standard Thai tones, in M.-J. Solé, P. Beddor, and M. Ohala (eds.), *Experimental Approaches to Phonology*. Oxford: Oxford University Press, 270–301.
- ROGERS, CATHERINE L., DALBY, JONATHAN, and NISHI, K. (2004). Effects of noise and proficiency on intelligibility of Chinese-accented English. *Language and Speech* 47, 139–54.
- LISTER, JENNIFER, FEBO, DASHIELLE M., BESING, JOAN M., and ABRAMS, HARVEY B. (2006). Effects of bilingualism, noise, and reverberation on speech perception by listeners with normal hearing. *Applied Psycholinguistics* 27: 465–85.
- ROMANI, CHRISTINA and CALABRESE, ANNA (1998). Syllabic constraints in the phonological errors of an aphasic patient. *Brain and Language* 64: 83–121.
- ROMANI, GIAN LUCA, WILLIAMSON, SAMUEL J., and KAUFMAN, LLOYD (1982). Tonotopic organization of the human auditory cortex. *Science* 216: 1339–40.
- ROOTH, MATS (1992). A theory of focus interpretation. *Natural Language Semantics* 1: 75–116.
- (1996). Focus, in S. Lappin (ed.), *Handbook of Contemporary Semantic Theory*. London: Blackwell.
- ROSE, MARY A. (2006). Language, place, and identity in later life. Ph.D. dissertation, Stanford University.
- ROSE, SHARON and KING, LISA (2007). Speech error elicitation and co-occurrence restrictions in two Ethiopian Semitic languages. *Language and Speech* 50: 451–504.
- and WALKER, R. (2004). A typology of consonant agreement as correspondence. *Language* 80: 475–531.

- ROSE, YVAN and WAQUIER-GRAVELINES, SOPHIE (2007). French speech acquisition, in S. McLeod (ed.), *The International Guide to Speech Acquisition*. Florence, KY: Thomson Delmar Learning.
- ROSENTHAL, ORNA, FUSI, STEFANO, and HOCHSTEIN, SHAUL (2001). Forming classes by stimulus frequency: Behavior and theory. *Proceedings of the National Academy of Sciences* 98(7): 4265–70.
- ROST, GWYNETH and McMURRAY, BOB (2009). Speaker variability augments phonological processing in early word learning. *Developmental Science* 12(2): 339–49.
- (2010). Finding the signal by adding noise: The role of non-contrastive phonetic variability in early word learning. *Infancy* 15(6): 608–35.
- ROTHENBERG, MARTIN (1973). A new inverse-filtering technique for deriving the glottal air flow waveform during voicing. *Journal of the Acoustical Society of America* 53: 1632–45.
- ROUSSEAU, PASCAL and SANKOFF, DAVID (1978). Advances in variable rule methodology, in D. Sankoff (ed.), *Linguistic Variation: Models and Methods*. New York: Academic Press, 57–69.
- ROUX, JUSTUS C. (1995). On the perception and production of tone in Xhosa. *South African Journal of African Languages* 15: 196–204.
- ROY, ALICE C., CRAIGHERO, LAILA, FABBRI-DESTRO, MADDALENA, and FADIGA, LUCIANO (2008). Phonological and lexical motor facilitation during speech listening: A transcranial magnetic stimulation study. *Journal of Physiology Paris* 102: 101–5.
- ROY, DEB (2005a). Semiotic schemas: A framework for grounding language in action and perception. *Artificial Intelligence* 167: 170–205.
- (2005b). Grounding words in perception and action: Computational insights. *Trends in Cognitive Sciences* 9: 389–96.
- (2008). A mechanistic model of three facets of meaning, in M. de Vega, A. Glenburg, and A. Graesser (eds.), *Symbols and Embodiment: Debates on Meaning and Cognition*. Oxford: Oxford University Press.
- RUBACH, JERZY (1996). Shortening and ambisyllabicity in English. *Phonology* 13: 197–237.
- (1999). The syllable in phonological analysis. *Rivista di Linguistica* 11: 273–314.
- and BOOIJ, GEERT. E. (2001). Allomorphy in Optimality Theory: Polish iotation. *Language* 77: 26–60.
- RUBIN, PHILIP, BAER, THOMAS, and MERMELSTEIN, PAUL (1981). An articulatory synthesizer for perceptual research. *Journal of the Acoustical Society of America* 70: 321–28.
- RUMELHART, DAVID and ZIPSER, DAVID (1986). Feature discovery by competitive learning, in D. Rumelhart and J. L. McClelland (eds.), *Parallel Distributed Processing: Explorations in the Microstructure of Cognition*. Cambridge, MA: MIT Press, 151–93.
- RUSSELL, KEVIN (2008). Sandhi in Plains Cree. *Journal of Phonetics* 36: 450–64.
- RVACHEW, SUSAN and ANDREWS, ELLEN (2002). The influence of syllable position on children's production of consonants. *Clinical Linguistics and Phonetics* 16: 183–98.
- and GRAWBURG, MEGHANN (2006). Correlates of phonological awareness in preschoolers with speech sound disorders. *Journal of Speech, Language, and Hearing Research* 49: 74–87.
- and JAMIESON, DONALD (1989). Perception of voiceless fricatives by children with a functional articulation disorder. *Journal of Speech and Hearing Disorders* 54: 193–208.
- MATTOCK, KAREN, POLKA, LINDA, and MENARD, LUCIE (2006). Developmental and cross-linguistic variation in the infant vowel space: The case of Canadian English and Canadian French. *Journal of the Acoustical Society of America* 120: 2250–9.

- SAFFRAN, JENNY R., ASLIN, RICHARD N., and NEWPORT, ELISSA L. (1996). Statistical learning by 8-month-old infants. *Science* 274: 1926–8.
- and THIESSEN, ERIK D. (2003). Pattern induction by infant language learners. *Developmental Psychology* 39: 484–94.
- SAGEY, ELIZABETH (1986). The representation of features and relations in non-linear phonology. Ph.D. dissertation, MIT. [Published, New York: Garland Press, 1991.]
- (1988). On the ill-formedness of crossing association lines. *Linguistic Inquiry* 19: 109–18.
- SALTZMAN, ELLIOT (1979). Levels of sensorimotor representation. *Journal of Mathematical Psychology* 20: 91–163.
- (1986). Task dynamic coordination of the speech articulators: A preliminary model. *Experimental Brain Research Series* 15: 129–44.
- (1995). Dynamics and coordinate systems in skilled sensorimotor activity, in R. F. Port and T. van Gelder (eds.), *Mind as Motion*. Cambridge, MA: MIT Press, 149–73.
- and BYRD, DANI (2000). Task-dynamics of gestural timing: Phase windows and multi-frequency rhythms. *Human Movement Science* 19: 499–526.
- LÖFQVIST, A., and MITRA, S. (2000). “Clocks” and “glue”—Global timing and intergestural cohesion, in M. B. Broe and J. B. Pierrehumbert (eds.), *Papers in Laboratory Phonology V: Acquisition and the Lexicon*. Cambridge: Cambridge University Press. 88–101.
- and MUNHALL, KEVIN G. (1989). A dynamical approach to gestural patterning in speech production. *Ecological Psychology* 1: 333–82.
- NAM, HOSUNG, KRIVOKAPIC, JELENA, and GOLDSTEIN, LOUIS (2008). A task-dynamic toolkit for modeling the effects of prosodic structure on articulation, in *Proceedings of Speech Prosody 2008*, Campinas, Brazil.
- SALVERDA, ANNE PIER, DAHAN, DELPHINE, and MCQUEEN, JAMES M. (2003). The role of prosodic boundaries in the resolution of lexical embedding in speech comprehension. *Cognition* 90: 51–89.
- — TANENHAUS, MICHAEL K., CROSSWHITE, KATHERINE, MASHAROV, MIKHAIL, and McDONOUGH, JOYCE (2007). Effects of prosodically modulated sub-phonetic variation on lexical competition. *Cognition* 105: 466–76.
- SAMBUR, MARVIN R., ROSENBERG, AARON E., RABINER, LAWRENCE R., and MCGONEGAL, CAROL A. (1978). On reducing the buzz in LPC synthesis. *Journal of the Acoustical Society of America* 63: 918–24.
- SAMUEL, ARTHUR G. (1981). Phonemic restoration: Insights from a new methodology. *Journal of Experimental Psychology* 110(4): 474–94.
- (1996). Does lexical information influence the perceptual restoration of phonemes? *Journal of Experimental Psychology: General* 125: 28–51.
- SANCIER, MICHELE and FOWLER, CAROL A. (1997). Gestural drift in a bilingual speaker of Brazilian Portuguese and English. *Journal of Phonetics* 25: 421–36.
- SANDLER, WENDY (2006). Phonology, phonetics and the nondominant hand, in L. Goldstein, D. H. Whalen, and C. T. Best (eds.), *Laboratory Phonology 8*. Berlin: Mouton de Gruyter, 185–212.
- and LILLO-MARTIN, DIANE (2006). *Sign Language and Linguistic Universals*. Cambridge: Cambridge University Press.
- SANGSTER, CATHERINE (2002). Inter- and intra-speaker variation in Liverpool English: A sociophonetic study. D.Phil dissertation, University of Oxford.
- SANKOFF, DAVID (1970). On the rate of replacement of word-meaning relationships. *Language* 47: 564–9.

- SANKOFF, DAVID (1988). Variable rules, in U. Ammon, N. Dittmar, and K. J. Mattheier (eds.), *Sociolinguistics: An International Handbook of the Science of Language and Society*, vol. 2. Berlin: Walter de Gruyter, 984–97.
- and KRUSKAL, JOSEPH (1983). *Time Warps, String Edits, and Macromolecules*. Stanford, CA: CSLI Publications.
- and LABOV, WILLIAM (1979). On the uses of variable rules. *Language in Society* 8(2): 189–222.
- TAGLIAMONTE, SALI, and SMITH, ERIC (2005). Goldvarb X: A variable rule application for Macintosh and Windows. Department of Linguistics, University of Toronto.
- SANKOFF, GILLIAN and BLONDEAU, HÉLÈN (2007). Language change across the lifespan: /r/ in Montreal French. *Language* 83: 560–88.
- VAN SANTEN, JAN P. H. (1992). Contextual effects on vowel durations. *Speech Communication* 11: 513–46.
- and HIRSCHBERG, JULIA (1994). Segmental effects on timing and height of pitch contours. *Proceedings of the International Conference on Spoken Language Processing*, Yokohama, Japan, vol. 2, 719–22.
- and SHIH, CHILIN (2000). Suprasegmental and segmental timing models in Mandarin Chinese and American English. *Journal of the Acoustical Society of America* 107(2): 1012–26.
- SAPIR, EDWARD (1921). *Language*. New York: Harcourt, Brace, & World.
- (1925). Sound patterns in language. *Language* 1: 37–51.
- SAPIR, SHIMON (1989). The intrinsic pitch of vowels: Theoretical, physiological, and clinical considerations. *Journal of Voice* 3: 44–51.
- SARKAR, DEEPAYAN (2010). lattice: Lattice graphics. <<http://CRAN.R-project.org/package=lattice>>. R package version 0.18-3.
- SASISEKARAN, JAYANTHI, SMITH, ANNE, SADAGOPAN, NEERAJA, and WEBER-FOX, CHRISTINE (forthcoming). Nonword repetition in children and adults: Effects on movement coordination. *Developmental Science*.
- SATO, WATARU and YOSHIKAWA, SAKIKO (2007). Spontaneous facial mimicry in response to dynamic facial expressions. *Cognition* 104: 1–18.
- SATTATH, SHMUEL and TVERSKY, AMOS (1977). Additive similarity trees. *Psychometrika* 42: 319–45.
- SAUR, DOROTHEE, KREHER, BJÖRN W., SCHNELL, SUSANNE, KÜMMERER, DOROTHEE, KELLMEYER, PHILIPP, VRY, MAGNUS-SEBASTIAN, UMAROVA, ROZA, MUSSO, MARIACRISTINA, GLAUCHE, VOLKMAR, ABEL, STEFANIE, HUBER, WALTER, RIJNTJES, MICHEL, HENNIG, JÜRGEN, and WEILLER, CORNELIUS (2008). Ventral and dorsal pathways for language. *Proceedings of the National Academy of Sciences* 105: 18035–40.
- SAUSSURE, FERDINAND DE (1916). *Cours de linguistique générale*, ed. C. Bally and A. Sechehaye in collaboration with A. Riedlinger. Paris: Payot & Cie. [2nd edn, 1922]
- SAVELA, JANNE (2009). Role of selected spectral attributes in the perception of synthetic vowels. Ph.D. dissertation, University of Turku.
- SAVINO, MICHELINA and GRICE, MARTINE (2011). The perception of negative bias in Bari Italian questions, in S. Frota, P. Prieto, and G. Elordieta (eds.), *Prosodic Categories: Production, Perception and Comprehension*. Berlin: Springer Verlag, 187–206.
- SAWASHIMA, MASAYUKI, HIROSE, HAJIME, YOSHIOKA, HIROHIDE, and KIRITANI, SHIGERU (1982). Interaction between articulatory movements and vocal pitch control in Japanese word accent. *Phonetica* 39(45): 188–98.

- SCARBOROUGH, REBECCA (2010). Lexical and contextual predictability: Confluent effects on the production of vowels, in C. Fougeron, B. Kühnert, M. D'Imperio, and N. Vallée (eds.), *Laboratory Phonology 10*. Berlin: de Gruyter.
- SCHAFER, AMY J., SPEER, SHARI R., and WARREN, PAUL (2005). Prosodic influences on the production and comprehension of syntactic ambiguity in a game-based conversation task, in J. C. Trueswell and M. K. Tanenhaus (eds.), *Approaches to Studying World-situated Language Use*. Cambridge, MA: MIT Press, 209–25.
- and WHITE, S. DAVID (2000). Intonational disambiguation in sentence production and comprehension. *Journal of Psycholinguistic Research* 29: 169–82.
- SCHARENBERG, ODETTE (2007). Reaching over the gap: A review of efforts to link human and automatic speech recognition research. *Speech Communication* 49: 336–47.
- SCHARINGER, MATHIAS (2007a). The representation of vocalic features in vowel alternations. Phonological, morphological and computational aspects. Konstanz: Konstanz Online Publication System, <<http://nbn-resolving.de/urn:nbn:de:bsz:352-opus-24341>>.
- (2007b). Inter-word identity, <<http://www.inter-word.net/identity>>, accessed April 4, 2007.
- (2008). Minimal representations of alternating vowels. *Lingua*, forthcoming (doi:10.1016/j.lingua.2007.12.009).
- IDSARDI, WILLIAM J., and POE, SAMANTHA (2011). A comprehensive three-dimensional cortical map of vowel space. *Journal of Cognitive Neuroscience*, forthcoming (doi:10.1162/jocn_a_00056).
- REETZ, HENNING, and LAHIRI, ADITI (2009). Levels of regularity in inflected word form processing. *The Mental Lexicon* 4(1): 77–114.
- SCHIEFFERS, MICHAEL T. M. and SIMPSON, ADRIAN P. (1995). LACS: Label-Assisted Copy Synthesis. *Proceedings of the 13th International Congress of Phonetic Sciences* 2, 346–9.
- SCHELLINGER, SARAH K., EDWARDS, JAN, MUNSON, BENJAMIN, and BECKMAN, MARY E. (2008). The role of listener expectations on judgments of children's /s/ productions. Poster presented at the Symposium on Research in Child Language Disorders, June 5–7, University of Wisconsin, Madison. <http://www.ling.ohio-state.edu/~edwards/SRCLD_schellinger_final.pdf>, accessed June 17, 2009.
- SCHERER, KLAUS R. (2003). Vocal communication of emotion: A review of research paradigms. *Speech Communication* 40: 227–56.
- SCHIEFER, LISELOTTE (1986). F0 in the production and perception of breathy stops: Evidence from Hindi. *Phonetica* 43: 43–69.
- SCHILLER, NIELS O. (1998). The effect of visually masked primes on the naming latencies of words and pictures. *Journal of Memory and Language* 39: 484–507.
- (2000). Single word production in English: The role of subsyllabic units during speech production. *Journal of Experimental Psychology: Learning, Memory and Cognition* 26: 512–28.
- (2005). Verbal self-monitoring, in A. Cutler (ed.), *Twenty-first Century Psycholinguistics: Four Cornerstones*. Mahwah, NJ: Lawrence Erlbaum, 245–61.
- (2006). Lexical stress encoding in single word production estimated by event-related brain potentials. *Brain Research* 1112: 201–12.
- (2008). Syllables in psycholinguistic theory: Now you see them, now you don't, in B. L. Davis and K. Zajdó (eds.), *The Syllable in Speech Production: Perspectives on the Frame/Content Theory*. New York, NY and Hove: Taylor & Francis, 155–76.

