



University of Massachusetts
Amherst

Department of Linguistics

Ph.D. Program in Linguistics

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Important Information at a Glance

Specializations

Theoretical linguistics and allied fields: phonetics, phonology, morphology, syntax, semantics, psycholinguistics, and language acquisition.

Ranking

In the most recent National Research Council survey of doctoral programs, UMass Linguistics ranked #1 in quality of education and #4 in quality of faculty.

Deadline

Please send materials by January 1st to arrive at the Graduate School in time to be processed and forwarded to the Department of Linguistics by the January 15 deadline. Applications received by January 15 will be considered for admission the following September. We are unable to consider applications to enter in the Spring semester.

Degrees Offered

We offer the PhD only (and MA “along the way”). We do not offer a terminal MA. We do not require the MA for admission.

Financial Aid

Your application for admission is also an application for financial aid. If you are eligible for any fellowships (NSF, SSHRCC, Fulbright, Rotary, etc.), be sure to apply for them. All of our students receive tuition and a stipend from some source (fellowship, teaching assistantship, grant). For 2008–2009, the departmental stipend is \$18,500/year.

Required Tests

All applicants: Graduate Record Examination (GRE). International applicants whose native language is not English: Test of English as a Foreign Language (TOEFL).

The Department

Introduction

The graduate program in Linguistics at UMass Amherst focuses on educating a small number of doctoral candidates to become high level researchers in theoretical linguistics and, in most cases, teachers at the university level.

Research and training in the program are carried out almost entirely within the framework of generative grammar. Course requirements are structured to emphasize the core areas of syntax, semantics, phonetics and phonology, psycholinguistics, and language acquisition. UMass is in addition a major locus of research and teaching in morphology and Optimality Theory. Faculty and students are involved in research programs in all these areas.

The Special Character of the UMass Program

Several features combine to give the Department of Linguistics its unique character as well as its international renown as a center of research and learning in linguistic theory. Here, faculty and students share a common focus on theoretical linguistics, with strength in all its branches. At the same time, many members of the Department explore interdisciplinary connections between linguistic theory and other fields of inquiry, such as speech production and perception, philosophy of language, psychology, and cognitive science.

Very early in their graduate education, students begin pursuing original research projects, learning to evaluate different models critically. Like scientific research in any field, this is a collaborative effort in which both students and faculty participate. In the process, a great deal of learning takes place in individual interactions between a faculty member and a student, or among the students themselves.

Some students come to the graduate program with their research interests and area of specialization already firmly fixed in their minds. Other students come to us with vaguer goals and more diffuse interests. Both groups are well served by the faculty's breadth and by the program's emphasis on having students do original research in more than one area. It is not unusual to find that a student specializing in phonology has also made significant discoveries in semantics, or a student specializing in sentence processing has also done first rate research in phonology or syntax.

At the same time that they begin their careers as researchers, students also begin their careers as teachers. The department has devised a system of gradually increasing teaching responsibilities, to lay the groundwork for excellence in teaching. Students begin by apprenticing to a faculty member; later, they move

on to leading a discussion section and eventually have complete control of one of our introductory courses. A faculty member serves as consultant to the departmental teaching assistants and organizes a training seminar at the end of the spring semester.

The department's concern for preparing students for successful careers extends to other aspects of professional life as well. Beginning in the second and third year seminars (Ling 796A, 797A) and continuing through the later years of the program, students are introduced to and coached in the full range of activities that are part of being a member of the profession: writing an abstract, presenting a paper at a conference, submitting a manuscript for publication, responding to comments from editors and anonymous reviewers, and interviewing for a job.

This emphasis on preparation for research, teaching, and professional life serves our graduates very well. Many have been recruited by some of the leading universities and research institutions in the United States. These include the universities of Arizona, California, Maryland, Rochester, and Texas, Cornell, MIT, Rutgers, Stanford, and the State University of New York. Others work at research centers such as AT&T Bell Laboratories and Texas Instruments. Internationally, our graduates are employed at institutions like Osaka University, London University, the University of Edinburgh, and the University of Paris, as well as at the universities of Toronto, Québec at Montréal, British Columbia, and Ottawa.

Interdisciplinary Activities

The Department of Linguistics enjoys close relations with several other departments of the University with an interest in natural language. Graduate level work in other departments may be integrated into a program of studies, and faculty of other departments often serve as members of dissertation committees. Students may avail themselves of course offerings in Philosophy, Computer Science, Communication Disorders, Psychology, the foreign language departments, and Mathematics. Though the PhD program normally lasts five years, students whose plan of study includes a significant component of interdisciplinary work may extend to a sixth year with departmental consent.

Members of the Linguistics, Computer Science, Philosophy, and Psychology departments at the University and the other institutions of the Five College Consortium (UMass and Amherst, Hampshire, Mount Holyoke, and Smith colleges) work together in a Cognitive Science Program, which holds evening interdisciplinary seminars and colloquia during the year.

Center for the Study of African American Language

The Center for the Study of African American Language (CSAAL), directed by Prof. Lisa Green (Linguistics), fosters and integrates basic research on language in the African American community and applications of that research in educational, social, and cultural realms. It serves as a center of excellence on research on the various dimensions of African American language and also as a resource for communities across the country, with a commitment to furnishing information and training to teachers and other professionals who address issues of language and dialect used by children in school and pre school environments. The study of African American language carried out in the context of the Center includes at its core linguistic research on the dialect of English known as African American English (AAE). The Center, housed by the College of Humanities and Fine Arts, also brings together affiliated faculty from linguistics and other disciplines. For more information, see www.umass.edu/csaaal.

The Environment for Living, Studying, and Research

Located in Amherst, in the heart of the historic Pioneer Valley, the University enjoys one of the most charming natural and social environments in New England. The home of the Five Colleges, the Pioneer Valley also provides sophisticated musical, artistic, political, and recreational resources. Amherst is two hours by car from Boston, four hours from New York, and 45 minutes from the Hartford/Springfield airport, with excellent bus and train connections for domestic and international travel. Despite the proximity of these urban centers, the cost of living in the area is rather modest, and comfortable housing is within the reach of graduate students' budgets. (Detailed housing information is available at the Off Campus Housing Office, <http://www.umoch.org/>.)

A close knit community of 14 full time faculty members and about 30 graduate students, the Department is marked by an unusual degree of collegiality. Students have a direct role in departmental governance, and both students and faculty in different areas of specialization come together to attend dissertation defenses and weekly colloquia, or to audit seminar courses. "Town Meetings" of all members of the Department provide a forum where issues of general concern are discussed.

The Graduate Linguistic Student Association (GLSA), composed of all the graduate students, makes an essential contribution to the intellectual and social life of the Department. It organizes our colloquium series, bringing visiting speakers to the Department every week. Its very active publication program ensures international distribution of our students' doctoral dissertations and our working papers, the University of Massachusetts Occasional Papers in Linguistics. Each year the GLSA elects two representatives to sit as voting members at faculty meetings. Important changes in departmental

rules or procedures are often initiated by these representatives.

