

# Jeff Mielke

## Employment

2004 – present Postdoctoral researcher/lab manager, Arizona Phonological Imaging Laboratory (APIL)

## Education

September 2004 Ph.D. in Linguistics, The Ohio State University, Columbus, OH  
Dissertation title: “The Emergence of Distinctive Features”  
([http://www.ling.ohio-state.edu/~mielke/papers/Mielke\\_diss.pdf](http://www.ling.ohio-state.edu/~mielke/papers/Mielke_diss.pdf))

December 1999 M.A. in Linguistics, The Ohio State University, Columbus, OH

June 1997 B.A. in Japanese, University of Washington, Seattle, WA

June 1997 B.A. in Linguistics, University of Washington, Seattle, WA  
Minor in Mathematics

## Specialization

Phonological theory

Phonetics

Computational phonology

## Publications

to appear “Ambivalence and ambiguity in laterals and nasals” to appear in *Phonology* 22.2

to appear “Distinctive Features” (with Elizabeth Hume) Brown, K., ed., *Encyclopedia of Language and Linguistics* 2nd edition. Oxford: Elsevier.

to appear “Palatron: a technique for aligning ultrasound images of the tongue and palate” (with Adam Baker, Diana Archangeli, and Sumayya Racy) in Jackson, Scott and Daniel Siddiqi, eds., *Coyote Papers* vol. 14.

to appear “Emergent Feature Theory” to appear in *CLS* 41

to appear “Modeling distinctive feature emergence” to appear in *WCCFL XXIV*

to appear “Emergent features: evidence from natural classes in 561 languages” *Proceedings of WECOL 2004*.

to appear “Moving beyond innate features: a unified account of natural and unnatural classes” *Proceedings of NELS 35*.

2003 “The Interplay of Speech Perception and Phonology: Experimental Evidence from Turkish” *Phonetica* 60.3: 208-229.

- 2003 “Looking through opacity” (with Mike Armstrong and Elizabeth Hume) *Theoretical Linguistics* 29.1-2: 123-139.
- 2003 “The Diachronic Influence of Perception: Experimental Evidence from Turkish” *Proceedings of BLS* 29.
- 2002 “Turkish /h/ deletion: evidence for the interplay of speech perception and phonology” in Hirotsani, M., ed., *Proceedings of NELS* 32. Amherst, Mass.: GLSA. 383-402.
- (also appears in Hall, T.A., Bernd Pompino-Marschall, Marzena Rochon, eds., *The Articulation, Acoustics, and Perception of Consonants*, ZAS Papers in Linguistics 28, pp. 55-72)
- 2001 “Perception in phonology: the case of Turkish /h/ deletion” in Andronis, M., C. Ball, H. Elston and S. Neuvel, eds., *CLS 37: The Panels. Papers from the 37th Meeting of the Chicago Linguistic Society. Vol. 2*. Chicago: CLS. 59-72.
- 2001 “Considerations of Word Recognition for Metathesis” (with Elizabeth Hume) in Hume, E., N. Smith and J. van de Weijer, eds., *Surface Syllable Structure and Segment Sequencing*. Leiden: HIL. 135-158.
- 2001 “Explaining directional asymmetry in Turkish [h] deletion: A crosslinguistic study of perceptibility” in Hume, E. and K. Johnson, eds., *The Interplay of Speech Perception and Phonology*, OSUWPL, vol. 55: 117-171.
- 2000 Review of C. Gussenhoven and H. Jacobs (1998) *Understanding Phonology* (with Elizabeth Hume). *Phonology* 17.2: 281-286.