- SCHILLER, NIELS O., BLES, MART, and JANSMA, BERNADETTE M. (2003). Tracking the time course of phonological encoding in speech production: An event-related brain potential study. *Cognitive Brain Research* 17: 819–31.
- and COSTA, ALBERT (2006). Activation of segments, not syllables, during phonological encoding in speech production. *The Mental Lexicon* 1: 231–50.
- — and COLOMÉ, ANGELS (2002). Phonological encoding of single words: In search of the lost syllable, in C. Gussenhoven and N. Warner (eds.), *Laboratory Phonology 7*. Berlin: Mouton de Gruyter, 35–59.
- FIKKERT, PAULA, and LEVELT, CLAARTJE C. (2004). Stress priming in picture naming: An SOA study. *Brain and Language* 90: 231–40.
- JANSMA, BERNADETTE M., PETERS, JUDITH, and LEVELT, WILLEM J. M. (2006). Monitoring metrical stress in polysyllabic words. *Language and Cognitive Processes* 21: 112–40.
- SCHILLING-ESTES, NATALIE (1998). Investigating “self-conscious” speech: The performance register in Ocracoke English. *Language in Society* 27: 53–83.
- (2002). Investigating stylistic variation, in J. K. Chambers et al. (eds.), *The Handbook of Language Variation and Change*. Malden, MA: Blackwell, 375–401.
- SCHMIDT, ANNA MARIE (1996). Cross-language identification of consonants. Part 1: Korean perception of English. *Journal of the Acoustical Society of America* 99: 3201–11.
- SCHMIDT, RICHARD A., ZELAZNIK, HOWARD, HAWKINS, BRIAN, FRANK, JAMES S., QUINN, JOHN T., JR. (1979). Motor-output variability: A theory for the accuracy of rapid motor acts. *Psychological Review* 86(5): 415–451.
- SCHMIDT, THOMAS, DUNCAN, SUSAN, EHMER, OLIVER, HOYT, JEFFREY, KIPP, MICHAEL, LOEHR, DAN, MAGNUSON, MAGNUS, ROSE, TRAVIS, and SLOETJES, HAN (2008). An exchange format for multimodal annotations, in *Proceedings of the Workshop on Multimodal Corpora: From Models of Natural Interaction to Systems and Applications, Sixth International Conference on Language Resources and Evaluation*.
- SCHMITT, BERNADETTE M., BLES, MART, SCHILLER, NIELS O., and MÜNTE, THOMAS F. (2002). Overt naming in a picture-word interference task analyzed with event-related potentials (abstract). *Proceedings of the 9th Annual Meeting of the Cognitive Neuroscience Society*. Durham, NC: Duke University, 80.
- MÜNTE, THOMAS F., and KUTAS, MARTA (2000). Electrophysiological estimates of the time course of semantic and phonological encoding during implicit picture naming. *Psychophysiology* 37: 473–84.
- SCHNEIDER, KATRIN and LINFERT, BRITTA (2003). Categorical perception of boundary tones in German, in D. Recasens, M.-J. Solé, and J. Romero (eds.), *Proceedings of 15th International Congress of Phonetic Sciences*. Barcelona: Causal Productions Pty Ltd, 631–4.
- SCHOUTEN, M. E. and VAN HESSEN, A. J. (1992). Modeling phoneme perception: Categorical perception. *Journal of the Acoustical Society of America* 92: 1841–55.
- SCHRIEFERS, HERBERT, MEYER, ANTJE S., and LEVELT, WILLEM J. M. (1990). Exploring the time course of lexical access in language production: Picture-word interference studies. *Journal of Memory and Language* 29: 86–102.
- SCHUHMAN, TERESA, SCHILLER, NIELS O., GOEBEL, RAINER, and SACK, ALEX (2009). The temporal characteristics of functional activation in Broca’s area during overt picture naming. *Cortex* 45: 1111–16.

- SCHÜTZE, CARSON (2005). Thinking about what we are asking speakers to do, in S. Kepsers and M. Reis (eds.), *Linguistic Evidence: Empirical, Theoretical, and Computational Perspectives*. Berlin: Mouton de Gruyter, 457–84.
- SCHWARTZ, JEAN-LUC, BOE, LOUIS-JEAN, VALLE, NATALIE, and ABRY, CHRISTIAN (1997a). Major trends in vowel system inventories. *Journal of Phonetics* 25: 233–53.
- (1997b). The dispersion-focalization theory of vowel systems. *Journal of Phonetics* 25: 255–86.
- and ESCUDIER, P. (1989). A strong evidence for the existence of a large scale integrated spectral representation in vowel perception. *Speech Communication* 8: 235–59.
- SCHWARTZ, RICHARD and LEONARD, LARRY (1982). Do children pick and choose? An examination of phonological selection and avoidance in early lexical acquisition. *Journal of Child Language* 9: 319–36.
- SCHWARZLOSE, REBECCA and BRADLOW, ANN R. (2001). What happens to segment durations at the end of a word? *Journal of the Acoustical Society of America* 109: 2292.
- SCOBIE, JAMES M. (1991). Attribute-value phonology. Ph.D. dissertation, University of Edinburgh. [Published, New York: Garland Publishing, 1999.]
- (2005). The “end” of phonology: The theoretical significance of interface phenomena. Oral paper at the 1st International Conference on the Linguistics of Contemporary English. University of Edinburgh, Scotland, June, 23–26.
- (2006). Flexibility in the face of incompatible English VOT systems, in L. Goldstein, D. H. Whalen, and C. T. Best (eds.), *Laboratory Phonology 8*. Berlin: Mouton de Gruyter, 367–92.
- (2007a). Biological and social grounding of phonology: Variation as a research tool, in J. Trouvain and W. J. Barry (eds.), *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, 225–8.
- (2007b). Interface and overlap in phonetics and phonology, in G. Ramchand and C. Reiss (eds.), *The Oxford Handbook of Linguistic Interfaces*. Oxford: Oxford University Press, 17–52.
- GIBBON, FIONA, HARDCASTLE, WILLIAM J., and FLETCHER, PAUL (2000). Covert contrast as a stage in the acquisition of phonetics and phonology, in M. B. Broe and J. B. Pierrehumbert (eds.), *Papers in Laboratory Phonology V: Acquisition and the Lexicon*. Cambridge: Cambridge University Press, 194–207.
- and HEWLETT, NIGEL (2008). Quasi-phonemic contrast and the fuzzy inventory: Examples from Scottish English, in P. Avery, E. B. Dresher, and K. Rice (eds.), *Contrast: Perception and Acquisition: Selected Papers from the Second International Conference on Contrast in Phonology*. Berlin: Mouton de Gruyter, 87–113.
- and LAWSON, ELINOR (2008). Looking variation and change in the mouth: Developing the sociolinguistic potential of ultrasound tongue imaging. Final report to ESRC, Research Grant RES-000-22-2032.
- and TURK, ALICE E. (1999). Standard English in Edinburgh and Glasgow: The Scottish vowel length rule revealed, in P. Foulkes and G. J. Docherty (eds.), *Urban Voices: Accent Studies in the British Isles*. London: Arnold, 230–45.
- TURK, ALICE E., and HEWLETT, NIGEL (1999). Morphemes, phonetics and lexical items: The case of the Scottish vowel length rule. *Proceedings of the 14th International Congress of Phonetic Sciences*, San Francisco, 1617–20.

- SCOBIE, JAMES M., WRENCH, ALAN, and VAN DER LINDEN, MARIETTA (2008). Head-probe stabilisation in ultrasound tongue imaging using a headset to permit natural head movement, in R. Sock, S. Fuchs, and Y. Laprie (eds.), *Proceedings of the 8th International Seminar on Speech Production*. Strasbourg, France.
- SCOTT, SOPHIE K. (2003). PET and fMRI studies of the neural basis of speech perception. *Speech Communication* 41: 23–34.
- and JOHNSTRUDE, INGRID S. (2003). The neuroanatomical and functional organization of speech perception. *Trends in Neurosciences* 26: 100–7.
- SCULLY, CELIA (1979). Model prediction and real speech: Fricative dynamics, in B. Lindblom and S. Öhman (eds.), *Frontiers of Communication Research*. New York: Academic Press, 35–48.
- GEORGES, ESTHER, and CASTELLI, ERIC (1991). Fricative consonants and their articulatory trajectories. *Proceedings of the 12th International Congress of Phonetic Sciences*, Aix-en-Provence, vol. 3, 58–61.
- — — (1992). Articulatory paths for some fricatives in connected speech. *Speech Communication* 11: 411–16.
- SEGUI, JUAN and FERRAND, LUDOVIC (2002). The role of the syllable in speech perception and production, in J. Durand and B. Laks (eds.), *Phonetics, Phonology, and Cognition*. Oxford: Oxford University Press, 151–67.
- SEIDL, AMANDA and BUCKLEY, EUGENE (2005). On the learning of arbitrary phonological rules. *Language Learning and Development* 1: 289–316.
- SELKIRK, ELISABETH O. (1984). *Phonology and Syntax: The Relation between Sound and Structure*. Cambridge, MA: MIT Press.
- (1986). On derived domains in sentence phonology. *Phonology Yearbook* 3: 371–405.
- (1990). On the nature of prosodic constituency: Comments on Beckman and Edward's paper, in J. Kingston and M. Beckman (eds.), *Papers in Laboratory Phonology I: Between the Grammar and Physics of Speech*. Cambridge: Cambridge University Press, 179–200.
- (1995). Sentence prosody: Intonation, stress and phrasing, in J. Goldsmith (ed.), *The Handbook of Phonological Theory*. Oxford: Blackwell, 550–69.
- (1996). The prosodic structure of function words, in J. L. Morgan and K. Demuth (eds.), *Bootstrapping from Speech to Grammar in Early Acquisition*. Mahwah: Lawrence Erlbaum Associates, 187–213.
- (2000). The interaction of constraints on prosodic phrasing, in M. Horne (ed.), *Prosody: Theory and Experiment*. Dordrecht: Kluwer Academic Publishers, 231–61.
- (2002). Contrastive FOCUS vs. presentational focus: Prosodic evidence from right-node raising in English. *Speech Prosody 2002*. Aix-en-Provence, France.
- (2005). Comments on intonational phrasing in English, in S. Frota, M. Vigário, and M. J. Freitas (eds.), *Prosodies*. Berlin: Mouton de Gruyter, 11–58.
- (2007). Contrastive focus, givenness and the unmarked status of “discourse-new,” in C. Féry, G. Fanselow, and M. Krifka (eds.), *Working Papers of the SFB632, Interdisciplinary Studies on Information Structure*, vol. 6. Potsdam: Universitätsverlag Potsdam, 125–46.
- and SHEN, TONG (1990). Prosodic domains in Shanghai Chinese, in S. Inkelas and D. Zec (eds.), *The Phonology-Syntax Connection*. Chicago: University of Chicago Press.
- SHINYA, TAJAHITO, and KAWAHARA, SHIGETO (2004). Phonological and phonetic effects of minor phrase length on f0 in Japanese, in *Speech Prosody 2004: Proceedings of the 2nd International Conference on Speech Prosody*. Nara: Japan, 183–7.

- SERENO, JOAN A. and JONGMAN, ALLARD (1995). Acoustic correlates of grammatical class. *Language and Speech* 38: 57–76.
- SERRURIER, ANTOINE and BADIN, PIERRE (2008). A three-dimensional articulatory model of the velum and nasopharyngeal wall based on MRI and CT data. *Journal of the Acoustical Society of America* 123: 2335–55.
- SEVALD, CHRISTINE A., DELL, GARY S., and COLE, JENNIFER S. (1995). Syllable structure in speech production: Are syllables chunks or schemas? *Journal of Memory and Language* 34: 807–20.
- SHADEMAN, SHABNAM (2006). Is phonotactic knowledge grammatical knowledge?, in D. Baumer, D. Montero, and M. Scanlon (eds.), *Proceedings of the 25th West Coast Conference on Formal Linguistics*. Somerville, MA: Cascadia Proceedings Project, 371–9.
- SHADLE, CHRISTINE H. (1990). Articulatory-acoustic relationships in fricative consonants, in W. J. Hardcastle and A. Marchal (eds.), *Speech Production and Speech Modelling*. Dordrecht: Kluwer Academic Press, 187–209.
- (1991). The effect of geometry on source mechanisms of fricative consonants. *Journal of Phonetics* 19: 409–24.
- (1997). The aerodynamics of speech, in W. J. Hardcastle and J. Laver (eds.), *Handbook of Phonetics*. Oxford: Blackwell, 33–64.
- (2006). Acoustic phonetics, in K. Brown (ed.), *Encyclopedia of Language and Linguistics*, 2nd edn, vol. 9. Oxford: Elsevier, 442–60.
- (2010). Aerodynamics of speech, in W. J. Hardcastle, J. Laver, and F. Gibbon (eds.), *Handbook of the Phonetic Sciences*, 2nd edn. London: Blackwell, 39–80.
- BADIN, PIERRE, and MOULINIER, A. (1991). Towards the spectral characteristics of fricative consonants. *Proceedings of the 12th International Congress of Phonetic Sciences* vol. 3: 42–5.
- and MAIR, SHEILA J. (1996). Quantifying spectral characteristics of fricatives, in *Proceedings of the 4th International Conference on Spoken Language Processing (ICSLP '96)*, Philadelphia, Oct. 1996, 1521–4.
- — and CARTER, JOHN N. (1996). Acoustic characteristics of the front fricatives [f, v, θ, δ]. *Proceedings of the 4th Speech Production Seminar*, Autrans, 193–6.
- PROCTOR, MICHAEL I., and ISKAROUS, KHALIL (2008). An MRI study of the effect of vowel context on English fricatives. *Proceedings of Acoustics '08*, Paris, June 28–July 4, 5099–104.
- and SCULLY, CELIA (1995). An articulatory-acoustic-aerodynamic analysis of [s] in VCV sequences. *Journal of Phonetics* 23: 53–66.
- SHAFER, VALERIE L., MORR, MARA L., DATTA, HIA, KURTZBERG, DIANE, and SCHWARTZ, RICHARD G. (2005). Neurophysiological indices of speech processing deficits in children with specific language impairment. *Journal of Cognitive Neurosciences* 17: 1168–80.
- SHAHIN, ANTOINE J., BISHOP, CHRISTOPHER W., and MILLER, LEE M. (2009). Neural mechanisms for illusory filling-in of degraded speech. *NeuroImage* 44: 1133–43.
- SHAKED, AMIT (2007). Competing syntactic and phonological constraints in Hebrew prosodic phrasing. *The Linguistic Review* (Special issue on Prosodic Phrasing, ed. S. Frota and P. Prieto) 24: 169–99.
- SHANNON, CLAUDE E. (1948). A mathematical theory of communication. *Bell System Technical Journal* 27(July and October): 379–423, 623–56.
- SHARMA, ANU and DORMAN, MICHAEL F. (1999). Cortical auditory evoked potential correlates of categorical perception of voice-onset time. *Journal of the Acoustical Society of America* 106: 1078–83.