The departmental library, called “The Node”, aids faculty and students in their research. Ample computers and printers are available exclusively for student use in word processing and research on corpora and databases. There are also labs for Phonetics, Phonological Acquisition, Optimality Theory, as well as a Language Acquisition Center. See <http://www.umass.edu/research/> for links to these centers and lab facilities.

The Faculty

Rajesh Bhatt

Associate Professor

BTech, India Institute of Technology, 1993; PhD, University of Pennsylvania, 1999.

Syntax, semantics, mathematical linguistics, Modern Indo-Aryan.

Seth Cable

Assistant Professor

BA, Rutgers University, 2001; MS, Universiteit van Amsterdam, 2002; PhD, Massachusetts Institute of Technology, 2007.

Semantics.

Lyn Frazier

Professor

BA, University of Wisconsin, 1974; PhD, University of Connecticut, 1978.

Psycholinguistics, human sentence processing, syntax, semantics.

Lisa Green

Associate Professor

BS, Grambling State University, 1985; MA, University of Kentucky, 1987;

PhD, University of Massachusetts Amherst, 1993.

Syntax, semantics, language acquisition, African American English

Kyle B. Johnson

Professor and Graduate Program Director

BA, University of California at Irvine, 1981; PhD, Massachusetts Institute of Technology, 1985.

Syntax, semantics, comparative Germanic.

John Kingston

Professor and Director of the Phonetics Lab

BA, University of Chicago, 1976; MA, 1977; PhD, University of California at Berkeley, 1985.

Phonetics, phonology, speech perception, African and North American languages.

Angelika Kratzer

Professor

MA, University of Konstanz, 1973; PhD, 1979.

Formal semantics, syntax/semantics interface.

John McCarthy

Distinguished University Professor

AB, Harvard University, 1975; PhD, Massachusetts Institute of Technology, 1979.

Optimality Theory, phonology and phonetics, morphology, learnability, Semitic languages.

Joe Pater

Assistant Professor and Director of the Phonological Acquisition Lab

BA, Toronto, 1987; MA, Concordia, 1992; PhD, McGill, 1997.

Phonology, first and second language acquisition, developmental speech perception.

Christopher Potts

Associate Professor

BA, New York University, 1999; PhD, University of California at Santa Cruz, 2003.

Semantics, pragmatics, computational linguistics.

Thomas Roeper

Professor and Director of the Language Acquisition Center

BA, Reed College, 1965; PhD, Harvard University, 1973.

First language acquisition, morphology, syntax.

Elisabeth Selkirk

Professor, Head of Department, and Director of the Prosody Lab

BA, University of California at Berkeley, 1967; PhD, Massachusetts Institute of Technology, 1972.

Phonology, phonetics, intonation, phonology/syntax interface, morphology, Berber.

Margaret Speas

Professor and Director of Admissions

BA, Washington University, 1973; MA, Arizona, 1981; PhD, Massachusetts Institute of Technology, 1986.

Syntax, morphology, Athabaskan languages.

Ellen Woolford

Professor

BA, Rice University, 1971; PhD, Duke University, 1977

Syntax, typology, morphology.

For more information on the faculty, visit www.umass.edu/linguist/people/

Faculty Emeriti

Emmon Bach

Professor Emeritus

PhD, University of Chicago, 1959.

Semantics, syntax, morphology, Wakashan languages.

Roger Higgins

Associate Professor Emeritus

BA, Cambridge University, 1963; MPhil, Yale University, 1969; PhD, Massachusetts Institute of Technology, 1973.

Historical linguistics, historical syntax, history of English, Massachusetts, Nahuatl.

Barbara H. Partee

Distinguished University Professor of Linguistics and Philosophy Emerita

BA, Swarthmore College, 1961; PhD, Massachusetts Institute of Technology, 1965.

Formal semantics and its relation to syntax, philosophy of language, and cognitive science.

Adjunct and Allied Faculty

Shmuel Bolozky

Professor of Hebrew, Department of Judaic and Near Eastern Studies

Modern Hebrew phonology and morphology.

Vladimir Borschev

Research Professor of Linguistics; Senior Research Scientist, VINITI, Russian Academy of Sciences, Moscow

Formal semantics, computational linguistics, mathematical linguistics.

Phillip Bricker

Professor, Department of Philosophy

James E. Cathey

Professor and Chair of German and Scandinavian Studies

Germanic linguistics, Scandinavian languages, Finnish, Old Saxon.

Charles Clifton

Professor Emeritus, Department of Psychology

Language processing, sentence and discourse processing, parsing, interface of syntax and semantics.

Jill de Villiers

Professor of Psychology, Smith College
Language acquisition.

Francesco D'Introno

Professor, Department of Spanish and Portuguese
Spanish phonology and syntax.

Mark Feinstein

Professor of Linguistics, Hampshire College
Phonology.

Donald Freeman

Adjunct Professor, Founding Department Head

Richard Freyman

Associate Professor, Department of Communication Disorders
Hearing.

Jay Garfield

Doris Silbert Professor in the Humanities and Professor Philosophy
Director of the Five College Tibetan Studies in India Program, Smith College
Philosophy of language.

Kevin C. Klement

Assistant Professor, Department of Philosophy

Chisato Kitagawa

Adjunct Professor Emeritus, Asian Languages and Literatures
Japanese syntax and semantics

Andrew McCallum

Associate Professor, Department of Computer Science

Keith Rayner

Professor, Department of Psychology
Psycholinguistics, language processing.

Robert Rothstein

Adjunct Professor of Linguistics; Amesbury Professor of Judaic and Slavic
Studies and of Comparative Literature, and Adjunct Professor of Linguistics
Slavic and Yiddish linguistics, Russian, Polish.

David Samuels

Assistant Professor, Department of Anthropology

Jonathan Shaffer

Associate Professor, Department of Philosophy

Harry N. Seymour

Professor Emeritus, Department of Communication Disorders
Language disorders, first language acquisition, African-American English.

Shelley Velleman

Associate Professor, Department of Communication Disorders
Acquisition and disorders of phonology.

Rex Wallace

Professor, Department of Classics
Italic and Etruscan linguistics, Sanskrit, Indo-European.

Steven Weisler

Professor of Linguistics, Hampshire College
Semantics.

Phonetics and Phonology

Faculty and students at UMass are engaged in teaching and research that covers the full range of topics in phonetics, phonology, and their interfaces with each other and with fields as diverse as physiology, developmental psychology, morphology, and semantics. Indeed, the integration of results from disparate disciplines within the context of rigorous theories is a hallmark of phonetics and phonology in this Department.