### Manuscripts

- dissertation “The Emergence of Distinctive Features”

### Conference presentations

- 2005 “An ultrasound study of excrescent schwa before /r/ and /l/ in English” (with Adam Baker and Diana Archangeli” Ultrafest 3, Tucson
- 2005 “Aligning tongues and palates with Palatron” (with Adam Baker, Diana Archangeli, Peter Richtsmeier, and Sumayya Racy” Ultrafest 3, Tucson
- 2005 “Tracing the tongue surface with HeurDetect/Using scan lines to make accurate time measurements” (with Adam Baker and Diana Archangeli” Ultrafest 3, Tucson
- 2005 “Pedagogical implications of ultrasound technology in the ESL classroom” (with Bryan Meadows, Gwanhi Yun, and Diana Archangeli” Ultrafest 3, Tucson
- 2005 “Emergent Feature Theory” CLS 41, Chicago
- 2005 “The emergence of (un)natural classes” GLOW Phonology Workshop, Geneva

- 2005 “Modeling distinctive feature emergence” WCCFL XXIV, Simon Fraser University.
- 2004 “Emergent features: evidence from natural classes in 561 languages” WECOL ’04, University of Southern California.
- 2004 “Moving beyond innate features: a unified account of natural and unnatural classes” NELS 35, University of Connecticut.
- 2004 “Accepting unlawful variation and unnatural classes: a model of phonological generalization” VarPhon, Potsdam.
- 2004 “What ambivalent segments can tell us about the universality of distinctive features” 2004 Annual Meeting of the LSA, Boston.
- 2004 “Reanalyzing allophonic opacity in Sea Dayak & Canadian English” (with Mike Armstrong and Elizabeth Hume) 2004 Annual Meeting of the LSA, Boston.
- 2003 “Ambivalent segments” 9th Mid-Continental Workshop on Phonology, Urbana-Champaign.
- 2003 “Reanalyzing allophonic opacity” (with Mike Armstrong and Elizabeth Hume) 9th Mid-Continental Workshop on Phonology, Urbana-Champaign.
- 2003 “Stop-stop assimilation in American English connected speech” (with Amanda Reiter) 2003 Buckeye Language Processing Conference, Columbus.
- 2003 “The Diachronic Influence of Perception: Experimental Evidence from Turkish” BLS 29, Berkeley.
- 2003 “How to explain natural classes without universal distinctive features” Montréal-Ottawa-Toronto Phonology Workshop, Toronto.
- 2003 “Step forward if you are always marked... Not so fast, [Labial].” (with Andrea Sims) Montréal-Ottawa-Toronto Phonology Workshop, Toronto.
- 2002 “Testing the P-map hypothesis” poster presented at LabPhon 8, New Haven.
- 2002 “Unmarked Labials and Optimality Theory” (with Andrea Sims) 4th International Phonology Meeting of The Research Group (GDR) in Phonology of the French National Center for Scientific Research (C.N.R.S.), Grenoble.
- 2002 “The cognitive reality of speech perception: evidence from speech production” 4th International Phonology Meeting of The Research Group (GDR) in Phonology of the French National Center for Scientific Research (C.N.R.S.), Grenoble.
- 2002 “Interplay between perceptual salience and contrast: /h/ perceptibility in Turkish, Arabic, English, and French” Second International Conference on Contrast in Phonology, Toronto.

- 2002 “Does speech perception influence phonology directly or indirectly?” poster presented at OSU CogFest, Columbus.
- 2002 “Formalizing the perception-phonology interaction: looking for evidence of the P-map in speech style variation” Montréal-Ottawa-Toronto Phonology Workshop, Montréal.
- 2001 “Turkish /h/ deletion: evidence for the interplay of speech perception and phonology” Conference On The Phonetics-Phonology Interface, Berlin, and NELS 32, New York.
- 2001 “Perception in phonology: the case of Turkish [h] deletion” CLS 37, Chicago.
- 2000, 2001 “Considerations of Word Recognition for Metathesis” (with Elizabeth Hume) Surface Syllable Structure and Segment Sequencing (S5) workshop, Leiden, and the Montréal-Ottawa-Toronto Phonology Workshop, Ottawa.
- 2000 “Explaining directional asymmetry in Turkish [h] deletion: A crosslinguistic study of perceptibility” 6th Mid-Continental Workshop on Phonology, Columbus.
- 2000 “Directional asymmetry in repair strategy application” (with Georgios Tserdanelis) 6th Mid-Continental Workshop on Phonology, Columbus.
- 2000 “The role of perceptibility in Turkish [h] deletion: A crosslinguistic study of perceptibility” Montréal-Ottawa-Toronto Phonology Workshop, Toronto.