- SHATTUCK-HUFNAGEL, STEFANIE (1979). Speech errors as evidence for a serial ordering mechanism in sentence production, in W. E. Cooper and E. C. T. Walker (eds.), *Sentence Processing*. New York: Halsted Press, 295–342.
- (1983). Sublexical units and suprasegmental structure in speech production planning, in P. F. MacNeilage (ed.), *The Production of Speech*. New York: Springer, 109–36.
- (1987). The role of word onset consonants in speech production planning: New evidence from speech error patterns, in E. Keller and M. Gopnik (eds.), *Motor and Sensory Processing in Language*. Hillsdale, NJ: Erlbaum, 17–51.
- (1992). The role of word structure in segmental serial ordering. *Cognition* 42: 213–59.
- (1995). The importance of phonological transcription in empirical approaches to “stress shift” versus “early accent”: Comments on Grabe and Warren, and Vogel, Bunnell, and Hoskins, in B. Connell and A. Arvaniti (eds.), *Phonology and Phonetic Evidence: Papers in Laboratory Phonology IV*. Cambridge: Cambridge University Press, 128–40.
- (2000). Phrase-level phonology in speech production planning: Evidence for the role of prosodic structure, in M. Horne (ed.), *Prosody: Theory and Experiment*. Dordrecht: Kluwer Academic Publishers, 201–29.
- (2011). The role of the syllable in speech production in American English: A fresh consideration of the evidence, in C. Cairns and E. Raimy (eds.), *Handbook of the Syllable*. Leiden: Brill, 195–204.
- DEMUTH, KATHERINE, HANSON, HELEN, and STEVENS, KENNETH N. (2011). Acoustic cues to stop-coda voicing contrasts in the speech of American English 2–3-year-olds, in G. N. Clements and R. Ridouane (eds.), *Where Do Features Come From? The Nature and Sources of Phonological Primitives*. North-Holland Linguistics Series. Amsterdam: Elsevier, 327–42.
- and KLATT, DENNIS H. (1979). The limited use of distinctive features and markedness in speech production: Evidence from speech error data. *Journal of Verbal Learning and Verbal Behavior* 18: 41–55.
- OSTENDORF, MARIE, and ROSS, KEN (1994). Stress shift and early pitch accent placement in lexical items in American English. *Journal of Phonetics* 22: 357–88.
- and TURK, ALICE (2009). An experimental investigation of Abercrombian feet in American English. Talk presented at the 22nd Annual CUNY Conference on Human Sentence Processing.
- and VEILLEUX, NANETTE M. (2007). Robustness of acoustic landmarks in spontaneously-spoken American English. *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, 925–8.
- SHAW, JASON and GAFOS, ADAMANTIOS (2010). Quantitative evaluation of competing syllable parses, in J. Heinz, L. Cahill, and R. Wicentowski (eds.), *ACL SIGMORPHON, Proceedings of the 11th Meeting of the ACL special interest group in computational phonology and morphology*. Uppsala, July 11–16, Sweden.
- — HOOLE, PHILIP, and ZEROUAL, CHAKIR (2009). Syllabification in Moroccan Arabic: Evidence from patterns of temporal stability in articulation. *Phonology* 26: 187–215.
- SHELDON, A. and STRANGE, WINIFRED (1982). The acquisition of /r/ and /l/ by Japanese learners of English: Evidence that speech production can precede speech perception. *Applied Psycholinguistics* 3: 243–61.
- SHEN, XIAO-NAN (1990). Tonal coarticulation in Mandarin. *Journal of Phonetics* 18: 281–95.
- SHEPARD, ROGER N. (1972). Psychological representation of speech sounds, in E. E. David and P. B. Denes (eds.), *Human Communication: A Unified View*. New York: McGraw-Hill, 67–113.

- SHI, FENG, SHI, LIN, and LIAO, RONGRONG (1987). An experimental analysis of the five-level tones of the Gaoba Dong language. *Journal of Chinese Linguistics* 15: 335–61.
- SHIH, CHILIN (1987). The phonetics of the Chinese tonal system. AT&T Bell Labs technical memo.
- (1988). Tone and intonation in Mandarin. *Working Papers of the Cornell Phonetics Laboratory 3: Stress, Tone and Intonation*. Ithaca: Cornell University, 83–109.
- and KOCHANSKI, GREG (2000). Chinese Tone Modeling with Stem-ML. Sixth International Conference on Spoken Language Processing (ICSLP 2000). Beijing, October 16–20.
- — and YOON, SU-YOUN (2007). The missing link between articulatory gestures and sentence planning, in *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, 35–8.
- and SPROAT, RICHARD (1992). Variations of the Mandarin rising tone, in *Proceedings of the IRCS Workshop on Prosody in Natural Speech*. Philadelphia: Institute for Research in Cognitive Science, University of Pennsylvania, 193–200.
- SHINN-CUNNINGHAM, BARBARA G. (2008). Object-based auditory and visual attention. *TRENDS in Cognitive Sciences* 12: 182–6.
- SHOBBROOK, KATHERINE and HOUSE, JILL (2003). High rising tones in Southern British English. *Proceedings of the 15th International Congress of Phonetic Sciences*. Barcelona, 1273–6.
- SHOCKEY, LINDA (2008). Understanding casual English pronunciation: Poles apart. Presentation at the First Nijmegen Speech Reduction Workshop, MPI, Nijmegen, The Netherlands.
- SHOCKLEY, KEVIN, RICHARDSON, DANIEL C., and DALE, RICK (2009). Conversation and coordinative structures. *Topics in Cognitive Science* 1: 305–19.
- SABADINI, LAURA, and FOWLER, CAROL A. (2004). Imitation in shadowing words. *Perception and Psychophysics* 66: 422–9.
- SANTANA, MARIE-VEE, and FOWLER, CAROL A. (2003). Mutual interpersonal postural constraints are involved in cooperative conversation. *Journal of Experimental Psychology: Human Perception and Performance* 29: 326–32.
- SHTYROV, YURY and PULVERMULLER, FRIEDEMANN (2007). Language in the mismatch negativity design: Motivations, benefits and prospects. *Journal of Psychophysiology* 21(3–4): 176–87.
- SHUE, YEN-LIANG, KEATING, PATRICIA, and VICENIK, CHAD (2009). VoiceSauce: A program for voice analysis. Poster presented at the Fall meeting of the Acoustical Society of America, San Antonio.
- SILVA, DAVID (1992). The phonetics and phonology of stop lenition in Korean. Ph.D. dissertation, Cornell University.
- SILVERMAN, DANIEL (2006). The diachrony of labiality in Trique, and the functional relevance of gradience and variation, in L. M. Goldstein, D. H. Whalen, and C. T. Best (eds.), *Laboratory Phonology 8*. New Haven: Mouton de Gruyter, 133–54.
- SILVERMAN, KIM E. A. (1986). F0 segmental cues depend on intonation: The case of the rise after voiced stops. *Phonetica* 43: 76–91.
- (1990). The separation of prosodies: Comments on Kohler's paper, in J. Kingston and M. Beckman (eds.), *Papers in Laboratory Phonology I: Between the Grammar and Physics of Speech*. Cambridge: Cambridge University Press, 72–106.
- and PIERREHUMBERT, JANET (1990). The timing of prenuclear high accents in English, in J. Kingston and M. Beckman (eds.), *Papers in Laboratory Phonology I. Between the Grammar and Physics of Speech*. Cambridge: Cambridge University Press, 72–106.

- SIMON, CLAUDE and FOURCIN, ADRIAN J. (1978). Cross-language study of speech pattern learning. *Journal of the Acoustical Society of America* 63: 925–35.
- SIMON, ELLEN, ESCUDERO, PAOLA, and BROERSMA, MIRJAM. (2010). Learning minimally different words in a third language: L2 proficiency as a crucial predictor of accuracy in an L3 word learning task. *Proceedings of the Sixth International Symposium on the Acquisition of Second Language Speech* (New Sounds 2010).
- and VAN HERREWEGHE, MIEKE (2010), The relation between orthography and phonology. *Language and Speech* 53(3): 303–6.
- SIMOSA, PANAGIOTIS G., DIEHL, RANDY L., BREIER, JOSHUA I., MOLIS, MICHELLE R., ZOURIDAKIS, GEORGE, and PAPANICOLAOU, ANDREW C. (1998). MEG correlates of categorical perception of a voice onset time continuum in humans. *Cognitive Brain Research* 7: 215–19.
- SINGH, LEHER, MORGAN, JAMES, and BEST, CATHERINE T. (2002). Baby talk or happy talk? *Infancy* 3: 365–94.
- WHITE, KATHERINE (2004). Preference and processing: The role of speech affect in early spoken word recognition. *Journal of Memory and Language* 51(2): 173–89.
- SINNOTT, JOAN M., BROWN, CHARLES H., and BORNEMAN, MELISSA A. (1998). Effects of syllable duration on stop-glide identification in syllable-initial and syllable-final position by humans and monkeys. *Perception and Psychophysics* 60: 1032–43.
- SIROTIN, YEVGENIY B. and DAS, ANIRUDDHA (2009). Anticipatory haemodynamic signals in sensory cortex not predicted by local neuronal activity. *Nature* 457: 475–9.
- SJÖLANDER, KIMMEN (2003). An HMM-based system for automatic segmentation and alignment of speech, in *Proceedings of Fonetik 2003*, Umeå, Sweden, 93–6.
- SKOUSEN, ROYAL, LONSDALE, DERYL, and PARKINSON, DILWORTH (2002). *Analogical modeling. An exemplar-based approach to language*. Amsterdam: John Benjamins.
- SLANEY, MALCOM, COVELL, MICHELE, and LASSITER, BUD (1996). Automatic audio morphing. *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing*, Atlanta, GA, May 7–10, 1996, vol. 2, 1001–4.
- SLEVC, L. ROBERT and MIYAKE, AKIRA (2006). Individual differences in second language proficiency: Does musical ability matter? *Psychological Science* 17: 675–81.
- SLIFKA, JANET (2000). Respiratory constraints at prosodic boundaries in speech. Ph. D. dissertation, Massachusetts Institute of Technology, Cambridge, MA. <<http://hdl.handle.net/1721.1/29184>>.
- (2006). Some physiological correlates to regular and irregular phonation at the end of an utterance. *Journal of Voice* 20: 171–86.
- SLOBIN, DAN I. (1973). Cognitive prerequisites for the development of grammar, in C. Ferguson and D. I. Slobin (eds.), *Studies of Child Language Development*. New York: Holt, Rhinehart and Winston, 175–208.
- (1997). The origins of grammaticizable notions: Beyond the individual mind, in D. I. Slobin (ed.), *The Crosslinguistic Study of Language Acquisition: Expanding the Contexts*. Mahwah, NJ: Lawrence Erlbaum.
- SLUIJTER, AGAATH M. C. (1995). Phonetic correlates of stress and accent. Ph.D. dissertation, Leiden University.
- and VAN HEUVEN, VINCENT J. (1995). Effects of focus distribution, pitch accent and lexical stress on the temporal organization of syllables in Dutch. *Phonetica* 52: 71–89.
- (1996). Spectral balance as an acoustic correlate of linguistic stress. *Journal of the Acoustical Society of America* 100: 2471–85.

- SMILJANIĆ, RAJKA and BRADLOW, ANN R. (2007). Clear speech intelligibility: Listener and talker effects. *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, Germany.
- (2009) Speaking and hearing clearly: Talker and listener factors in speaking style changes. *Linguistics and Language Compass* 3: 236–64.
- SMIT, ANN B., FREILINGER, JOHN J., BERNTHAL, JAMES E., HAND, LINDA, and BIRD, A. (1990). The Iowa articulation norms project and its Nebraska replication. *Journal of Speech and Hearing Disorders* 55: 779–98.
- SMITH, ANNE and GOFFMAN, LISA (1998). Stability and patterning of speech movement sequences in children and adults. *Journal of Speech, Language, and Hearing Research* 41: 18–30.
- SMITH, BRUCE L. (1978). Temporal aspects of English speech production: A developmental perspective. *Journal of Phonetics* 6: 37–67.
- (1992). Relationships between duration and temporal variability in children’s speech. *Journal of the Acoustical Society of America* 91: 2165–74.
- and KENNEY, MARY KAY (1994). Variability control in speech production tasks performed by adults and children. *Journal of the Acoustical Society of America* 96: 699–705.
- and HUSSAIN, SARMAD (1996). A longitudinal investigation of duration and temporal variability in children’s speech production. *Journal of the Acoustical Society of America* 99: 2344–9.
- SMITH, CAROLINE L. (1995). Prosodic patterns in the coordination of vowel and consonant gestures, in B. Connell and A. Arvaniti (eds.), *Phonology and Phonetic Evidence*. Cambridge: Cambridge University Press, 205–22.
- SMITH, E. A., MUNSON, BENJAMIN, and HALL, KATHLEEN C. (2008). Rethinking the meaning of Minnesotan [æ]: Sexual orientation or personal well-being? Oral presentation at the conference on New Ways of Analyzing Variation (NWAV), Houston, TX. <http://www.ling.ohio-state.edu/~kchall/Smith_Munson_Hall_NWAV_2008.pdf>, accessed June 17, 2009.
- SMITH, JENNIFER, DURHAM, MERCEDES, and FORTUNE, LIANE (2007). “Mam, my trousers is fa’in doon!”: Community, caregiver, and child in the acquisition of variation in a Scottish dialect. *Language Variation and Change* 19: 63–99.
- SMITH, NEILSON V. (1973). *The Acquisition of Phonology: A Case Study*. London: Cambridge University Press.
- SMITH, RACHEL. (2004). Fine acoustic detail and context effects in spoken word recognition. Ph.D. dissertation, University of Cambridge.
- and HAWKINS, SARAH (2000). Allophonic influences on word-spotting experiments, in A. Cutler, J. McQueen, and R. Zondervan (eds.), *Proceedings of the Workshop on Spoken Word Access Processes (SWAP)*. Nijmegen: Max Planck Institute, 139–42.
- SMOLENSKY, PAUL (1996). On the comprehension/production dilemma in child language. *Linguistic Inquiry* 27: 720–31.
- and LEGENDRE, GÉRALDINE (2006). *The Harmonic Mind: From Neural Computation to Optimality-Theoretic Grammar*. Cambridge, MA: MIT Press/Bradford Books.
- SNEDEKER, JESSE and TRUESWELL, J. C. (2003). Using prosody to avoid ambiguity: Effects of speaker awareness and referential context. *Journal of Memory and Language* 48: 103–30.
- SNIDER, KEITH L. (1990). Tonal upstep in Krachi: Evidence for a register tier. *Language* 66(3): 453–74.
- (1998). Phonetic realisation of downstep in Bimoba. *Phonology* 15: 77–101.