The core faculty are John Kingston, John McCarthy, Joe Pater, and Lisa Selkirk. In his research, Kingston examines how phonetic theory, data, and methods contribute to the understanding of phonological patterns. His work focuses on how speech sounds are perceived, in particular on how the many acoustic differences between minimally contrasting speech sounds interact perceptually. The first goal of this research is to determine whether these interactions arise because particular acoustic properties integrate auditorily or if instead because the acoustic properties are produced by the same articulation. This is the first step in developing a complete model of speech-sound recognition, from the cochlea to the lexicon, and in understanding how the perception of speech sounds influences phonology. The second step is to understand how listeners use their knowledge of the grammar of their native language and the statistical properties of the lexicon to evaluate the products of auditory processing and decide what words they have heard. Advances in this direction have been made through Kingston's recent studies of similarities and differences in the perception of native vs. foreign speech sounds and speech vs. nonspeech sounds that imitate speech acoustically, and through students' studies of the effects of phonotactics and allophonic variation on speech perception. Kingston's most recent research draws all these threads together in the study of how a sound's phonetic and phonological context affects its recognition.

John McCarthy's recent books reflect his current interests. *A Thematic Guide to Optimality Theory* (Cambridge University Press, 2002) deals with foundational questions in Optimality Theory: What are its core properties? What are its main results? *Hidden Generalizations: Phonological Opacity in Optimality Theory* (Equinox, 2007) proposes a novel formalization of Optimality Theory to address phonological opacity and other problems. *Doing Optimality Theory* (Blackwell, 2008) shows McCarthy's approach to teaching Optimality Theory.

Over the years, McCarthy has published on a wide range of topics, including the phonetics and phonology of guttural consonants in Semitic, vowel harmony in northwestern Spain, the Obligatory Contour Principle, the nature of reduplication/phonology interactions, the properties of morphological templates, and the character of faithfulness constraints in Optimality Theory. One recurrent theme in his research is the study of prosodic morphology. In collaboration with Alan Prince of Rutgers University, he has applied Optimality Theory to a range of problems in prosodic morphology, working toward independent, general explanations for the properties of reduplication, root-and-pattern morphology, and other phenomena at the interface between phonology and morphology.

Joe Pater works on phonology (the sound systems of language) and on the acquisition of phonology. Pater's research in phonological theory has examined English word stress, the segmental phonologies of several Austronesian languages, and naturalistic and experimental data on first and second language acquisition. This research has explored various consequences of the ranked and violable constraints of Optimality Theory: the reduction of complex stress patterns to the interaction of basic principles; the cross-linguistic predictions of factorial typology; the analysis of phonological development as constraint ranking; a restrictive theory of exceptions. In recent work, he has been constructing a cross-linguistic typology of phonological exceptionality and addressing the learnability issues that exceptions raise. He has two main current projects. The first is a computational study of phonological typology and phonological learning in Smolensky and Legendre's (2006) Harmonic Grammar. This is funded by a faculty research grant from the University of Massachusetts, Amherst. The second is a study of gradient phonotactics that combines corpus-based, experimental and computational methods. This research is funded by a grant to Rene Kager at Utrecht University from the Dutch version of the NSF. He also works on phonology in Prince and Smolensky's (1997, 2004) Optimality Theory, and is very interested in synthesizing derivational and constraint-based phonology. Also see the Psycholinguistics & Acquisition section for other aspects of Pater's research.

Lisa Selkirk works primarily in phonological theory and on the interfaces of phonology with other components of grammar. Her work in phonological theory includes various publications on prosodic structure—syllables, stress, and prosodic phrasing—and on the nature and organization of phonological features. A long-term interest has been the relation of phonology to syntax and morphology. Recent work in morphology includes investigations into the phonology and morphosyntax of clitics and into the nature of affix classes. Her investigations of phonology at the sentence level include cross-linguistic work on the various constraint families involved in determining the representation of sentence prosody, including those appealing to morphosyntax and information structure. Current projects include research on prosodic phrasing in English through the study of intonational contours, cross-linguistic examination of the fo-cus-prominence relation, and more generally the relation between intonation and semantic and pragmatic notions. Her current work on the phonetics-phonology interface includes an articulatory investigation of syllabification in Berber in collaboration with Berber-speaking colleagues and researchers at Haskins Labs.

Students in the Department study an equally wide range of topics. The titles of some recently-completed dissertations give a sense of this range:

Contrast Preservation in Phonological Mappings (Ania Lubowicz)

Deriving Economy: Syncope in Optimality Theory (Maria Gouskova)

The Development of Phonological Categories in Children's Perception of Final Voicing in Dialects of English (Caroline Jones)

Downtrends and Post-FOCUS Intonation in Japanese (Mariko Sugahara)

The Formal Expression of Markedness (Paul de Lacy)

Gestures and Segments: Vowel Intrusion as Overlap (Nancy Hall)

Morphologically-Governed Accent in Optimality Theory (John Alderete)

Phonological Augmentation in Prominent Positions (Jennifer L. Smith)

Phonological Constraints on the Segmentation of Continuous Speech
(Cecilia Kirk)

Phonological Grammar in Speech Perception (Elliott Moreton)

Quantifying the Sonority Hierarchy (Steve Parker)

What it Means to Be a Loser: Non-optimal Candidates in Optimality Theory
(Andries Coetzee)

Many of these works grew out of informal presentations made by students at the weekly phonetics/phonology group or at HUMDRUM (an annual mini-conference on Optimality Theory bringing together students from Johns Hopkins, U Maryland, Rutgers, and UMass.)

Over the years, this Department has produced some of the leading contributors to the fields of phonetics and phonology including Janet Bing at Old Dominion University, Toni Borowsky at Sydney University, Ellen Broselow at SUNY Stony Brook, Mary Clark at the University of New Hampshire, Elan Dresher at the University of Toronto, Junko Itô, Armin Mester, and Jaye Padgett, all at UC Santa Cruz, Jean Lowenstamm at the University of Paris, Joyce McDonough at the University of Rochester, Scott Myers, at the University of Texas, Austin, and Máire Ni Chiosáin at University College, Dublin. That tradition continues; recent graduates have taken up tenure-track positions at Cambridge University, the University of Iowa, the University of Maryland, the University of Michigan, the University of North Carolina, Rutgers University, Simon Fraser University, the University of Southern California, the University of Victoria (British Columbia), and Oakland University. They have also received prestigious research awards, such as minority postdoctoral fellowships from the National Science Foundation and the Ford Foundation.

The Phonetics and Phonological Acquisition Laboratories are located in nearby Bartlett Hall. They support a busy community of faculty, advanced and beginning graduate students, and undergraduates in a congenial environment. The Phonetics Lab contains a sound-attenuated chamber for recording speech and running perceptual experiments. It is equipped with state-of-the-art workstations, personal computers, other hardware, and software needed to investigate the acoustics and perception of speech experimentally, as well as intraoral pressure and oral and nasal airflow. The Phonological Acquisition lab is equipped with a soundproof booth, audio recording equipment, and two Macintosh computers. Its primary purpose is to support research on phonological acquisition, by providing the facilities for setting up and running experiments on production and perception, and for searching computerized corpora of child speech.