#### **Invited talks**

- 2005 “Survey and simulation evidence for emergent features” Laboratoire de Sciences Cognitives et Psycholinguistique, Paris.
- 2004 “The emergence of distinctive features” University of Arizona.

#### **Awards and Honors**

- 2003 – 2004 Presidential Fellowship (dissertation year fellowship), The Ohio State University
- 2002 Award for best student abstract, Second International Conference on Contrast in Phonology
- 2002 William James Award for best poster presentation, OSU CogFest
- 2000 – 2001 Foreign Language and Area Studies Fellowship to study Turkish (9 months), from the Ohio State University
- 2000 Pre-dissertation research travel grant to perform perception experiments in Paris, from the Ohio State University
- 1998 – 1999 University Fellowship (first year fellowship), The Ohio State University

**Teaching Experience**

- 2005 (spring) Guest lecturer for Diane Ohala, Intro to Phonology (LIN 315, University of Arizona). This is an undergraduate introduction to phonological theory. I lectured on innateness vs. emergence of features.
- 2003 (spring) Teaching Assistant for Peter Culicover, The Basics of Learning a Language (LINGUIST 170, Ohio State). This is a new high-enrollment course for non-majors, taught for the first time in Spring 2003, which now fulfills a general education requirement. The class teaches students about language structure, culture, and strategies for language learning in order to help them to be better language learners. I designed parts of the curriculum (see also Research Experience, winter 2003 below), was responsible for all grading, wrote quiz questions, edited quizzes and put them on-line in We-bCT, created PowerPoint presentations, managed technology for lectures, and led weekly discussion sections.
- 2003 (winter) Co-instructor (with Elizabeth Hume), Phonological Theory II (LINGUIST 603.02, Ohio State). This is a graduate-level course on segmental phonology, covering Preliminaries, SPE, various approaches to Feature Geometry, Optimality Theory, and Dispersion Theory. I designed parts of the curriculum, and lectured and led discussions in half of the class meetings.
- 2003 (autumn) Substitute for Elizabeth Hume, Phonological Theory I (LINGUIST 603.01, Ohio State). This is a graduate-level introduction to phonological theory. I lectured on nonlinear phonology and Unified Feature Theory.
- 2002 (spring) Graduate Teaching Associate (full responsibility), Language Across Cultures (LINGUIST 365, Ohio State). This is an introductory sociolinguistics course primarily for non-majors with a maximum enrollment of 35, which fulfills a general education requirement and covers dialectology, language variation and change, the Sapir-Whorf hypothesis, kinship terms, language choice, code-switching, language and gender, language maintenance, shift, and death, pidgins and creoles, language planning and policy, and the sociolinguistics of sign language. I designed the entire curriculum, and created assignments, quizzes, exams, and activities.
- 2002 (autumn) Graduate Teaching Associate (full responsibility), Introduction to Language (LINGUIST 201, Ohio State) This is a survey course with a maximum enrollment of 40. primarily for non-majors, which fulfills a general education requirement and covers phonetics, phonology, morphology, syntax, pragmatics, psycholinguistics, semantics, language variation, language contact, language change, and animal communication. I designed the entire curriculum, and created assignments, quizzes , exams, and activities.
- 2002 (winter) Graduate Teaching Associate (full responsibility), Introduction to Language (LINGUIST 201, Ohio State)
- 2001 (autumn) Graduate Teaching Associate (full responsibility), Introduction to Language (LINGUIST 201, Ohio State)
- 2000 (winter) Graduate Teaching Associate (full responsibility), Introduction to Language (LINGUIST 201, Ohio State)