- SNOEREN, NATALIE D., GASKELL, M. GARETH, and DI BETTA, ANNA MARIA (2009). The perception of assimilation in newly learned novel words. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 35(2): 542–9.
- SEGUI, JUAN, and HALLÉ, PIERRE A. (2008). Perceptual processing of partially and fully assimilated words in French. *Journal of Experimental Psychology: Human Perception and Performance* 34(1): 193–204.
- SO, LYDIA K. H. and DODD, BARBARA (1995). The acquisition of phonology by Cantonese-speaking children. *Journal of Child Language* 22: 473–95.
- SOAMES, SCOTT (1984). Linguistics and psychology. *Linguistics and Philosophy* 7: 155–180.
- SODERSTROM, MELANIE, MATHIS, DONALD, and SMOLENSKY, PAUL. (2006). Abstract genomic encoding of Universal Grammar in Optimality Theory, in P. Smolensky and G. Legendre. *The Harmonic Mind*. Cambridge, MA: MIT Press, 403–71.
- SOLÉ, MARIA-JOSEP (2007). Controlled and mechanical properties in speech, in M.-J. Solé, P. S. Beddor, and M. Ohala (eds.), *Experimental Approaches to Phonology*. Oxford: Oxford University Press, 302–21.
- SOMMERS, MITCHELL S., NYGAARD, LYNNE C., and PISONI, DAVID B. (1994). Stimulus variability and spoken word recognition. I. Effects of variability in speaking rate and overall amplitude. *Journal of the Acoustical Society of America* 96: 1314–24.
- VAN SON, ROB J. J. H. and POLS, LOUIS C. W. (1990). Formant frequencies of Dutch vowels in a text, read at normal and fast rate. *Journal of the Acoustical Society of America* 88: 1683–93.
- (1992). Formant movements of Dutch vowels in a text, read at normal and fast rate. *Journal of the Acoustical Society of America* 92: 121–7.
- SONG, JAE YUNG and DEMUTH, KATHERINE (2008). Compensatory vowel lengthening for omitted coda consonants: A phonetic investigation of children's early representations of prosodic words. *Language and Speech* 51: 385–402.
- SUNDARA, MEGHA, and DEMUTH, KATHERINE (2009). Phonological constraints on children's production of English third person singular *-s*. *Journal of Speech, Language, and Hearing Research* 52: 623–42.
- SORACE, ANTONELLA and KELLER, FRANK (2005). Gradience in linguistic data. *Lingua* 115(11): 1497–1524.
- SPEER, SHARI R. and ITO, KIWAKO (2009). Prosody in first language acquisition: Acquiring intonation as a tool to organize information in conversation. *Language and Linguistics Compass* 3: 90–110.
- SPELKE, ELIZABETH S. (1979). Perceiving bimodally specified events in infancy. *Developmental Psychology* 15: 626–36.
- SPENCER, JOHN, BLUMBERG, MARK, McMURRAY, BOB, ROBINSON, SCOTT, SAMUELSON, LARISSA, and TOMBLIN, J. BRUCE (2009). Short arms and talking eggs: Why we should no longer abide the nativist-empiricist debate. *Child Development Perspectives* 3(2): 79–87.
- SPINELLI, ELSA, WELBY, PAULINE, and SCHAEGIS, A. L. (2007). Fine-grained access to targets and competitors in phonemically ambiguous spoken sequences: The case of French elision. *Language and Cognitive Processes*. 22(6): 828–59.
- SPIVEY, MICHAEL J. (2007). *The Continuity of Mind*. New York: Oxford University Press.
- GROSJEAN, MARC, and KNOBLICH, GÜNTHER (2005). Continuous attraction toward phonological competitors. *Proceedings of the National Academy of Sciences* 102(29): 10393–8.
- SPROAT, RICHARD and FUJIMURA, OSAMU (1993). Allophonic variation in English /l/ and its implications for phonetic implementation. *Journal of Phonetics* 21: 291–311.

- STAGER, CHRISTINE L. and WERKER, JANET F. (1997). Infants listen for more phonetic detail in speech perception than in word-learning tasks. *Nature* 388: 381–2.
- STAMPE, DAVID (1979). *A Dissertation on Natural Phonology*. New York: Garland Press [Ph.D. dissertation, University of Chicago, 1973].
- STARK, RACHEL (1980). Stages of speech development in the first year of life, in G. Yeni-Komshian, J. Kavanagh, and C. Ferguson (eds.), *Child Phonology I: Production*. New York: Academic Press.
- STARREVELD, PETER. (2000). On the interpretation of onsets of auditory context effects in word production. *Journal of Memory and Language* 42: 497–525.
- STAUM CASASANTO, LAURA (2008). Experimental investigations of sociolinguistic knowledge. Ph.D. dissertation, Stanford University, Palo Alto, CA.
- STEDMAN, MARK (1991). Structure and intonation. *Language* 67: 260–96.
- (2000). Information structure and the syntax-phonology interface. *Linguistic Inquiry* 31: 649–89.
- STEELE, SHIRLEY (1986a). Interaction of vowel F0 and prosody. *Phonetica* 43: 92–105.
- (1986b). Nuclear accent F0 peak location: Effects of rate, vowel and number of following syllables. *Journal of the Acoustical Society of America* 80: s51.
- STEELS, LUC (1995). A self-organizing spatial vocabulary. *Artificial Life* 2(3): 319–32.
- (1997). The synthetic modeling of language origins. *Evolution of Communication* 1: 1–34.
- STEMBERGER, JOSEPH P. (1982). The nature of segments in the lexicon: Evidence from speech errors. *Lingua* 56: 235–59.
- (1991). Radical underspecification in language production. *Phonology* 8: 73–112.
- (1992). A performance constraint on compensatory lengthening in child phonology. *Language and Speech* 24: 207–18.
- and STOEL-GAMMON, CAROL (1991). The underspecification of coronals: Evidence from language acquisition and performance errors, in J. Paradis and J.-F. Prunet (eds.), *The Special Status of Coronals: Internal and External Evidence*. New York: Academic Press, 181–99.
- STEPHENS, JOSEPH D. W. and HOLT, LORI L. (submitted). A standard set of American-English voiced stop consonant stimuli from morphed natural speech.
- STERIADE, DONCA (1987). Redundant values, in *CLS 23: Parasession on Autosegmental and Metrical Phonology*. Chicago: Chicago Linguistic Society, 339–62.
- (1993). Closure, release, and nasal contours, in M. Huffman and R. Krakow (eds.), *Nasals, Nasalization, and the Velum (Phonetics and Phonology 5)*. San Diego: Academic Press, 401–70.
- (1995). Underspecification and markedness, in John Goldsmith (ed.), *Handbook of Phonological Theory*. Cambridge, MA: Blackwell, 114–74.
- (1997). Lexical conservatism, in *Linguistics in the Morning Calm, Selected Papers from SICOL 1997*. Linguistic Society of Korea, Hanshin Publishing House, 157–79.
- (1999a). Alternatives to syllable-based accounts of consonantal phonotactics, in O. Fujimura, B. D. Joseph, and B. Palek (eds.), *Proceedings of LP '98: Item Order in Language and Speech*, vol. 1. Prague: Karolinum Press, 205–45.
- (1999b). Phonetics in phonology: The case of laryngeal neutralization, in M. Gordon (ed.), *Papers in Phonology 3*, UCLA Working Papers in Linguistics 2. Los Angeles: Department of Linguistics, University of California, 25–145.

- STERIADE, DONCA (2000). Paradigm uniformity and the phonetics/phonology boundary, in M. Broe and J. Pierrehumbert (eds.), *Papers in Laboratory Phonology V: Acquisition and the Lexicon*. Cambridge: Cambridge University Press.
- (2001). Directional asymmetries in place assimilation, in E. Hume and K. Johnson (eds.), *The Role of Speech Perception in Phonology*. San Diego: Academic Press, 219–50.
- STEVENS, KENNETH N. (1971). Airflow and turbulence noise for fricative and stop consonants: Static considerations. *Journal of the Acoustical Society of America* 50(4/2): 1180–E92.
- (1972). The quantal nature of speech: Evidence from articulatory-acoustic data, in E. E. David and P. B. Denes (eds.), *Human Communication: A Unified View*. New York: McGraw-Hill, 51–66.
- (1989). On the quantal nature of speech. *Journal of Phonetics* 17: 3–45.
- (1992). Lexical access from features. Speech Communication Group Working Papers, Research Laboratory of Electronics, MIT 8, 119–44.
- (1994). Phonetic evidence for hierarchies of features, in P. A. Keating (ed.), *Phonological Structure and Phonetic Form: Papers in Laboratory Phonology III*. Cambridge: Cambridge University Press, 242–58.
- (1999). *Acoustic Phonetics*. Cambridge, MA: MIT Press.
- (2002). Towards a model for lexical access based on acoustic landmarks and distinctive features. *Journal of the Acoustical Society of America* 111: 1872–91.
- and BICKLEY, CORINE A. (1991). Constraints among parameters simplifying control of a Klatt Formant Synthesizer. *Journal of Phonetics* 19: 161–74.
- and BLUMSTEIN, SHEILA E. (1978). Invariant cues for place of articulation in stop consonants. *Journal of the Acoustical Society of America* 64: 1358–68.
- and KEYSER, SAMUEL (1989). Primary features and their enhancement in consonants. *Language* 65: 81–106.
- (2010). Quantal theory, enhancement and overlap. *Journal of Phonetics* 38: 10–19.
- STOCKMAL, VERNA, MOATES, DANNY R., and BOND, ZINNY S. (2000). Same talker, different language. *Applied Psycholinguistics* 21: 383–93.
- STOCKMAN, IDA J. (2006). Alveolar bias in the final consonant deletion patterns of African American children. *Language, Speech, and Hearing Services in Schools* 37: 85–95.
- and VAUGHN-COOKE, FAY (1989). Addressing new questions about black children's language, in R. W. Fasold and D. Schiffrin (eds.), *Language Change and Variation*. Amsterdam: John Benjamins, 274–300.
- STOEL-GAMMON, CAROL and BUDER, EUGENE H. (1999). Vowel length, post-vocalic voicing and VOT in the speech of two-year olds. *Proceedings of the 13th International Conference of Phonetic Sciences* 3: 2485–8.
- WILLIAMS, KAREN, and BUDER, EUGENE (1994). Cross-language differences in phonological acquisition: Swedish and American /t/. *Phonetica* 51: 146–58.
- STONE, MAUREEN (1995). How the tongue takes advantage of the palate during speech, in F. Bell-Berti and L. Raphael (eds.), *Producing Speech: Contemporary Issues: A Festschrift for Katherine Safford Harris*. New York: American Institute of Physics, 143–53.
- (2005). A guide to analyzing tongue motion from ultrasound images. *Clinical Linguistics and Phonetics* 19(6–7): 455–502.
- and DAVIS, EDWARD P. (1995). A head and transducer support system for making ultrasound images of tongue/jaw movement. *Journal of the Acoustical Society of America* 98(6): 3107–12.

- DOUGLAS, ANDREW S., AIVER, MORIEL N., GULLIPALLI, RAO, LEVINE, WILLIAM S., and LUNDBERG, ANDREW J. (2001). Modeling tongue surface contours from Cine-MRI images. *Journal of Speech, Language, and Hearing Research* 44: 1026–40.
- FABER, ALICE, RAFAEL, LAWRENCE, and SHAWKER, THOMAS (1992). Cross-sectional tongue shape and linguopalatal contact patterns in [s], [esh], and [l]. *Journal of Phonetics* 20(2): 253–70.
- and LUNDBERG, ANDREW (1996). Three-dimensional tongue surface shapes of English consonants and vowels. *Journal of the Acoustical Society of America* 99: 3728–37.
- and VATIKIOTIS-BATESON, ERIC (1995). Trade-offs in tongue, jaw, and palate contributions to speech production. *Journal of Phonetics* 23(1–2): 81–100.
- STORKEL, HOLLY L. (2001). Learning new words: Phonotactic probability in language development. *Journal of Speech, Language, and Hearing Research* 44: 1321–38.
- (2002). Restructuring of similarity neighbourhoods in the developing mental lexicon. *Journal of Child Language* 29: 251–74.
- (2004). The emerging lexicon of children with phonological delays: Phonotactic constraints and probability in acquisition. *Journal of Speech, Language, and Hearing Research* 47: 1194–212.
- (2006). Do children still pick and choose? The relationship between phonological knowledge and lexical acquisition beyond 50 words. *Clinical Linguistics and Phonetics* 20: 523–9.
- (2009). Developmental differences in the effects of phonological, lexical and semantic variables on word learning by infants. *Journal of Child Language* 36: 291–321.
- ARMBRUSTER, JONNA, and HOGAN, TIFFANY P. (2006). Differentiating phonotactic probability and neighborhood density in adult word learning. *Journal of Speech, Language, and Hearing Research* 49: 1175–92.
- and MORRISSETTE, MICHELE L. (2002). The lexicon and phonology: Interactions in language acquisition. *Language, Speech, and Hearing in Schools* 33: 24–37.
- STORY, BRAD H. (2005). Synergistic modes of vocal-tract articulation for American English vowels. *Journal of the Acoustical Society of America* 118: 3834–59.
- (2008). Comparison of magnetic resonance imaging-based vocal tract area functions obtained from the same speaker in 1994 and 2002. *Journal of the Acoustical Society of America* 123: 327–35.
- STRAND, ELIZABETH A. (1999). Uncovering the role of gender stereotypes in speech perception. *Journal of Language and Social Psychology* 18: 86–99.
- (2000). Gender stereotype effects in speech processing. Ph.D. thesis, Ohio State University, Columbus, OH.
- and JOHNSON, KEITH (1996). Gradient and visual speaker normalization in the perception of fricatives, in D. Gibbon (ed.), *Natural Language Processing and Speech Technology: Results of the 3rd KONVENS Conference, Bielfelt, October 1996*. Berlin: Mouton de Gruyter, 14–26.
- STRANGE, WINIFRED (1995). Cross-language studies of speech perception: A historical review, in W. Strange (ed.), *Speech Perception and Linguistic Experience: Issues in Cross-language Research*. Baltimore: York Press, 3–45.
- (2007). Cross-language phonetic similarity of vowel. Theoretical and methodological issues, in O.-S. Bohn and M. Munro (eds.), *Language Experience in Second-language Speech Learning: In honor of James Emil Flege*. Amsterdam: John Benjamins, 35–55.