The Optimality Laboratory is located in South College. It supports research on Optimality Theory. It houses an extensive library of published and unpublished works and contains Macintosh and Windows computers for word-processing, data analysis, compiling bibliographies, and similar purposes. It also serves as a meeting-place and nexus for students and faculty with interests in developing and applying OT.

Syntax

Research in syntax at UMass centers around developing the tools to discover the universal properties that determine natural language. As in the other areas of research in the department, the syntax group relies on a close working relationship among faculty and students, whose interests are largely responsible for the particular topics chosen. In recent years, some of these have included the role of the lexicon in determining syntactic structures, the typologies of Case, agreement and other determinants of grammatical functions, the role of functional categories in the syntax to semantics mapping, and the nature of interfaces between syntactic representations and those of the phonetic and semantic components. Most of this research is couched in Optimality Theory and the Minimalist Program. The core faculty members are Ellen Woolford, Peggy Speas, Kyle Johnson and Rajesh Bhatt. But the overall community includes many faculty in other areas and departments who have especially enriched the connectedness the syntax research program at UMass has to other fields. These include Lyn Frazier, Angelika Kratzer, Chisato Kitagawa, Tom Roeper, Lisa Selkirk, and Chris Potts.

Rajesh Bhatt's research focuses on the syntax-semantics interface and the comparative syntax of the Modern Indo-Aryan languages. In his work on the syntax-semantics interface, he has examined a variety of constructions that involve A-bar movement: correlative constructions, the syntax of headed relative clauses, and comparatives. Currently he is exploring the implications of syntactic congruences found in languages with correlatives between certain modification structures, since-clauses, until-clauses, and comparatives - in the relevant languages all these are realized as correlatives, suggesting the possibility that there may be substantial congruences in the semantics of these varied constructions and more generally the way individuals, times, and locations are treated by the linguistic system. The other major strand of his work involves work on comparative syntax within the Indo-Aryan languages, which represent a large body of closely-related languages where theoretical and comparative work has lagged behind descriptive work, and where possibilities abound for work on crosslinguistics as well as dialectal variation. The topics examined by him in this context include long distance agreement, ergativity, causativization, argument structure and the extent of variation within the Hindi-Urdu dialect area. A third strand of research pursued by him concerns formal universals of linguistic theory. This work is couched within the Tree Adjoining Grammar formalism and studies linguistic theories in the context of formal properties such as semilinearity, generative capacity, and expressive power.

Kyle Johnson is a specialist in comparative Germanic and is particularly well-known for his work in ellipsis phenomena (VP Ellipsis, Gapping, Pseudogapping, Sluicing, and so on). He has used these phenomena to develop an account of word-order variation in Germanic, to probe the underlying mechanisms that yield island effects, to discover the relationship between syntactic and phonetic representations and as a tool for finding the constituent meanings of phrases headed by functional categories. His research has spanned the gamut of

theoretical syntax, from the mechanisms of grammatical function changing operations to the syntax of verb movement and Case assignment. He is presently working on a phase-based account of the locality conditions that govern the binding theory.

Peggy Speas has done pioneering work in three areas: the projection of bare phrase structure, Navajo morphology and syntax, and the application of Optimality Theory to null anaphora. Her current interest is in the syntax of inflectional categories and their role in obviation, logophoricity, deixis, null anaphora and other systems of reference tracking. Her recent publications focus on the syntax of the left periphery of the clause, particularly evidential and epistemic morphemes. She has also made significant contributions to understanding the cross-linguistic constraints on inflectional morphology, the relationship between Lexical Conceptual Structure and sentential syntax, and the syntax of functional categories. She is interested in the larger questions of cognitive science involving the architecture of the language faculty and how language is related to other cognitive capacities.

Ellen Woolford is best known for her work in the emerging field of theoretical typology. Her current research focuses on the theory and typology of Case and agreement systems, especially those involving ergativity and animacy-hierarchy effects. She combines standard approaches with Optimality Theory to provide new insights into these areas. She is also working on problems where Case and agreement can shed new light on problems in other areas of syntax, including binding, locality, and argument structure. She has done fieldwork in Papua New Guinea on the grammar of the creole language, Tok Pisin, and has a substantial interest in several other language areas, particularly Bantu, Austronesian, and Native American languages. Her previous research in syntax has explored a broad range of topics, including passives, multiple objects, word order, VP internal subjects, binding, and constraints on A and A' movement.

The research directions taken by the syntax group have always been influenced by active collaboration with graduate students and thus reflect the interests and expertise of those students. Like their other colleagues at UMass, the syntax faculty devote much of their time to interactions with students, and they place great value on those interactions. We employ a team-mentoring model of advising, which engages graduate students in innovative research from the earliest stages of their training. Although students can work in any framework and are encouraged to read literature from a broad range of approaches, the philosophy at UMass is to focus on one theoretical framework in order to get students involved in original research as soon as possible. In this context, though, students are encouraged from the beginning to question what they are taught. Our shared commitment to these goals creates an atmosphere in which students can participate fully, question any and all assumptions in a productive way, and expect open-minded feedback as they develop their own ideas.

The syntax track at UMass begins with a comprehensive graduate introduction to syntax in the fall (Ling 601), which provides a firm foundation in all of the basic areas of syntax, followed by a three hour intermediate syntax course in the

spring (Ling 604), which introduces students to current issues in syntax. In the second and third years, students take the proseminar in syntax and syntax seminars on current topics, plus optional courses that combine syntax with other areas of interest including typology, field methods, morphology, acquisition, sentence processing, and the syntax/semantics interface.

Graduate student research in syntax has had an illustrious history at UMass, and continues to make important contributions that drive the field. Recent dissertation topics have included the syntax and semantics of internally-headed relative clauses (Kim 2004), the constraints on mapping from Lexical Conceptual Structure to syntactic structure (Juarros 2003), the structure and interpretation of comparatives in German and English (Lechner 1999), the structure of DP's in Bafut (Tamanji 1999), the typology and analysis of split ergativity (Isaak 2000), the syntax and interpretation of ellipsis (Schwarz 2000), and long-distance quantification in Japanese (Shimoyama 2001). The following short sample of past dissertations gives some idea of the scope and influence that UMass graduate student research has achieved and the current positions that our graduates hold:

Grimshaw, Jane (1977) *English Wh-Constructions and the Theory of Grammar*.

(Rutgers University).