- 1999 (autumn) Graduate Teaching Associate (full responsibility), Introduction to Language (LINGUIST 201, Ohio State)

### Research Experience

- 2004 – present Lab manager, Arizona Phonological Imaging Laboratory (APIL), developing ultrasound research protocols and applying ultrasound imaging to questions in theoretical phonology and L1 and L2 acquisition.
- 2003 (winter) Research Assistant for Elizabeth Hume, Peter Culicover, and Keith Johnson, designing a new course, The Basics of Learning a Language (Linguistics 170). This is a new high-enrollment course for non-majors, taught for the first time in Spring 2003, which now fulfills a general education requirement. The course teaches students about language structure, culture, and strategies for language learning in order to help them to be better language learners. I designed parts of the curriculum, and designed and created a multilingual video presentation for incorporation into PowerPoint presentations.
- 2002 (summer) Research Assistant for Mark Pitt, Elizabeth Hume, and Keith Johnson, on the 2001 (summer) Variation in Conversation project, creating and aligning (with Entropics Aligner) a close phonetic transcription of 10-15% of the digitally-recorded 40-hour Buckeye Corpus of Central Ohio conversational speech.
- 2000 (spring) Research Assistant for Elizabeth Hume, working on the Metathesis Project (<http://www.ling.ohio-state.edu/~ehume/metathesis/>), maintaining and expanding an electronic database of instances of metathesis.
- 1999 (summer) Research Assistant for Elizabeth Hume and Keith Johnson, organizing the ICPhS satellite meeting on “The Role of Perception in Phonology” in San Francisco, responsible for registration, equipment, catering arrangements, and dealing with speakers, poster presenters, and other participants.
- 1997 (spring) Research Assistant for Kaoru Ohta, University of Washington Department of East Asian Languages and Literature, responsible for creating summaries of various syntax articles and data.

### Fieldwork

- Gen(gbe) phonology, morphology, syntax (especially phonemic system and VP syntax)
- Turkish phonology, phonetics
- Guizhou Mandarin phonetics, phonology

### Professional Activities and Service

- 2005 Reviewer, Journal of Linguistics
- 2005 Grand Awards Judge (Behavioral and Social Sciences), Intel International Science and Engineering Fair

2004	Reviewer, WCCFL 24
2003	assisted with revisions for the 9th edition of the Language Files (introductory linguistics textbook).
2002 – 2003	College of Humanities Curriculum Committee, OSU
2002	co-founder (with Georgios Tserdanelis) of the Columbus Funology Circle (underground phonological theory discussion group)
2001 – 2002	201/202/371 Research Experience Committee, OSU Linguistics Department. (Responsible for a program through which students in linguistics classes participate as subjects in linguistics experiments and/or attend linguistics talks)
2001 – 2002	Social chair, Student Linguistics Association, OSU
2001	assisted with revisions for the 8th edition of the Language Files (introductory linguistics textbook), including rewriting File 4.2 on phonological rules.
2000 – 2002	coach of the linguistics co-rec intramural softball “Pitch Accents”
2000 – 2001	President, Student Linguistics Association, OSU (Responsible for communication between Linguistics Department faculty and graduate students, and for participating in faculty meetings as a voting member)
1999 – 2001	Webmaster, Phonies (OSU phonetics and phonology discussion group)
1999 – 2000	Treasurer, Student Linguistics Association, OSU
1998 – 1999	Linguistics representative to the Council of Graduate Students, OSU
1998 – 1999	Conversation partner program, OSU
Prof. societies	Linguistic Society of America

### Language Proficiency

English	native
Japanese	formal coursework and immersion
Turkish	formal coursework
Finnish	formal coursework

### Academic References

Elizabeth Hume  
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Columbus, OH 43210-1298  
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**Contact information**

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