- STRANGE, WINIFRED, AKAHANE-YAMADA, REIKO, KUBO, R., TRENT, S. A., and NISHI, K. (2001). Effects of consonantal context on perceptual assimilation of American English vowels by Japanese listeners. *Journal of the Acoustical Society of America* 109: 1692–704.
- and DITTMANN, S. (1984). Effects of discrimination training on the perception of /r-l/ by Japanese adults learning English. *Perception and Psychophysics* 36: 131–45.
- and JENKINS, JAMES J. (1978). Role of linguistic experience in the perception of speech, in R. D. Walk and H. L. Pick (eds.), *Perception and Experience*. New York: Plenum, 125–69.
- and JOHNSON, THOMAS L. (1983). Dynamic specification of coarticulated vowels. *Journal of the Acoustical Society of America* 74: 695–705.
- STRAUSS, ANSELM and CORBIN, JULIET (1998). *Basics of Qualitative Research*. Thousand Oaks, CA and London: Sage Publications.
- STREETER, LYNN A. (1978). Acoustic determinants of phrase boundary perception. *Journal of the Acoustical Society of America* 64: 1582–92.
- STREVENS, PETER (1960). Spectra of fricative noise in human speech. *Language and Speech* 3: 32–49.
- STROBL, CAROLIN, MALLEY, JAMES, and TUTZ, GERHARD (2009). An introduction to recursive partitioning: Rationale, application, and characteristics of classification and regression trees, bagging, and random forests. *Psychological Methods* 14: 323–48.
- STROGATZ, STEVEN H. and STEWART, IAN (1993). Coupled oscillators and biological synchronization. *Scientific American* 269(6), 102–9.
- STUART-SMITH, JANE (1999). Glasgow: accent and voice quality, in P. Foulkes and G. J. Docherty (eds.), *Urban Voices*. London: Arnold, 203–22.
- (2003). The phonology of modern urban Scots, in J. Corbett, J. D. McClure, and J. Stuart-Smith (eds.), *The Edinburgh Companion to Scots*. Edinburgh: Edinburgh University Press, 110–37.
- (2006). The influence of media on language, in C. Llamas, P. Stockwell, and L. Mullany (eds.), *The Routledge Companion to Sociolinguistics*, London: Routledge, 140–8.
- (2007a). A sociophonetic investigation of postvocalic /r/ in Glaswegian adolescents. *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, 1307.
- (2007b). Empirical evidence for gendered speech production: /s/ in Glaswegian, in J. Cole and J. I. Hualde (eds.), *Laboratory Phonology 9*. Berlin: Mouton de Gruyter, 65–86.
- and TIMMINS, CLAIRE (2006). “Tell her to shut her moof”: The role of the lexicon in TH-fronting in Glaswegian, in G. Caie, C. Hough, and I. Wotherspoon (eds.), *The Power of Words*. Amsterdam: Rodopi, 171–83.
- and TWEEDIE, FIONA (2007). “Talkin’ Jockney”?: Accent change in Glaswegian. *Journal of Sociolinguistics* 11: 221–60.
- STUDDERT-KENNEDY, MICHAEL and GOLDSTEIN, LOUIS (2003). Launching language: The gestural origin of discrete infinity, in M. H. Christiansen and S. Kirby (eds.), *Language Evolution: The States of the Art*. Oxford: Oxford University Press.
- SHANKWEILER, DONALD, and PISONI, DAVID (1972). Auditory and phonetic processes in speech perception: Evidence from a dichotic study. *Cognitive Psychology* 3: 455–66.
- STUMP, GREG and FINKEL, RAPHAEL (2009). Principal parts and degrees of paradigmatic transparency, in J. P. Blevins and J. Blevins (eds.), *Analogy in Grammar: Form and Acquisition*. Oxford: Oxford University Press, 13–53.
- SUGAHARA, MARIKO and TURK, ALICE (2009). Durational correlates of English sublexical constituent structure. *Phonology* 26: 477–524.

- SUMMERFIELD, QUENTIN (1981). Differences between spectral dependencies in auditory and phonetic temporal processing: relevance to the perception of voicing in initial stops. *Journal of the Acoustical Society of America* 72: 51–61.
- SUMMERS, VAN W. (1987). Effects of stress and final-consonant voicing on vowel production: Articulatory and acoustic analyses. *Journal of the Acoustical Society of America* 82(3): 847–63.
- SUNDARA, MEGHA, DEMUTH, KATHERINE, and KUHL, PATRICIA (2011). Sentence-position effects on children's perception and production of English 3rd person singular *-s*. *Journal of Speech, Language, and Hearing Research* 54: 55–71.
- and POLKA, LINDA (2008). Discrimination of coronal stops by bilingual adults: The timing and nature of language interaction. *Cognition* 106: 234–58.
- — and BAUM, SHARI (2006). Production of coronal stops by simultaneous bilingual adults. *Bilingualism, Language and Cognition* 9: 97–114.
- — and GENESEE, FRED (2006). Language experience facilitates discrimination of / d /-/ D/ in monolingual and bilingual acquisition of English. *Cognition* 100: 369–88.
- — and MOLNAR, MONICA (2008). Development of coronal stop perception: Bilingual infants keep pace with their monolingual peer. *Cognition* 108: 232–42.
- SUNDBERG, ULLA and LACERDA, FRANCISCO (1999). Voice Onset Time in speech to infants and adults. *Phonetica* 56: 186–99.
- SUOMI, KARI (2007). On the tonal and temporal domains of accent in Finnish. *Journal of Phonetics* 35(1): 40–55.
- MCQUEEN, JAMES M., and CUTLER, ANNE (1997). Vowel harmony and speech segmentation in Finnish. *Journal of Memory and Language* 36(3): 422–44.
- TOIVANEN, JUHANI, and YLITALO, RIIKKA (2003). Durational and tonal correlates of accent in Finnish. *Journal of Phonetics* 31: 113–38.
- — — (2008). *Finnish Sound Structure: Phonetics, Phonology, Phonotactics, and Prosody*. University of Oulu, Finland: Studia Humaniora Ouluensia 9.
- SURPRENANT, AIMÉE M. and GOLDSTEIN, LOUIS (1998). The perception of speech gestures. *Journal of the Acoustical Society of America* 104: 518–29.
- SUSSMAN, HARVEY M. and SHORE, J. (1996). Locus equations as phonetic descriptors of consonantal place of articulation. *Perception and Psychophysics* 58(6): 936–46.
- SVANTESSON, JAN-OLOF and HOUSE, DAVID (2006). Tone production, tone perception and Kammu tonogenesis. *Phonology* 23: 309–33.
- SWADESH, MORRIS (1971). *Origin and diversification of language*. Chicago: Aldine Atherton.
- SWARTZ, B. E. (1998). Timeline of the history of EEG and associated fields. *Electroencephalography and Clinical Neurophysiology* 106: 173–6.
- SWEET, HENRY (1874). *History of English Sounds*. London: Trübner.
- SWERTS, MARC and KRAHMER, EMIEL (2008). Facial expression and prosodic prominence: Effects of modality and facial area. *Journal of Phonetics* 36(2): 219–38.
- — and AVESANI, CINZIA (2002). Prosodic marking of intonation status in Dutch and Italian: A comparative analysis. *Journal of Phonetics* 30: 629–54.
- SWINGLEY, DANIEL and ASLIN, RICHARD N. (2000). Spoken word recognition and lexical representation in very young children. *Cognition* 76: 147–66.
- — (2007). Lexical competition in young children's word learning. *Cognitive Psychology* 54(2): 99–132.

- SWINGLEY, PINTO, JOHN P., and FERNALD, ANNE (1998). Assessing the speed and accuracy of word recognition in infants, in C. Rovee-Collier, L. Lipsitt, and H. Hayne (eds.), *Advances in Infancy Research*, vol. 12. Stamford, CT: Ablex.
- SYRDAL, ANN K., HIRSCHBERG, JULIA, MCGORY, JULIE, and BECKMAN, MARY E. (2001). Automatic ToBI prediction and alignment to speed manual labeling of prosody. *Speech Communication* 33: 135–51.
- SZCZEPEK-REED, BEATRICE (2006). *Prosodic Orientation in English Conversation*. Houndmills, Basingstoke: Palgrave Macmillan.
- TABAIN, MARIJA (1998). Non-sibilant fricatives in English: Spectral information above 10 kHz. *Phonetica* 55: 107–30.
- BREEN, GAVAN, and BUTCHER, ANDREW (2004). VC vs. CV syllables: A comparison of Aboriginal languages with English. *Journal of the International Phonetic Association* 34: 175–200.
- TABAK, WIEKE, SCHREUDER, ROBERT, and BAAYEN, R. HARALD (2010). Producing inflected verbs: A picture-naming study. *The Mental Lexicon* 5: 22–46.
- TABOSSI, PATRIZIA (1996). Cross-modal semantic priming. *Language and Cognitive Processes* 11: 569–76.
- TAFT, MARCUS (1981). Prefix stripping revisited. *Journal of Verbal Learning and Verbal Behaviour* 20: 289–97.
- TAGLIAMONTE, SALLY (2006). *Analysing Sociolinguistic Variation*. Cambridge: Cambridge University Press.
- and BAAYEN, R. HARALD (2010). Forests and trees of York English: *Was/were* variation as a case study for statistical practice. MS submitted for publication.
- TAKANE, YOSHIO, YOUNG, FORREST W., and DE LEEUW, JAN (1977). Nonmetric individual differences multidimensional scaling: An alternating least squares method with optimal scaling features. *Psychometrika* 42: 7–67.
- TAMARIZ, MÓNICA (2008). Exploring systematicity between phonological and context-cooccurrence representations of the mental lexicon. *Mental Lexicon* 3(2): 259–78.
- TANENHAUS, MICHAEL K., SPIVEY-KNOWLTON, MICHAEL J., EBERHARD, KATHLEEN M., and SEDIVY, JULIE C. (1995). Integration of visual and linguistic information in spoken language comprehension. *Science* 268: 1632–4.
- and TRUESWELL, JOHN C. (2005). Eye movements as a tool for bridging the language-as-product and language-as-action divide, in J. C. Trueswell and M. K. Tanenhaus (eds.), *Approaches to Studying World-Situated Language Use: Bridging the Language-as-Product and Language-as-Action Traditions*. Cambridge, MA: MIT Press.
- (2006). Eye movements and spoken language comprehension, in M. Traxler and M. Gernsbacher (eds.), *Handbook of Psycholinguistics*, 2nd edn. New York: Academic Press, Elsevier, 863–900.
- TEERANON, PHANINTRA (2007). The plausibility of tonal evolution in the Malay dialect spoken in Thailand: Evidence from an acoustic study. *Taiwan Journal of Linguistics* 5(2): 45–64.
- TELKEMEYER, SILKE, ROSSI, SONJE, KOCH, STEFAN P., NIERHAUS, TILL, STEINBRINK, JENS, POEPEL, DAVID, OBRIG, HELLMUTH, and WARTENBURGER, ISABELL (2009). Sensitivity of newborn auditory cortex to the temporal structure of sounds. *Journal of Neuroscience* 29: 14726–33.
- THIESSEN, ERIK D. (2007). The effect of distributional information on children's use of phonemic contrasts. *Journal of Memory and Language* 56: 16–34.

- HILL, EMILY A., and SAFFRAN, JENNY R. (2005). Infant-directed speech facilitates word segmentation. *Infancy* 7: 53–71.
- THOMAS, ERIK R. (2002a). Sociophonetic approaches of speech perception experiments. *American Speech* 77: 115–47.
- (2002b). Instrumental phonetics, in J. K. Chambers, P. Trudgill, and N. Schilling-Estes (eds.), *The Handbook of Language Variation and Change*. Oxford: Blackwell, 168–200.
- THOMPSON, EVAN, PALACIOS, ADRIAN, and VARELA, FRANCISCO (1992). Ways of coloring: Comparative color vision as a case study in cognitive science. *Behavioral and Brain Studies* 15: 1–74.
- THORN, ANNABEL S. C. and FRANKISH, CLIVE R. (2005). Long-term knowledge effects on serial recall of nonwords are not exclusively lexical. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 31: 729–35.
- TIEDE, MARK, BOYCE, S. E., HOLLAND, CHRISTY, and CHOE, K. ANN. (2004). A new taxonomy of American English /r/ using MRI and ultrasound. *Journal of the Acoustical Society of America* 115: 2633–4.
- TILSEN, SAMUEL (2009). Multitimescale dynamical interactions between speech rhythm and gesture. *Cognitive Science* 33: 839–79.
- TIMCKE, ROLF, VON LEDEN, HANS, and MOORE, PAUL (1958). Laryngeal vibrations: Measurements of the glottic wave. *AMA Archives of Otolaryngology* 68: 1–19.
- TOMASELLO, MICHAEL (2003). *Constructing a Language: A Usage-based Theory of Language Acquisition*. Cambridge, MA and London: Harvard University Press.
- TORREIRA, FRANCISCO, ADDA-DECKER, MARTINE, and ERNESTUS, MIRJAM (2010). The Nijmegen Corpus of Casual French. *Speech Communication* 52(3): 201–212.
- TOSCANO, JOSEPH, and McMURRAY, BOB (2010). Cue integration with categories: Weighting acoustic cues in speech using unsupervised learning and distributional statistics. *Cognitive Science* 34(3): 434–64.
- TRAGER, GEORGE L. and SMITH, HENRY L. (1951). *An Outline of English Structure*. Norman, OK: Battenburg Press.
- TRAUNMÜLLER, HARTMUT (1981). Perceptual dimension of openness in vowels. *Journal of the Acoustical Society of America* 69: 1465–75.
- TREHUB, SANDRA E. (1976). The discrimination of foreign speech contrasts by infants and adults. *Child Development* 47: 466–72.
- TREIMAN, REBECCA (1989). The internal structure of the syllable, in G. N. Carlson and M. T. Tanenhaus (eds.), *Linguistic Structure in Language Processing*. Dordrecht: Kluwer, 27–52.
- and KESSLER, BRETT (1995). In defense of an onset-rime syllable structure for English. *Language and Speech* 38: 127–42.
- KNEWASSER, STEPHANIE, TINCOFF, RUTH, and BOWMAN, MARGO (2000). English speakers' sensitivity to phonotactic patterns, in M. B. Broe and J. Pierrehumbert (eds.), *Papers in Laboratory Phonology V: Acquisition and the Lexicon*. Cambridge: Cambridge University Press, 269–82.
- TRICOMI, ELIZABETH, DELGADO, MAURICIO R., MCCANDLISS, BRUCE D., MCCLELLAND, JAY L., and FIEZ, JULIE A. (2006). Performance feedback drives caudate activation in a phonological learning task. *Journal of Cognitive Neuroscience* 18: 1029–43.
- TROCHIM, WILLIAM and DONNELLY, JAMES P. (2006). *The Research Methods Knowledge Base*, 3rd edn. Cincinnati: Atomic Dog Publishing.