Rochemont, Michael (1978) *A Theory of Stylistic Rules*. (University of British Columbia)

Finer, Daniel (1984) *The Formal Grammar of Switch Reference*. (SUNY Stony Brook)

Sells, Peter (1984) *The Syntax and Semantics of Resumptive Pronouns*. (SOAS, University of London)

Kitagawa, Yoshihisa (1986) *Subjects in Japanese and English*. (Indiana University)

Nishigauchi, Taisuke (1986) *Quantification in Syntax*. (Kobe Shoin Women's University)

Chao, Wynn (1987) *On Ellipsis*. (University of London)

Diesing, Molly (1990) *The Syntactic Roots of Semantic Partition*. (Cornell University)

Dechaine, Rosemarie (1993) *Predicates Across Categories*. (University of British Columbia)

In addition to regular seminars on current topics in syntax, students have the opportunity to meet and discuss their work and exchange ideas on important issues in syntax at regular meetings of the syntax reading group as well as at informal workshops conducted jointly with graduate students at surrounding universities. Our students regularly present papers at national and international conferences and publish their work both in those conference proceedings and in major journals.

One of the great strengths at UMass is the opportunity of doing work at the interface of syntax and other subdisciplines. Students in all areas receive excellent training in syntax, whether they specialize in syntax or not, and there are many resources and opportunities for pursuing cutting-edge research on such topics as the mapping between syntax and semantics, the acquisition of syntax, syntactic

processing, and the connection between prosody and syntax. There is significant joint work in syntax at UMass involving externally funded collaborations with members of other departments at the university, especially in communication disorders and psychology. We also maintain strong ties with syntacticians in East Asian Languages, Classics, Slavic, and Spanish and Portuguese; many students pursue research in these areas.

Semantics

UMass has been a leader in formal semantics since the earliest beginnings of the field (as “Montague Grammar”) in the early 1970’s, and our graduates are among the leading researchers and teachers in semantics all over the world. The core faculty members are Chris Potts and Angelika Kratzer. Barbara Partee, though retired, continues to maintain ties to the department in instruction and active research. They collaborate in instruction or research with several other faculty members, including Rajesh Bhatt, Lyn Frazier, Kyle Johnson, Tom Roeper, and Lisa Selkirk.

Semantics and the semantics-syntax interface have a strong presence in the graduate curriculum. After the first-year courses Ling 610 and 620, students take a proseminar offered every Fall. The pro-seminar is a transition from the first-year courses to the seminars, with a strong pedagogical component but with research topics varying from year to year. Research seminars for advanced graduate students also have varying topics and may be taught collaboratively by several faculty members.

Recent (since 2000) doctoral dissertations in semantics include the following (current affiliations are shown in parentheses):

Schwarz, Bernhard (2000) *Topics in Ellipsis*. (McGill University)

Shimoyama, Junko (2001) *Wh-Constructions in Japanese*. (McGill University)

Recent research by the faculty covers a wide range of topics. Angelika Kratzer is working on event and situation semantics, the typology of quantification strategies, conversational implicatures, and meaning and intonation. With alumna Irene Heim, Kratzer is also co-founder and co-editor of the journal *Natural Language Semantics*. The two are also authors of a recent textbook on semantics.

Christopher Potts’s early work addresses the syntax and semantics of a wide range of appositive expressions. Recently, he has been working to apply the tools and techniques of model-theoretic semantics to phenomena that appear to have a significant pragmatic component: expressive meanings, quotation, metalinguistic negation, utterance modifiers, and other constructions connected with speech-act theory. He has also published articles on the formal foundations of syntactic and phonological theories.

Barbara Partee, though recently retired, continues to be involved in teaching and research. Her activity of late has centered on collaborative projects with Russian colleagues aimed at furthering the integration of formal compositional semantics (principally Western) and lexical semantics, which is a central focus among Russian semanticists. A recently completed project focused on type-shifting and the interpretation of genitive phrases in English and Russian, and a current project (funded by NSF) concentrates on compositionality issues raised by the notorious genitive of negation construction in Russian. See <http://people.umass.edu/partee> for more information.

Emmon Bach, another emeritus faculty member, now lives in London. See <http://people.umass.edu/ebach> for information on his past and present activities.

An NSF-funded project headed by Partee, Bach, and Kratzer investigated the expression of quantification in a typologically varied range of languages, drawing on the work of numerous colleagues elsewhere and catalyzing new research by a number of scholars devoted to some of the questions we had raised. Student research assistants played a major role in the project, and several dissertations grew out of it, as well as a book, *Quantification in Natural Languages*, edited by Bach, Kratzer, Partee, and Eloise Jelinek of the University of Arizona.

The atmosphere for working on semantics at UMass is further strengthened by the frequent presence of postdoctoral and predoctoral visiting scholars. Formal and informal workshops and conferences, sometimes organized entirely by students, add to the liveliness of the research environment. Graduate students run a Semantics Reading Group which meets to discuss papers of common interest and to present their current work for feedback. An annual UMass/UConn/MIT semantics workshop facilitates the informal exchange of ideas among faculty and students at these institutions.

Opportunities for interdisciplinary work in semantics are abundant. The syntax-semantics interface is a particular strength. In addition, there are excellent relations with the Philosophy Department (Partee holds a joint appointment), and students studying semantics are encouraged to take advantage of relevant offerings in logic and the philosophy of language; a philosopher is often the outside member of a semantics dissertation committee. A number of students have, as part of their dissertation or other research, fruitfully pursued connections between semantics and psycholinguistics, in the areas of both adult processing and acquisition.

Psycholinguistics & Acquisition

Psycholinguistic training encompasses theoretical and empirical studies in language acquisition and adult sentence processing under the direction of the core faculty members, Lyn Frazier, Joe Pater, and Tom Roeper. Both areas are covered in the introductory graduate course “Psychological Foundations of Linguistic Theory” which Frazier and Roeper teach jointly. More specialized courses are also offered on particular topics in acquisition and processing. Regular evening meetings of the Five College Psycholinguistics Group draw together faculty and graduate students working in diverse areas of psycholinguistics and phonetics. They offer a forum for local psycholinguists to discuss research in progress, and they also feature visiting speakers in a setting that encourages informal discussion.

In language acquisition there is an emphasis upon bringing experimental and naturalistic data to bear upon the development of linguistic theory. Cooperation with Jill de Villiers of nearby Smith College has led to extensive work on *wh*-movement and its connections to the theory of mind and the study of deafness. Collaborative work with Harry Seymour (former chair of the Department of Communication Disorders and emeritus adjunct professor of linguistics) has led to an NIH-funded project on developing diagnostic measures that are sensitive to the distinction between authentic speech disorders and normal speech in a non-standard dialect, such as African American English. This research calls on the expertise of a number of linguistics students and faculty from a range of specializations. Other recent projects investigate how children acquire aspects of both syntax and semantics: the theory of *wh*-barriers, quantification, minimalist approaches to formal features, expletives, temporal nouns, and cognitive dimensions of possible world semantics. Experimentation and exploration of other languages is encouraged; recent examples include Spanish, German, Dutch, and Arabic.

Research in phonological acquisition is directed by Joe Pater. Pater has three on-going projects. The first is a detailed study of an extremely large computer-based corpus of phonetically transcribed child English data. These data are particularly valuable for the light they shed on phonological acquisition, as they closely follow the development of four children from their very first meaningful utterances through the emergence of complex sentences. The study of this database has also been the focus of several student projects, including collaborative publications with graduate student Adam Werle. The second project is an experimental study of the learning of artificial languages. This research allows the testing of hypotheses from phonological theory that are difficult to assess in natural language acquisition. This project also involved collaboration with Anne-Michelle Tessier. Pater’s most recent undertaking is a cross-linguistic study of the perception of assimilated clusters, in collaboration with Shinsook Lee of Hoseo University.

A Language Acquisition Center has been established to provide a laboratory and meeting-place for students and faculty from different departments. Linguistics

graduate students work there on projects in acquisition, often in collaboration with graduate students from the departments of Communication Disorders, Spanish, and Psychology. Recent dissertations on acquisition include studies on the acquisition of quantification (William Philip), variables (Ana Perez), determiner phrases and SLI (Eliane Ramos), habitual *be* in African American English (Janice Jackson), sequence of tense and point of view (Bart Hollebrandse), comparatives (Deanna Moore), and negation and topic islands (Lamya Abdul-Kareem).

In the area of adult sentence processing, there is close collaboration with the Department of Psychology, in particular with Charles Clifton and Keith Rayner. Introductory graduate psychology courses in cognitive psychology and statistics supplement the offerings in the Linguistics Department for students wishing to specialize in psycholinguistics. Joint research by Frazier, Clifton and Rayner provides opportunities for research assistants to obtain experience in laboratories specialized for conducting auditory and visual language processing studies, such as recording eye movements while people read carefully controlled sentences or texts.

In an on-going collaborative research program, Frazier, Clifton and Rayner have been developing a detailed model of syntactic processing. Recent work has extended beyond syntax proper to the syntax-prosody interface and the syntax-semantics interface. Recent dissertations in sentence processing have also explored the syntactic interfaces. They include theoretical and experimental studies of prosodic boundaries in syntactic and semantic processing in English by Amy Schafer (now at the University of Hawai'i) and in Japanese by Masako Hirotani (Carleton University), and research on prosodic and parallelism effects in the processing of ellipsis by Katy Carlson (Morehead State). Recent dissertations linking processing to the syntax-semantics interface include a study of processing Italian subject pronouns by Maria Nella Carminati (University of Dundee) and an investigation of processing tense by Mike Dickey (University of Pittsburgh), and a study of the semantics and processing of reflectives by Helen Majewski.

Morphology & Typology

UMass has a unique concentration of faculty with a research interest in morphology. John McCarthy, Joe Pater, and Lisa Selkirk have studied issues at the interface of phonology and morphology. McCarthy's work on prosodic morphology defines a range of questions about the nature of reduplication and root-and-pattern morphology, where the realization of morphological distinctions seems to be directly controlled by aspects of phonological representation. Pater's work on English stress looks at the relationship between the grammar and the lexicon. Selkirk's book *The Syntax of Words* and associated articles set out a comprehensive theory of morphological structure which offers an influential alternative to the derivationally-mediated approach of Lexical Phonology.

John McCarthy's recent books reflect his current interests. A Thematic Guide to Optimality Theory (Cambridge University Press, 2002) deals with foundational questions in Optimality Theory: What are its core properties? What are its main results? Hidden Generalizations: Phonological Opacity in Optimality Theory (Equinox, 2007) proposes a novel formalization of Optimality Theory to address phonological opacity and other problems. *Doing Optimality Theory* (Blackwell, 2008) shows McCarthy's approach to teaching Optimality Theory.

Over the years, McCarthy has published on a wide range of topics, including the phonetics and phonology of guttural consonants in Semitic, vowel harmony in northwestern Spain, the Obligatory Contour Principle, the nature of reduplication/phonology interactions, the properties of morphological templates, and the character of faithfulness constraints in Optimality Theory. One recurrent theme in his research is the study of prosodic morphology. In collaboration with Alan Prince of Rutgers University, he has applied Optimality Theory to a range of problems in prosodic morphology, working toward independent, general explanations for the properties of reduplication, root-and-pattern morphology, and other phenomena at the interface between phonology and morphology.

Though many of the faculty have done research on morphosyntax, Tom Roeper and Peggy Speas devote the greatest amount of energy to this topic. Roeper has published extensively in this field; his most important results are in the areas of implicit arguments, productive morphology, and lexical rules, and he has also been engaged in studies that connect theoretical and experimental results on the acquisition of morphology. Speas's work deals with the differences between functional and lexical categories and the ways in which syntactic structures are projected from morphologically-complex words. An area of particular attention in her research is the relation between morphology and syntax in Navajo.

Though all theoretical linguists have a commitment to the study of language typology, several of the UMass faculty have made typological and comparative study a special strength of their work. Ellen Woolford's current research focuses on Case and agreement typology. She has published on passive and object marking patterns in multiple object constructions, on the structure of VSO languages, and on constraints on *wh*-Movement, drawing on data from a wide range of languages, with a concentration on African, Native American, and Austronesian material.

Kyle Johnson's current research makes use of comparative Germanic material, and strives to connect the Verb-Object/Object-Verb divide in this family's basic word order with a variety of other syntactic differences among these languages: the pattern and scope of "Gapping" phenomena, differences in how quantificational expressions interact, the availability of Scrambling, and the placement of Subjects within clauses. The 1995 book *Quantification in Natural Languages*, edited by Emmon Bach, Angelika Kratzer, and Barbara Partee (with Eloise Jelinek) advances the important goal of enriching formal semantics by bringing greater attention to typological studies. Finally, since Optimality Theory brings with it certain inherent typological commitments, faculty working in that framework (McCarthy, Pater, Selkirk, Speas, Woolford) inevitably confront typological questions in their research.

Because his contributions to the field of linguistics have been so extensive and diverse, this is the best place to mention Emmon Bach's continuing role in the life of the Department. During his long career, Bach has published articles and books on syntax and phonology, on the languages of British Columbia, on formal problems and semantic issues in the morphology of polysynthetic languages, and on many issues and problems in semantics and its relation to syntax. Since his retirement in 1992, he has had an active, though part-time, involvement with the Department. For the last several years, he has also been teaching linguistics and co-teaching Haisla and Tsimshian in British Columbia, while continuing his fieldwork on Haisla.

Admissions & Financial Aid

Entrance Requirements

Applicants are not required to have taken any particular set of courses or to be trained in any particular discipline. Rather, they must present evidence of their ability to engage in serious study of a complex subject, such as:

- Academic work of high quality in the humanities or natural or social sciences, particularly of a more theoretical cast.
- Original research (publications, projects, etc.).
- Mastery in depth of a language or a group of languages.

Although we do not expect every applicant to have a substantial background in theoretical linguistics, we look for evidence that the decision to pursue a Ph.D. in this field is a thoughtful one, based on reading and consultation with advisers.