- TRUBETZKOY, NICHOLAI S. (1939/1969). *Grundzuge der Phonologie*. Travaux du Cercle Linguistique de Prague 7. [English translation: C. A. M. Baltaxe (trans.), *Principles of Phonology*. Berkeley, CA: University of California Press. 1969.]
- TRUCKENBRODT, HUBERT (1995). Phonological phrases: Their relation to syntax, focus, and prominence. Ph.D. dissertation, MIT, Cambridge, MA.
- (1999). On the relation between syntactic phrases and phonological phrases. *Linguistic Inquiry* 30: 219–55.
- (2002). Upstep and embedded register levels. *Phonology* 19: 77–120.
- (2007a). Upstep on edge tones and on nuclear accents, in T. Riad and C. Gussenhoven (eds.), *Tones and Tunes*, vol. 2. Berlin: Mouton de Gruyter, 349–86.
- (2007b). The syntax-phonology interface, in Paul de Lacy (ed.), *The Cambridge Handbook of Phonology*. Cambridge: Cambridge University Press, 435–56.
- TRUDGILL, PETER (1974). *The Social Differentiation of English in Norwich*. Cambridge Studies in Linguistics 13. Cambridge: Cambridge University Press.
- (1986). *Dialects in Contact*. Oxford: Blackwell.
- TSAO, FENG-MING, LIU, HUEI-MEI, and KUHL, PATRICIA K. (2004). Speech perception in infancy predicts language development in the second year of life: A longitudinal study. *Child Development* 75: 1067–84.
- — — (2006). Perception of native and non-native affricate-fricative contrasts: Cross language tests on adults and infants. *Journal of the Acoustical Society of America* 120: 2285–94.
- TSE, JOHN (1978). Tone acquisition in Cantonese: A longitudinal case study. *Journal of Child Language* 5: 191–204.
- TSUKADA, KIMIKO, BIRDSONG, DAVID, BIALYSTOK, ELLEN, MACK, MOLLY, SUNG, H., and FLEGE, JAMES E. (2005). A developmental study of English vowel production and perception by native Korean adults and children. *Journal of Phonetics* 33: 263–90.
- BURNHAM, DENIS, LUKSANEYANAWIN, SUDAPORN, KRACHAIKIAT, NIRATASAI, and RUNGROJSUWAN, SORABUD (2004). The effect of tone on vowel duration in Thai: A developmental study. Presentation at the 9th Conference on Laboratory Phonology.
- TUCKER, BENJAMIN V. (2007). Spoken word recognition of the reduced American English flap. Ph.D. dissertation, University of Arizona.
- TULLER, BETTY (2004). Categorization and learning in speech perception as dynamical processes, in M. A. Riley and G. C. Van Orden (eds.), *Tutorials in Contemporary Nonlinear Methods for the Behavioral Sciences*. National Science Foundation. <<http://www.nsf.gov/sbe/bcs/pac/nmbs/nmbs.jsp>>.
- CASE, PAMELA, DING, MINGZHOU, and KELSO, J. A. SCOTT (1994). The nonlinear dynamics of speech categorization. *Journal of Experimental Psychology: Human Perception and Performance* 20: 3–16.
- TURK, ALICE E. (2010). Does prosodic constituency signal relative predictability? A smooth signal redundancy hypothesis. *Laboratory Phonology* 1(2): 227–62.
- and DIMITROVA, SNEZHINA (2007). English phrasal stress targets multiple, optional lengthening sites, in *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, 1177–80.
- and SAWUSCH, JAMES (1997). The domain of accentual lengthening in American English. *Journal of Phonetics* 25: 25–41.
- and SHATTUCK-HUFNAGEL, STEFANIE (2000). Word-boundary-related duration patterns in English. *Journal of Phonetics* 28: 397–440.

- (2007). Multiple targets of phrase-final lengthening in American English words. *Journal of Phonetics* 35(4): 445–72.
- and WHITE, LAURENCE (1999). Structural influences on accentual lengthening in English. *Journal of Phonetics* 27: 171–206.
- TURVEY, MICHAEL T. (1977). Preliminaries to a theory of action with reference to vision, in R. Shaw and J. Bransford (eds.), *Perceiving, Acting and Knowing: Toward an Ecological Psychology*. Hillsdale, NJ: Lawrence Erlbaum, 211–65.
- (1990). Coordination. *American Psychologist* 45: 938–53.
- TVERSKY, AMOS and GATI, ITAMAR (1982). Similarity, separability, and the triangle inequality. *Psychological Science* 89: 123–54.
- ULDALL, ELIZABETH T. (1971). Isochronous stresses in RP, in L. L. Hammerich, R. Jakobson, and E. Zwirner (eds.), *Forms and Substance: Phonetic and Linguistic Papers Presented to Eli Fischer-Jorgensen*. Copenhagen: Akademisk Forlag, 205–10.
- URBERG CARLSON, KARI, KAISER, EDEN, and MUNSON, BENJAMIN (2008). Assessment of children's speech production 2: Testing gradient measures of children's productions. Poster presented at the 2008 ASHA Convention, Chicago, 20–22. <http://www.tc.umn.edu/~munso005/Urberg-CarlsonEtAl_Final.pdf>, accessed June 14, 2009.
- VALLABHA, GAUTAM K., MCCLELLAND, JAMES L., PONS, FERRAN, WERKER, JANET F., and AMANO, SHIGEAKI (2007). Unsupervised learning of vowel categories from infant-directed speech. *Proceedings of the National Academy of Sciences* 104: 13273–8.
- VAMPOLA, TOMÁŠ, HORÁČEK, JAROMÍR, and ŠVEC, JAN G. (2008). FE modeling of human vocal tract acoustics. Part 1: Production of Czech vowels. *Acta Acustica* 94: 433–47.
- VAN DEN BROEKE, MARCEL and GOLDSTEIN, LOUIS (1980). Consonant features in speech errors, in V. Fromkin (ed.), *Errors in Linguistic Performance: Slips of the Tongue, Ear, Pen, and Hand*. New York: Academic Press.
- VAN ENGEN, KRISTIN J., BAESE-BERK, MELISSA, BAKER, RACHEL E., CHOI, ARIM, KIM, MIDAM, and BRADLOW, ANN R. (2010). The Wildcat Corpus of Native- and Foreign-Accented English: Communicative efficiency across conversational dyads with varying language alignment profiles. *Language and Speech* 53(4), 510–40.
- and BRADLOW, ANN R. (2007). Sentence recognition in native- and foreign-language multi-talker background noise. *Journal of the Acoustical Society of America* 121(1): 519–26.
- VAN GUILDER, LINDA. (2007). Cross-language perception in foreign name transcription. Ph.D. dissertation, Georgetown University.
- VAN ORDEN, GUY C. (1987). A ROWS is a ROSE: spelling, sound, and reading. *Memory and Cognition* 15: 181–98.
- VAN TURENNOUT, MIRANDA, HAGOORT, PETER, and BROWN, COLIN M. (1997). Electrophysiological evidence on the time course of semantic and phonological processes in speech production. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 23: 787–806.
- VAN WIJNGAARDEN, SANDER, STEENEKEN, HERMAN, and HOUTGAST, TAMMO (2002). Quantifying the intelligibility of speech in noise for non-native listeners. *Journal of the Acoustical Society of America* 111: 1906–16.
- VANCE, TIMOTHY (1977). Tonal Distinctions in Cantonese. *Phonetica* 34: 93–107.
- VANRELL, MARIA DEL MAR (2007). A tonal scaling contrast in Majorcan Catalan interrogatives. *Journal of Portuguese Linguistics* (special issue on Prosody of Iberian Languages, ed. G. Elordieta and M. Vigário) 6(1): 147–78.

- VASQUEZ-ALVAREZ, YOLANDA and HEWLETT, NIGEL (2007). The “trough effect”: An ultrasound study. *Phonetica* 64: 105–121.
- VAUX, BERT (2008). Why the phonological component must be serial and rule-based, in B. Vaux and A. Nevins (eds.), *Rules, Constraints, and Phonological Phenomena*. Oxford: Oxford University Press, 20–60.
- VECERA, SHAUN and O'REILLY, RANDALL (1998). Figure-ground organization and object recognition processes: An interactive account. *Journal of Experimental Psychology: Human Perception and Performance* 24(2): 441–62.
- VAN DE VELDE, HANS and VAN HOUT, ROELAND (1999). The pronunciation of (r) in Standard Dutch. *Linguistics in the Netherlands* 16: 177–88.
- VENNEMANN, THEO (1972). Phonetic analogy and conceptual analogy, in T. Vennemann and T. H. Wilbur (eds.), *Schuchardt, the Neogrammarians, and the Transformational Theory of Phonological Change: Four Essays by Hugo Schuchardt, Theo Vennemann, Terence H. Wilbur*. Linguistische Forschungen 26. Frankfurt am Main: Athenäum, 115–79.
- (1974). Phonological concreteness in Natural Generative Grammar, in R. Shuy and C.-J. N. Bailey (eds.), *Toward Tomorrow's Linguistics*. Washington DC: Georgetown University Press, 202–19.
- VESALIUS, ANDREAS (1543). *De humani corporis fabrica and [The] epitome [of Andreas Vesalius]*, Basel. *Epitome* trans. L. R. Lind. Cambridge, MA: MIT Press, 1969.
- VIGÁRIO, MARINA (2003). *The Prosodic Word in European Portuguese*. Berlin and New York: Mouton de Gruyter.
- (2009). The Prosodic Word Group as a domain of prosodic hierarchy. Paper given at the Sixth Old Conference in Phonology (OCP6), University of Edinburgh.
- and FROTA, SÓNIA (2003). The intonation of Standard and Northern European Portuguese. *Journal of Portuguese Linguistics* (special issue on Portuguese Phonology, ed. W. L. Wetzels), 2(2): 115–37.
- VIHMAN, MARILYN M. (1993). Variable paths to early word production. *Journal of Phonetics* 21: 61–82.
- (1996). *Phonological Development: The Origins of Language in the Child*. Oxford: Blackwell.
- and CROFT, WILLIAM. (2007). Phonological development: Toward a “radical” templatic phonology. *Linguistics* 45: 683–725.
- MACKEN, MARLYS, MILLER, RUTH, SIMMONS, HAZEL, and MILLER, JIM (1985). From babbling to speech: A reassessment of the continuity issue. *Language* 61: 397–445.
- and NAKAI, SATSUKI (2003). Experimental evidence for an effect of vocal experience on infant speech perception, in M.-J. Solé, D. Recasens, and J. Romero (eds.), *Proceedings of the 15th International Congress of Phonetic Sciences*, Barcelona, 1017–20.
- THIERRY, GUILLAUME, LUM, JARRAD, KEREN-PORTNOY, TAMAR, and MARTIN, PAM (2007). Onset of word form recognition in English, Welsh and English-Welsh bilingual infants. *Applied Psycholinguistics* 28: 475–93.
- and VELLEMAN, SHELLEY L. (1989). Phonological reorganization: A case study. *Language and Speech* 32: 149–70.
- (2002). The optimal initial state. Unpublished manuscript available on the Rutgers Optimality Archive, <<http://roa.rutgers.edu/index.php3>>.
- VIO, MONIQUE and COLAS, ANNIE (2006). Pitch cues for the recognition of yes-no questions in French. *Journal of Psycholinguistic Research* 35(5): 427–45.

- VITEVITCH, MICHAEL S. (1997). The neighborhood characteristics of malapropisms. *Language and Speech* 40: 211–28.
- (2002). The influence of phonological similarity neighborhoods on speech production. *Journal of Experimental Psychology: Learning, Memory and Cognition* 28(4): 735–47.
- and LUCE, PAUL A. (1998). When words compete: Levels of processing in spoken word perception. *Psychological Science* 9: 325–9.
- and RODRÍGUEZ, EVA (2005). Neighborhood density effects in spoken word recognition in Spanish. *Journal of Multilingual Communication Disorders* 3: 64–73.
- VIVIANI, PAOLO (1990). Eye movements in visual search: Cognitive, perceptual, and motor control aspects, in K. Kowler (ed.), *Eye Movements and their Role in Visual and Cognitive Processes: Reviews of Oculomotor Research*, vol. 4. Amsterdam: Elsevier, 353–93.
- VOGEL, IRENE, BUNNELL, H. TIMOTHY, and HOSKINS, STEVEN (1995). The phonology and phonetics of the Rhythm Rule, in B. Connell and A. Arvaniti (eds.), *Phonology and Phonetic Evidence: Papers in Laboratory Phonology IV*. Cambridge: Cambridge University Press, 111–27.
- VOLAITIS, LYDIA E. and MILLER, JOANNE L. (1992). Phonetic prototypes: influence of place of articulation and speaking rate on the internal structure of voicing categories. *Journal of the Acoustical Society of America* 92: 723–35.
- VROOMEN, JEAN, VAN ZON, MONIQUE, and DE GELDER, BEATRICE (1996). Cues to speech segmentation: Evidence from juncture misperceptions and wordspotting. *Memory and Cognition* 24: 744–55.
- WAALS, JULIETTE (1999). *An Experimental View of the Dutch Syllable*. The Hague: Holland Academic Graphics (UiL OTS/Utrecht University Dissertation). [LOT International Series, 18.]
- WADE, TRAVIS and HOLT, LORI L. (2005). Incidental categorization of spectrally complex non-invariant auditory stimuli in a computer game task. *Journal of the Acoustical Society of America* 118: 2618–33.
- WAGNER, MICHAEL (2002). The role of prosody in laryngeal neutralization, in A. Csirmaz, Z. Li, A. Nevins, O. Vaysman, and M. Wagner (eds.), *Phonological Answers (and their Corresponding Questions)*. MITWPL 42: 373–92.
- WAHBA, GRACE (1990). *Spline Models for Observational Data*. Philadelphia: Society of Industrial and Applied Mathematics.
- WALKER, RACHEL (1999). Guaraní voiceless stops in oral versus nasal contexts: An acoustical study. *Journal of the International Phonetic Association* 29: 63–94.
- BYRD, DANI, and MPIRANYA, FIDÈLE (2008). An articulatory view of Kinyarwanda coronal harmony. *Phonology* 25: 499–535.
- WALSH, THOMAS and PARKER, FRANK (1983). The duration of morphemic and non-morphemic /s/ in English. *Journal of Phonetics* 11: 201–6.
- WANG, D. MARILYN and BILGER, ROBERT C. (1973). Consonant confusions in noise: A study of perceptual features. *Journal of the Acoustical Society of America* 54: 1248–66.
- WANG, H. SAMUEL and DERWING, BRUCE L. (1994). Some vowel schemas in three English morphological classes: Experimental evidence, in M. Y. Chen and O. C. L. Tzeng (eds.), *In Honor of Professor William S.-Y. Wang: Interdisciplinary Studies on Language and Language Change*. Taipei: Pyramid Press, 561–75.
- WANG, YING WAI (2006). Contextual tonal variation and pitch targets in Cantonese. *Proceedings of Speech Prosody 2006. Dresden, Germany*, 317–20.