In making admissions decisions, we place greatest emphasis on the potential to carry out significant independent research. We therefore look most of all for an inquiring mind, for an ability to formulate precise questions and arguments, for a willingness to work in areas where fundamental theoretical principles may be called into question, and for an interest in abstract problems. We look too for the character that will sustain a student through the hard work needed to acquire the intellectual tools of the trade.

Applicants are very strongly encouraged to send a writing sample directly to the Department. The sample may be a copy of a term paper, research report, thesis, or problem sets. It need not deal with a topic in linguistics, but it should reflect the applicant's ability to pursue serious scholarly inquiry. We read these samples carefully and they greatly influence our admissions decisions.

All applicants are required by University regulations to take the Graduate Record Examination. (No GRE subject test is required.) Furthermore, University regulations require the Test of English as a Foreign Language (TOEFL) of all applicants who are not citizens of the United States and whose native language is not English. (In addition, applicants from India are required to submit TOEFL scores.)

No single factor—GRE scores, transcripts, recommendations, or writing sample—will exclude anyone from admission, nor will any single factor ensure admission. There are no quotas or formulas. In making our decisions, we look for evidence from any source of the potential to make a contribution in theoretical linguistics.

The deadline for receipt of applications at the Department is January 15 for admission the following September. When you send in your application, it is first processed by the Graduate School and may not arrive in the Department for two weeks. Therefore, we strongly recommend that you have all your materials in the mail in time to arrive by January 1. If you are applying close to the deadline, you should also send a photocopy of your application directly to the Department. The Admissions Committee makes its decisions during the months of January through March. You will be notified as soon as the Committee has made a decision about your application.

We do not accept applications for spring admission. We do not require applicants to the PhD program to have an MA. We do not consider applications for the MA degree only except under very special circumstances; inquire first.

Financial Aid

It is departmental policy that, resources permitting, all students are adequately supported for the full five years of the graduate program. For many years now, we have been completely successful in achieving this goal. This year, all of our students without other sources of financial aid are receiving a tuition waiver and a stipend of \$17,343. Additional summer support is sometimes available.

Departmental funding sources include:

- Departmental fellowships, which require no teaching and only minimal duties, are normally awarded to all incoming students without other support. These fellowships allow new students to complete their first year courses without interference from teaching or research duties.
- About half of our students are supported by teaching assistantships and associateships; they may be assigned to be a Teaching Assistant for Linguist 101 “People and their Language,” Linguist 201 “Introduction to Linguistic Theory”, or as a Teaching Associate responsible for their own section of Linguist 201. Occasionally students teach more advanced courses, such as undergraduate phonology or semantics.
- Almost half of our students are supported as research assistants on one of the current research grants.

Essential to our success in finding support for everyone has been the contribution that students themselves make by seeking sources of outside support. Therefore, applicants are strongly encouraged to apply to all available outside sources of funds:

- U.S. citizens or permanent residents may be eligible for Graduate Fellowships offered by the National Science Foundation, which supports work in linguistics. Applicants are urged to make early inquiries.
- Citizens of other countries should investigate fellowships that may be available to them, such as SSHRCC awards for Canadians or Fulbright and Rotary fellowships for citizens of other countries.

The University of Massachusetts Office of Research Affairs (Student Section), 517 Goodell, can help. Call them at (413) 545-3428.

Your application for admission, if submitted on time, is also an application for financial aid. Please inform us at any point if you are successful in obtaining outside support.

Structure of the PhD Program

Overview

The structure of our degree program is determined, to a great extent, by our goal of helping students become skilled theoretical linguists capable of outstanding independent research. We therefore try to keep formal requirements to a minimum, to allow each student the greatest opportunity to concentrate on such research. Nevertheless, we recognize that this sort of freedom carries with it the responsibility to keep close track of the progress of each student, and we therefore provide a number of mechanisms for advising students.

Course Requirements

During their first year, students are normally expected to take the following program of courses:

Fall Semester

- 601 Introduction to Transformational Grammar
- 603 Generative Phonology
- 610 Semantics and Generative Grammar

Spring Semester

- 604 Syntactic Theory
- 606 Phonological Theory

Students who arrive with a significant background may sometimes be permitted to opt out of one or two of these courses; this determination is made at the beginning of the semester by the instructor and the Graduate Program Director. Nevertheless, we encourage even these students to audit the courses for two reasons. One is simply that similarly titled courses at different universities are seldom exactly the same. More importantly, students admitted together develop a valuable esprit de corps from taking their courses together, which in turn benefits both departmental life and the students themselves.

During the first two years, students are also expected to take three out of the following five courses:

- 605 Language Change and Language Typology
- 611 Psychological Background to Linguistic Theory
- 620 Formal Semantics
- 614 Introduction to Phonetic Theory
- 748 Structure of a Non-Indo-European Language (Field Linguistics)

In their second year, many students also choose to take Linguistics 720 Proseminar in Semantics and Linguistics 730 Proseminar in Phonology. More advanced students have a choice of seminar-level courses in different areas of linguistic theory. Descriptions of some recent offerings can be found at the back of this brochure.

Research Requirements

During their fourth and fifth semesters, students prepare a portfolio of two substantial papers in different areas of linguistic theory to demonstrate that they are fully qualified to begin dissertation research. Each paper is written in consultation with various faculty members, and while writing the paper a student registers for a seminar where he or she can present and discuss the work with peers. Students thus learn about each other's work and gain useful experience in oral presentation of research. Many general papers lead to lectures at scientific meetings or publications in the major journals of the field.

From the fourth semester until dissertation research begins, each student's progress is reviewed by a Doctoral Guidance Committee consisting of the principal adviser for each general paper and a third member appointed by the Graduate Program Director. At the end of each semester, the Doctoral Guidance Committee meets with the student to provide continuing advice and supervision in planning a course of study before embarking on dissertation research. The Doctoral Guidance Committee also approves the completed general papers.

During the fourth and fifth years, students select a topic and prepare a dissertation. The dissertations completed in this Department enjoy very wide circulation thanks to the efforts of the Graduate Linguistic Student Association (GLSA), which publishes and sells them internationally.

Teaching Requirement

Since most people holding a Ph.D. in linguistics become university teachers, it is important for a graduate program to set up a framework within which teaching skills can be developed. The Department therefore requires that every student acquire some teaching experience, either through faculty/student team teaching or by being responsible for teaching a section of one of our introductory courses. In addition, most seminars are structured in such a way as to provide maximum student responsibility and opportunity for classroom participation.

The typical graduate student begins preparation for a teaching career by apprenticing with a faculty member teaching introductory linguistics (either Ling 101 "People and their Language" or Ling 201 "Introduction to Linguistic Theory"). The student is gradually prepared to take on greater responsibility and to teach independently. This may involve leading discussion sections of Ling 101 or teaching a section of Ling 201. Ling 201 is the ultimate responsibility, which nearly all of our students undertake. Graduate student instructors in Ling 201, called "teaching associates," have almost complete control over the content, evaluation, and instructional methods for a 30-student section of this course. Needless to say, this experience is essential preparation for an academic career.