- WANG, YUE, SPENCE, MICHELLE, JONGMAN, ALLARD and SERENO, JOAN (1999). Training American listeners to perceive Mandarin tones. *Journal of the Acoustical Society of America* 106: 3649–58.
- WANROOIJ, KARIN (2009). Does distributional input improve the categorization of speech sounds? Neurobiological aspects and computer simulations. MA thesis, University of Amsterdam.
- WARD, GREGORY and HIRSCHBERG, JULIA (1985). Implicating uncertainty: The pragmatics of fall-rise intonation. *Language* 61(4): 747–76.
- WARNER, NATASHA (2003). Rapid perceptibility as a factor underlying universals of vowel inventories, in A. Carnie, H. Harley, and M. Willie (eds.), *Formal Approaches to Function in Grammar*. Amsterdam: John Benjamins, 245–61.
- (2011). Reduction, in M. van Oostendorp, C. Ewen, E. Hume, and K. Rice (eds.), *The Blackwell Companion to Phonology*. Malden, MA & Oxford: Wiley-Blackwell.
- and ARAI, TAKAYUKI (2001). The role of the mora in the timing of spontaneous Japanese speech. *Journal of the Acoustical Society of America* 109: 1144–56.
- BRENNER, DAN, WOODS, ANNA, TUCKER, BENJAMIN V., and ERNESTUS, MIRJAM (2009). Were we or are we? Perception of reduced function words in spontaneous conversations. *Journal of the Acoustical Society of America* 125: 2655 (abstract).
- FOUNTAIN, AMY, and TUCKER, BENJAMIN V. (2009). Cues to perception of reduced flaps. *Journal of the Acoustical Society of America* 125: 3317–27.
- ——— (forthcoming). Cues to perception of reduced flaps. *Journal of the Acoustical Society of America*.
- JONGMAN, ALLARD, SERENO, JOAN, and KEMPS, RACHÈL (2004). Incomplete neutralization and other sub-phonemic durational differences in production and perception: Evidence from Dutch. *Journal of Phonetics* 32: 251–76.
- WARREN, DONALD W. (1982). Aerodynamics of speech, in N. Lass, L. McReynolds, J. Northern, and D. Yoder (eds.), *Speech, Language, and Hearing* 1. Philadelphia: W. B. Saunders, 219–44.
- WARREN, PAUL (2005). Issues in the study of intonation in language varieties. *Language and Speech* 48(4): 345–58.
- HAY, JENNIFER, and THOMAS, BRYNMOR (2007). The loci of sound change effects in recognition and perception, in J. Cole and J. Hualde (eds.), *Laboratory Phonology* 9. Berlin: Mouton de Gruyter, 87–112.
- SPEER, SHARI, and SCHAFER, AMY (2003). Wanna-contraction and prosodic disambiguation in US and NZ English. *Wellington Working Papers in Linguistics* 15: 31–50.
- WARREN, RICHARD M. (1999). *Auditory Perception: A New Analysis and Synthesis*. Cambridge: Cambridge University Press.
- WASSINK, ALICIA B. (2001). Theme and variation in Jamaican vowels? *Language Variation and Change* 13(2): 135–59.
- WRIGHT, RICHARD A., and FRANKLIN, AMBER D. (2007). Speaker variability in vowel production: An investigation of motherese, hyperspeech, and Lombard speech in Jamaican speakers. *Journal of Phonetics* 35: 363–79.
- WATERSON, NATALIE (1971). Child phonology: A prosodic view. *Journal of Linguistics* 7: 179–211.
- WATSON, DUANE G., GUNLOGSON, CHRISTINE A., and TANENHAUS, MICHAEL K. (2006). Online methods for the investigation of prosody, in S. Sudhoff, D. Lenertova, R. Meyer, S. Pappert, P. Augurzky, I. Mleinek, N. Richter, and J. Schlieer (eds.), *Methods in Empirical Prosody Research*. New York: Walter de Gruyter, 259–82.

- TANENHAUS, MICHAEL K., and GUNLOGSON, CHRISTINE A. (2008). Interpreting pitch accents in online comprehension: H* vs. L+H*. *Cognitive Science* 32: 1232–44.
- WATSON, IAN (1990). Acquiring the voicing contrast in French: A comparative study of monolingual and bilingual children, in J. N. Green and W. Ayers-Bennett (eds.), *Variation and Change in French: Essays presented to Rebecca Posner on the Occasion of her Sixtieth Birthday*. London: Routledge, 37–60.
- WATSON, KEVIN (2007). Liverpool English. *Journal of the International Phonetics Association* 37(3): 351–60.
- WATT, DOMINIC and FABRICIUS, ANNE (2002). Evaluation of a technique for improving the mapping of multiple speakers' vowel spaces in the F1~F2 plane. *Leeds Working Papers in Linguistics and Phonetics* 9: 159–73.
- and INGHAM, CATHERINE (2000). Durational evidence of the Scottish Vowel Length Rule in Berwick English, *Leeds Working Papers in Linguistics and Phonetics* 8, 205–228.
- WATTS, DUNCAN J. (2002). A simple model of global cascades. *Proceedings of the National Academy of Sciences of the United States of America* 99(9): 5766–71.
- and DODDS, PETER S. (2007). Influentials, networks, and public opinion formation. *Journal of Consumer Research* 34: 441–58.
- WAUQUIER-GRAVELINES, SOPHIE (2003). Troncation et reduplication: Peut-on parler de gabarits morphologiques dans le lexique précoce?, in B. Fradin, G. Dal, M. Hathout, F. Kerleroux, M. Roché, and M. Plénat (eds.), *Les unités morphologiques. Silexicales* 3. Lille: Université de Lille III.
- WAYLAND, RATREE (1997). Non-native production of Thai: Acoustic measurements and accentedness ratings. *Applied Linguistics* 18: 345–73.
- and GUION, SUSAN (2004). Training English and Chinese listeners to perceive Thai tones: A preliminary report, *Language Learning* 54: 681–712.
- — LANDFAIR, DAVID, and LI, BIN (2006). Native Thai speakers acquisition of English word stress patterns. *Journal of Psycholinguistic Research* 35: 285–304.
- and LI, BIN (2008). Effects of two training procedures in cross-language perception of tones. *Journal of Phonetics* 36: 250–67.
- WEBB, ANDREW (1999). *Statistical Pattern Recognition*. London: Arnold (Newnes).
- WEBER, ANDREA (2008). What eye movements can tell us about spoken-language processing: A psycholinguistic survey, in C. M. Riehl (ed.), *Was ist linguistische Evidenz: Kolloquium des Zentrums Sprachenvielfalt und Mehrsprachigkeit*, November 2006. Aachen: Shaker, 57–68.
- and CUTLER, ANNE (2004). Lexical competition in non-native spoken-word recognition. *Journal of Memory and Language* 50: 1–25.
- WEDEL, ANDREW (2004). Self-organization and categorical behavior in phonology. Ph.D. thesis, University of California at Santa Cruz.
- (2006). Exemplar models, evolution and language change. *The Linguistic Review* 23: 247–74.
- (2007). Feedback and regularity in the lexicon. *Phonology* 24: 147–85.
- and VOLKINBURG, HEATHER (2009). Modeling simultaneous convergence and divergence of linguistic features between differently-identifying groups in contact. MS.
- WEIDE, ROBERT (1995). The Carnegie Mellon Pronouncing Dictionary (cmudict), technical report version 1.4, November 8, 1995.
- VAN DE WEIJER, JOOST (1998). Language input for word discovery. Doctoral dissertation, Max Planck Institute for Psycholinguistics, Nijmegen.

- WEINREICH, URIEL, LABOV, WILLIAM, and HERZOG, MARVIN (1968). Empirical foundations for a theory of language change, in W. Lehmann and Y. Malkiel (eds.), *Directions for Historical Linguistics*. Austin: University of Texas Press, 97–195.
- WEISMER, GARRY, DINNSEN, DANIEL A., and ELBERT, MARY A. (1981). A study of the voicing distinction associated with omitted, word-final stops. *Journal of Speech and Hearing Disorders* 46: 320–7.
- WELBY, PAULINE. (2003). The slaying of Lady Mondegreen, being a study of the association and alignment of French intonational rises and their role in speech segmentation. Ph.D. dissertation, Ohio State University.
- (2004). The structure of French intonational rises: A study of text-to-tune alignment, in B. Bel and I. Marlien (eds.), *Proceedings of the Conference on Speech Prosody 2004*, Nara, Japan, March 23–26, 127–30. ISCA archive, <<http://www.isca-speech.org/archive/sp2004>>.
- (2006). French intonational structure: Evidence from tonal alignment. *Journal of Phonetics* 34(3): 343–71.
- and LOEVENBRUCK, HÉLÈNE (2006). Anchored down in Anchorage: Syllable structure and segmental anchoring in French. *Italian Journal of Linguistics* 18(1) (special issue: Current Issues in Tonal Alignment, ed. M. D’Imperio): 74–124.
- WELLS, JOHN C. (1982). *Accents of English*, vol 1. Cambridge: Cambridge University Press.
- WERKER, JANET F., COHEN, LESLIE B., LLOYD, VALERIE, CASASOLA, MARIANELLA, and STAGER, CHRISTINE L. (1998). Acquisition of word-object associations by 14-month-old infants. *Developmental Psychology* 34(6): 1289–309.
- and CURTIN, SUZANNE (2005). PRIMIR: A developmental framework of infant speech processing. *Language Learning and Development* 1(2): 197–234.
- FENNELL, CHRISTOPHER T., CORCORAN, KATHLEEN M., and STAGER, CHRISTINE L. (2002). Infants’ ability to learn phonetically similar words: Effects of age and vocabulary size. *Infancy* 3: 1–30.
- GILBERT, J. V. H., HUMPHREY, K., and TEES, R. C. (1981). Developmental aspects of cross-language speech perception. *Child Development* 52: 349–55.
- and POLKA, LINDA (1993). Developmental changes in speech perception: New challenges and new directions. *Journal of Phonetics* 21: 83–101.
- — and PEGG, JUDITH E. (1998). The conditioned head-turn procedure as a method for testing infant speech perception. *Early Development and Parenting* 6 (3–4): 171–8.
- PONS, FERRAN, DIETRICH, CHRISTIANE, KAJIKAWA, SACHIYO, FAIS, LAUREL, and AMANO, SHIGEAKI (2006). Infant-directed speech supports phonetic category learning in English and Japanese. *Cognition* 103(1): 147–62.
- and STAGER, CHRISTINE (2000). Developmental changes in infant speech perception and early word learning: Is there a link?, in M. Broe and J. B. Pierrehumbert (eds.), *Papers in Laboratory Phonology V: Acquisition and the Lexicon*. Cambridge: Cambridge University Press, 181–93.
- and TEES, RICHARD C. (1984a). Cross-language speech perception: Evidence for perceptual reorganization during the first year of life. *Infant Behavior and Development* 7: 49–63.
- — (1984b). Phonemic and phonetic factors in adult cross-language speech perception. *Journal of the Acoustic Society of America* 75(6): 1866–78.
- — (1999). Influences on infant speech processing: Toward a new synthesis. *Annual Review of Psychology* 50: 509–35.

- WEST, PAULA (1999). Perception of distributed coarticulatory properties in English /l/ and /ʔ/. *Journal of Phonetics* 27: 405–26.
- WESTBURY, JOHN R. (1994). X-ray microbeam speech production database user's handbook, version 1.0, Madison, WI, <<http://www.medsch.wisc.edu/~milenkvc/pdf/ubdbman.pdf>>.
- WESTERMANN, GERT and MIRANDA, EDUARDO R. (2004). A new model of sensorimotor coupling in the development of speech. *Brain and Language* 89: 393–400.
- WHALEN, DOUG H. (1990). Coarticulation is largely planned. *Journal of Phonetics* 18: 3–35.
- ABRAMSON, ARTHUR S., LISKER, LEIGH, and MODY, MARIA (1990). Gradient effects of fundamental frequency on stop consonant voicing judgments. *Phonetica* 47(12): 36–49.
- — — (1993). F0 gives voicing information even with unambiguous voice onset times. *Journal of the Acoustical Society of America* 93: 2152–60.
- BEST, CATHERINE T., and IRWIN, JULIA R. (1997). Lexical effects in the perception and production of American English /p/ allophones. *Journal of Phonetics* 25: 501–28.
- GICK, BRYAN, KUMADA, MASANOBU, and HONDA, KIYOSHI (1999). Cricothyroid activity in high and low vowels: Exploring the automaticity of intrinsic F0. *Journal of Phonetics* 27(2): 125–42.
- ISKAROUS, KHALIL, TIEDE, MARK, OSTRY, DAVID, LEHNERT-LEHOULLIER, HEIKE, VATIKIOTIS-BATESON, ERIC, and HAILEY, DONALD (2005). The Haskins Optically Corrected Ultrasound System (HOCUS). *Journal of Speech, Language, and Hearing Research* 48(3): 543–53.
- and LEVITT, ANDREA G. (1995). The universality of intrinsic F0 of vowels. *Journal of Phonetics* 23(3): 349–66.
- — — and WANG, Q. (1991). Intonational differences between the reduplicative babbling of French- and English-learning infants. *Journal of Child Language* 18: 501–16.
- WHEELDON, LINDA R. and LEVELT, WILLEM J. M. (1995). Monitoring the time course of phonological encoding. *Journal of Memory and Language* 34: 311–34.
- and MORGAN, JANE L. (2002). Phoneme monitoring in internal and external speech. *Language and Cognitive Processes* 17: 503–35.
- and WAKSLER, RACHELLE (2004). Phonological underspecification and mapping mechanisms in the speech recognition lexicon. *Brain and Language* 90(1–3): 401–12.
- WHEELER, MAX W. (2005). Voicing contrast: Licensed by prosody or licensed by cue? MS, University of Sussex, <<http://roa.rutgers.edu/view.php3?roa=769>> [ROA-769].
- WHITE, KATHERINE S. and MORGAN, JAMES L. (2008). Sub-segmental detail in early lexical representations. *Journal of Memory and Language* 59: 114–32.
- PEPERKAMP, SHARON, KIRK, CECILIA, and MORGAN, JAMES L. (2008). Rapid acquisition of phonological alternations by infants. *Cognition* 107: 238–65.
- WHITE, LAURENCE (2002). English speech timing: A domain and locus approach. Ph.D. dissertation, University of Edinburgh.
- and MÁDY, KATALIN (2008). The long and the short and the final: Phonological vowel length and prosodic timing in Hungarian, in P. A. Barbosa et al. (eds.), *Proceedings of the Fourth Conference on Speech Prosody 2008*, May 6–9, Campinas, Brazil, 363–6.
- and MATTYS, SVEN L. (2007). Calibrating rhythm: First language and second language studies. *Journal of Phonetics* 35: 501–22.
- and TURK, ALICE E. (2010). English words on the Procrustean bed: Polysyllabic shortening reconsidered. *Journal of Phonetics* 38: 459–71.

- WICHMANN, ANNE (2000). *Intonation in Text and Discourse*. London: Longman.
- (2008). Speech corpora and spoken corpora, in A. Lüdeling and M. Kytö (eds.), *Corpus Linguistics: An International Handbook*. Berlin: Mouton de Gruyter, 187–206.
- and CAULDWELL, RICHARD (2003). Wh-questions and attitude: The effect of context, in A. Wilson, P. Rayson, and T. McEnery (eds.), *Corpus Linguistics by the Lune: A Festschrift for Geoffrey Leech*. Frankfurt am Main: Peter Lang.
- WICKELGREN, WAYNE A. (1965). Distinctive features and errors in short-term memory for English vowels. *Journal of the Acoustical Society of America* 38: 583–8.
- (1966). Distinctive features and errors in short-term memory for English consonants. *Journal of the Acoustical Society of America* 39: 388–98.
- WIENER, NORBERT (1948). *Cybernetics*. New York: John Wiley and Sons.
- WIGHTMAN, COLIN W. and OSTENDORF, MARI (1994). Automatic labeling of prosodic patterns. *IEEE Transactions on Audio, Speech and Language Processing* 2(4): 469–81.
- SHATTUCK-HUFNAGEL, STEFANIE, OSTENDORF, MARI, and PRICE, PATTI (1992). Segmental durations in the vicinity of prosodic phrase boundaries. *Journal of the Acoustical Society of America* 91: 1707–17.
- WILLERMAN, RAQUEL (1994). *The phonetics of pronouns: Articulatory bases of markedness*. Ph.D dissertation, University of Texas, Austin.
- WILLIAMS, L. (1979). The modification of speech perception and production in second-language learning. *Perception and Psychophysics* 26: 95–105.
- WILLIAMS, SARAH and HAMMARBERG, BJORN (1998). Language switches in L3 production: Implications for a polyglot speaking model. *Applied Linguistics* 19: 295–333.
- WILSHIRE, CAROLYN E. and NESPOULOUS, JEAN-LUC (2003). Syllables as units in speech production: Data from aphasia. *Brain and Language* 84: 724–47.
- WILSON, COLIN (2003). Experimental investigation of phonological naturalness, in *WCCFL* 22, ed. G. Garding and M. Tsujimura. Somerville, MA: Cascadilla Press, 533–46.
- (2006). Learning phonology with substantive bias: An experimental and computational study of velar palatalization. *Cognitive Science* 3: 945–82.
- and OBDEYN, MARIEKE (2009). Simplifying subsidiary theory: Statistical evidence from Arabic, Muna, Shona, and Wargamay. MS, Johns Hopkins University.
- WILSON, IAN (2007). The effects of post-velar consonants on vowels in Nuu-chah-nulth: Auditory, acoustic, and articulatory evidence. *Canadian Journal of Linguistics* 52(1/2): 43–70.
- WINKLER, ISTVÁN, KUJALA, TEIJA, ALKU, PAAVO, and NÄÄTÄNEN, RISTO (2003). Language context and phonetic change detection. *Cognitive Brain Research* 17: 833–44.
- — TIITINEN, HANNU, SIVONEN, PÄIVI, ALKU, PAAVO, LEHTOKOSKI, ANNE, CZIGLER, ISTVÁN, CSÉPE, VALÉRIA, ILMONIEMI, RISTO J., and NÄÄTÄNEN, RISTO (1999). Brain responses reveal the learning of foreign language phonemes. *Psychophysiology* 36: 638–42.
- WODZINSKI, SYLVIE, FRISCH, STEFAN, and STEARNS, ADRIENNE (2007). Update of research on velar stop consonant production. Talk presented at Ultrafest IV, New York University, September 2007. <http://jerome.linguistics.fas.nyu.edu/presentations/Ultrafest_IV_WFS_2007.pdf>, accessed March 15, 2009.
- WOLFRAM, WALT (1991). *Dialects and American English*. Englewood Cliffs, NJ: Prentice Hall.
- and THOMAS, ERIK (2002). *The Development of African American English*. Oxford: Blackwell.
- WOLFSON, NESSA (1976). Speech events and natural speech: Some implications for sociolinguistic methodology. *Language in Society* 5: 189–209.

- WOOD, SIDNEY A. J. (1996). Assimilation or coarticulation: Evidence from the temporal coordination of tongue gestures for the palatalization of Bulgarian alveolar stops. *Journal of Phonetics* 24: 139–64.
- WREMBEL, MAGDALENA (2007). The impact of voice quality resetting on the perception of a foreign accent in third language acquisition, in A. S. Rauber, M. A. Watkins, and B. O. Baptista (eds.), *New Sounds 2007: Proceedings of the Fifth International Symposium on the Acquisition of Second Language Speech*. Florianópolis, Brazil: Federal University of Santa Catarina, 481–91.
- WRENCH, ALAN and SCOBIE, JAMES M. (2006). Spatio-temporal inaccuracies of video-based ultrasound images of the tongue, in H. C. Yehia, D. Demolin, and R. Laboissiere (eds.), *Proceedings of the 7th International Seminar on Speech Production*. São Paulo, Brazil.
- (2008). High-speed cineloop ultrasound vs. video ultrasound tongue imaging: Comparison of front and back lingual gesture location and relative timing, in R. Sock, S. Fuchs, and Y. Laprie (eds.), *Proceedings of the 8th International Seminar on Speech Production*. Strasbourg, France, 57–60.
- WRIGHT, JAMES T. (1986). The behavior of nasalized vowels in the perceptual vowel space, in J. Ohala and J. J. Jaeger (eds.), *Experimental Phonology*. Orlando: Academic Press, 45–67.
- WRIGHT, RICHARD A. (2001). Perceptual cues in contrast maintenance, in E. Hume and K. Johnson (eds.), *The Role of Speech Perception in Phonology*. San Diego, CA: Academic Press, 251–77.
- (2003). Factors of lexical competition in vowel articulation, in R. Local, R. Ogden, and R. Temple (eds.), *Phonetic Interpretation: Papers in Laboratory Phonology VI*. Cambridge: Cambridge University Press, 75–87.
- (2004). A review of perceptual cues and cue robustness, in B. Hayes, R. Kirchner, and D. Steriade (eds.), *Phonetically Based Phonology*. Cambridge: Cambridge University Press, 34–57.
- WRIGHT, SUSAN and KERSWILL, PAUL (1989). Electropalatography in the analysis of connected speech processes. *Clinical Linguistics and Phonetics* 3: 49–57.
- XU, YI (1994). Production and perception of coarticulated tones. *Journal of the Acoustical Society of America* 95(4): 2240–53.
- (1997). Contextual tonal variations in Mandarin. *Journal of Phonetics* 25: 61–83.
- (1998). Consistency of tone-syllable alignment across different syllable structures and speaking rates. *Phonetica* 55: 179–203.
- (1999). F0 peak delay: When, where and why it occurs, in J. Ohala (ed.), *Proceedings of the 14th International Congress of Phonetic Sciences*, 1881–4.
- (2001). Fundamental frequency peak delay in Mandarin. *Phonetica* 58: 26–52.
- (2002). Articulatory constraints and tonal alignment, in B. Bel and I. Marlien (eds.), *Proceedings of the Speech Prosody 2002 Conference*, Aix-en-Provence, Laboratoire Parole et Langage, 91–100.
- (2004). Understanding tone from the perspective of production and perception. *Language and Linguistics* 5: 757–97.
- (2005). Speech melody as articulatorily implemented communicative functions. *Speech Communication* 46: 220–51.
- and SUN, XUEJUN (2002). Maximum speed of pitch change and how it may relate to speech. *Journal of the Acoustical Society of America* 111: 1399–413.
- and WANG, Q. E. (2001). Pitch targets and their realization: Evidence from Mandarin Chinese. *Speech Communication* 33: 319–37.

- XU, YI, and XU, CHING X. (2005). Phonetic realization of focus in English declarative intonation. *Journal of Phonetics* 33: 159–97.
- YAMADA, REIKO A. (1995). Age and acquisition of second language speech sounds: Perception of American English /p/ and /l/ by native speakers of Japanese, in W. Strange (ed.), *Speech Perception and Linguistic Experience: Issues in Cross-language Research*. Timonium, MD: York Press, 305–20.
- STRANGE, WINIFRED, MAGNUSON, J. S., PRUITT, J. S., and CLARKE III, W. D. (1994). The intelligibility of Japanese speakers' productions of American English /r/, /l/, and /w/, as evaluated by native speakers of American English. *Proceedings of the International Conference of Spoken Language Processing*. Yokohama: Acoustical Society of Japan, 2023–6.
- YIP, MOIRA (1989). Contour tones. *Phonology* 6: 149–74.
- (1992). Tonal register in East Asian languages, in H. van der Hulst and K. Snider, *The Phonology of Tone: The Representation of Tonal Register*. Berlin: Mouton de Gruyter, 245–68.
- (1995). Tone in East Asian languages, in J. Goldsmith (ed.), *Handbook of Phonological Theory*. Oxford: Blackwell, 476–94.
- (2001). The complex interaction of tones and prominence, in M. Kim, and U. Strauss (eds.), *Proceedings of NELS 31*. U. Mass Amherst: G.L.S.A.
- (2002). *Tone*. Cambridge: Cambridge University Press.
- (2007). Tone, in P. de Lacy (ed.), *The Cambridge Handbook of Phonology*. Cambridge: Cambridge University Press, 229–52.
- YOON, TAEJIN (2007). A predictive model of prosody through grammatical interface: A computational approach. Ph.D. dissertation, University of Illinois.
- YOON, YEO BOM and DERWING, BRUCE L. (2001). A language without a rhyme: Syllable structure experiments in Korean. *Canadian Journal of Linguistics* 46: 187–237.
- YOUNG, ROBERT and MORGAN, WILLIAM (1980, 1987) *The Navajo Language*. Albuquerque: University of New Mexico Press.
- YOUNG, STEVE, EVERMANN, GUNNAR, GALES, MARK, HAIN, THOMAS, KERSHAW, DAN, LIU, XUNYING (Andrew), MOORE, GARETH, ODELL, JULIAN, OLLASON, DAVE, POVEY, DAN, VALTCHEV, VALTCHO, and WOODLAND, PHIL (2002). *The HTK Book*. Cambridge: Cambridge University Engineering Department.
- YU, ALAN C. L. (2004). Explaining final obstruent voicing in Lezgian: Phonetics and history. *Language* 80: 73–97.
- (2006). Tonal effects on perceived vowel duration. Presentation at the 10th Conference on Laboratory Phonology, Paris.
- YUAN, JIAHONG (2004). Intonation in Mandarin Chinese: Acoustics, perception, and computational modeling. Doctoral dissertation, Cornell University, Ithaca.
- BRENIER, JASON M., and JURAFSKY, DAN (2005). Pitch accent prediction: Effects of genre and speaker, in *Proceedings of EUROSPEECH-05*. Lisbon, September, 1409–12.
- SHIH, CHILIN, and KOCHANSKI, GREG (2002). Comparison of declarative and interrogative intonation in Chinese. *Speech Prosody 2002*, Aix-en-Provence, France, 711–14.
- ZAMUNER, TANIA S. (2009). Phonological probabilities at the onset of language development: Speech production and word position. *Journal of Speech, Language, and Hearing Research* 52: 49–60.
- GERKEN, LOUANN, and HAMMOND, MICHAEL (2004). Phonotactic probabilities in young children's speech production. *Journal of Child Language* 31: 515–36.

- and OHALA, DIANE K. (1999). Preliterate children's syllabification of intervocalic consonants, in A. Greenhill, H. Littlefield, and C. Tano (eds.), *Proceedings of BUCLD 23*. Somerville: Cascadia Press, 753–63.
- ZANGL, RENATE and FERNALD, ANNE (2007). Increasing flexibility in children's online processing of grammatical and nonce determiners in fluent speech. *Language Learning and Development* 3: 199–231.
- ZANONE, PIER-GIORGIO and KELSO, J. A. SCOTT (1997). Coordination dynamics of learning and transfer: Collective and component levels. *Journal of Experimental Psychology: Human Perception and Performance* 23: 1454–80.
- ZEC, DRAGA (2007). The syllable, in P. de Lacy (ed.), *The Cambridge Handbook of Phonology*. Cambridge: Cambridge University Press, 161–94.
- ZENG, FAN-GANG (2009). Phoneme perception experiment. University of California, Irvine, Speech and Hearing Research Laboratory, <<http://www.ucihs.uci.edu/hesp/webtest/PHONEME/phonememain.htm>>, accessed March 13, 2009.
- ZERBIAN, SABINE (2007). Phonological phrasing in Northern Sotho (Bantu). *The Linguistic Review* (special issue on Prosodic Phrasing, ed. S. Frota and P. Prieto) 24: 233–62.
- ZHANG, JIALU, LÜ, SHINAN, and QI, SHIQIAN (1982). A cluster analysis of the perceptual features of Chinese speech sounds. *Journal of Chinese Linguistics* 10: 190–206.
- ZHANG, JIE (2002). *The Effects of Duration and Sonority on Contour Tone Distribution: A Typological Survey and Formal Analysis*. New York: Routledge.
- (2004). The role of contrast-specific and language-specific phonetics in contour tone distribution, in B. Hayes, R. Kirchner, and D. Steriade (eds.), *Phonetically Based Phonology*. Cambridge: Cambridge University Press, 157–90.
- ZHANG, JINSONG and HIROSE, KEIKICHI (2004). Tone nucleus modeling for Chinese lexical tone recognition. *Speech Communication* 42(3–4): 447–66.
- ZHANG, QING (2005). A Chinese yuppie in Beijing: Phonological variation and the construction of a new professional identity. *Language in Society* 34: 431–66.
- (2008). Rhotacization and the “Beijing Smooth Operator”: The social meaning of a linguistic variable. *Journal of Sociolinguistics* 12: 201–22.
- ZHANG, QINGFANG and DAMIAN, MARKUS F. (2009). The time course of segment and tone encoding in Chinese spoken production: An event-related potential study. *Neuroscience* 163: 252–65.
- — and YANG, YUFANG (2007). Electrophysiological estimates of the time course of tonal and orthographic encoding in Chinese speech production. *Brain Research* 1184: 234–44.
- — and YANG, YUFANG (2007). Electrophysiological estimates of the time course of semantic and metrical encoding in Chinese speech production. *Neuroscience* 147: 986–95.
- ZHANG, YANG, KUHL, PATRICIA K., IMADA, TOKIASHI, IVERSON, PAUL, PRUITT, JOHN, STEVENS, ERICA B., KAWAKATSU, MASAKI, TOHKURA, YOH'ICHI, and NEMOTO, IKU (2009). Neural signatures of phonetic learning in adulthood: A magnetoencephalography study. *NeuroImage* 46: 226–40.
- ZHANG, ZAOYAN, MONGEAU, LUC, and FRANKEL, STEVEN H. (2002). Broadband sound generation by confined turbulent jets. *Journal of the Acoustical Society of America* 112(2): 677–89.
- ZHAO, YUAN and JURAFSKY, DAN (2009). The effect of lexical frequency and Lombard reflex on tone hyperarticulation. *Journal of Phonetics* 37: 231–47.

- ZHARKOVA, NATALIA and HEWLETT, NIGEL (2009). Measuring lingual coarticulation from midsagittal tongue contours: Description and example calculations using English /t/ and /a/. *Journal of Phonetics* 37: 248–56.
- and HARDCASTLE, WILLIAM (2008). An ultrasound study of lingual coarticulation in children and adults, in R. Sock, S. Fuchs, and Y. Laprie (eds.), *Proceedings of the Eighth International Seminar on Speech Production*. Strasbourg, France, December 8–12, 161–4.
- ZIEGLER, JOHANNES C., PECH-GEORGEL, CATHERINE, GEORGE, FLORENCE, ALARIO, F.-XAVIER, and LORENZI, CHRISTIAN (2005). Deficits in speech perception predict language learning impairment. *Proceedings of the National Academy of Sciences* 102: 14410–15.
- ZIPE, GEORGE K. (1949). *Human Behavior and the Principle of Least Effort*. Cambridge, MA: Addison-Wesley.
- ZSIGA, ELIZABETH C. (1995). An acoustic and electropalatographic study of lexical and postlexical palatalization in American English, in B. Connell and A. Arvaniti (eds.), *Phonology and Phonetic Evidence: Papers in Laboratory Phonology IV*. Cambridge: Cambridge University Press, 282–302.
- (1997). Features, gestures, and Igbo vowels: An approach to the phonology/phonetics interface. *Language* 73: 227–74.
- (2000). Phonetic alignment constraints: Consonant overlap and palatalization in English and Russian. *Journal of Phonetics* 28: 69–102.
- and NITISAROJ, RATTIMA (2007). Tone features, tone perception, and peak alignment in Thai. *Language and Speech* 50: 343–83.
- GOUSKOVA, MARIA, and TLALE, ONE (2006). On the status of voiced stops in Tswana: Against *ND, in C. Davis, A. R. Deal, and Y. Zabbal (eds.), *NELS 36: Proceedings of the 36th Annual Meeting of the North East Linguistic Society*. Amherst, MA: GLSA.
- ZUBRITSKAYA, KATYA (1997). Mechanism of sound change in Optimality Theory. *Language Variation and Change* 9: 121–48.
- ZURAW, KIE (2000). Patterned exceptions in phonology. Ph.D. dissertation, UCLA.
- (2007). The role of phonetic knowledge in phonological patterning: Corpus and survey evidence from Tagalog. *Language* 83: 277–316.
- ZWITSERLOOD, PIENIE and MARSLEN-WILSON, WILLIAM D. (1989). The locus of the effects of sentential-semantic contexts in spoken-word processing. *Cognition* 32: 25–64.