Courses

601 Introduction to Syntactic Theory (4 credits)

This course is an intensive introduction to the concepts of generative syntax. In-depth survey of problems, methods, and results of research, with emphasis on different types of syntactic evidence and argument. Course work includes problem sets and readings.

603 Introduction to Phonological Theory (4 credits)

An introduction to contemporary phonological theory, covering topics such as syllable structure, stress, prosodic morphology, learnability, and acquisition. Throughout, there is emphasis on analyzing phonological data and on understanding the properties of a theory and the consequences that can be deduced from it. Requirements include problem sets and a short term paper.

604 Syntactic Theory II

This course continues an examination of the topics raised and discussed in 601, with greater attention to the current literature and to a comparison of competing hypotheses. The interaction between syntax and morphology, semantics, phonology and typological studies are examined. Requirements include brief written critiques, periodic problem sets, and a short term paper.

605 Language Typology

Examination of syntactic and morphological resemblances and differences among languages from a theoretical perspective.

606 Phonological Theory II

This course continues the work of LING 603, but with a shift in emphasis from acquiring basic skills to using them to evaluate and construct theories. The course is structured around two main topics, each of which is explored in depth: segmental phonology, including harmony, neutralization, and other processes; and the interface of phonology with other grammatical components, including phonetics, morphology, the lexicon, and the syntax. Requirements include shorter exercises and a final term paper.

610 Introduction to Formal Semantics (4 credits)

This is an introduction to the goals, methods and tools of formal semantics. We will cover basic formal tools such as propositional logic, first order predicate logic, and type theory, and investigate the treatment of some core natural language phenomena, including definite and indefinite descriptions, relative clauses, generalized quantifiers, and bound variable and other interpretations of pronouns. Emphasis will be placed on the development of the skills required for semantic argumentation and analysis. While English will be the main language from which data is drawn, we will occasionally examine data from unrelated languages.

Throughout the course we will keep an eye on the relationship between semantics and pragmatics, and the interfaces of semantics with syntax and with issues in the philosophy of language. Requirements: Homework exercises, readings. Textbook: Heim and Kratzer, *Semantics in Generative Grammar*. Optional textbooks: Partee, ter Meulen, and Wall, *Mathematical Methods in Linguistics*, and Martinich, *The Philosophy of Language*.

611 Psychological Background to Linguistic Theory

This introduction to psycholinguistics is designed to explore the basic psychological foundations of linguistic theory while simultaneously introducing students to the central ideas in contemporary studies of language acquisition and parsing. The course reviews the competence/performance distinction, modularity, theory-internal vs. external explanation, phrase structure parsing, empty category identification, evaluation metrics and parameter-setting theories of acquisition. Students will be exposed to experimental approaches to linguistic and psycholinguistic questions.

614 Introduction to Phonetic Theory

This course looks at how speech sounds are pronounced, what they sound like, and how they are perceived. These studies of speech production, acoustics, and perception have two goals: (1) to develop a principled theory of the phenomena, as in other linguistic disciplines; and (2) to understand what this theory tells us about the phonological patterns sounds enter into. The course is given in two parts. The first establishes essential foundations for understanding speech production, acoustics, and perception. In the second, more or less complete models of speaking and listening are developed. A key part of the student's work for the course is running experiments in the Phonetics Laboratory that illustrate some of the phenomena discussed in the course.

620 Formal Semantics II

An introduction to typed and intensional languages and their applications in linguistics. Topics include Montague's intensional logic and his "The Proper Treatment of Quantification in Ordinary English"; type-driven interpretation; generalized quantifiers; "donkey anaphora", discourse representation theory, and "dynamic" approaches to meaning; the semantics of focus; meaning postulates and lexical semantics. Continuing (from LING 610) emphasis on how the principle of compositionality relates to the organization of grammar.

702 Introduction to the Study of an Unfamiliar Language

Investigation, with the aid of an informant, of the structure of an unfamiliar language and of specific analytical problems it presents. Relevance of these to universal grammar.

711 Psycholinguistics: Language Acquisition

(*Description changes from year to year.*) This seminar will have three different emphases: the scope they each have depends upon the interests of the students: acquisition theory, the new data from 1,000 children in the Dialect Sensitive Language Test, and ongoing experimentation in first or second language acquisition.

Acquisition Theory: What is the role of recursion in acquisition and how does it appear in different structures (recursive compounds, complementation, Determiner-Spreading, Point-of-View Operators). How much diversity in recursive structures exists across languages and therefore what is the acquisition challenge?

Second we will examine how the distinction between recursive and non-recursive rules relates to the question of how far all people maintain Multiple Grammars. Is recognition of recursion a fundamental distinction between lexically defined rules and syntactic rules (see Juarros (in preparation))? We will address the recent work by Charles Yang and Heiner Drenhaus on Multiple Grammars and also read historical work by Anthony Kroch and Taylor on the topic.

Third, we will extend this discussion of Multiple Grammars to deal with a recent controversy between Rizzi, Schutze, and Roeper over *do*-insertion and the presence of “he don’t” and the absence of “he do” in child grammar. The issue pertains to the question of whether there is an independent Agreement node in the grammar, whether Feature-checking is responsive to depth of embedding, and whether the notion of Underspecification is useful in describing early grammars (see Hyams (1996), Schutze (2001), Roeper (1996)).

New Data: the results of 14 subtests on passive, *wh*-movement, quantification, paired questions, articles, agreement morphology, etc provide a rich source of empirical data and many “verbatim” responses that are of interest. We will see how far we can bring theoretical analysis to this database. This is an exciting, but unpredictable domain for exploration. We will learn the techniques needed to explore the data (at least some of them) and see where it goes.

New Experimentation: the remainder of the course will focus on various recent experiments in the department on comparatives, *there*-insertion, and ellipsis and whatever experimentation may be of interest to the participants.

712 Psycholinguistics: The Perception of Linguistic Form

Seminar course in adult psycholinguistics. Topics vary from year to year. The first part of the course will be devoted to recent papers on a variety of topics selected to highlight distinct models of sentence processing or to highlight issues of importance to both linguistic theory and theories of sentence processing. The second part of the course will focus on a single issue, such as the processing of moved constituents.

716 Topics in Phonetics

The purpose of this course is to prepare interested students who have taken Linguistics 614, Introduction to Phonetic Theory, for advanced, independent

research in phonetics and its relationship to phonology. It thus serves the same purpose as the proseminars in the other disciplines. Topics will vary from offering to offering; in this inaugural meeting, we will consider two topics in depth. The first is modern functional approaches to the explanation of phonological patterns, which include work by Steriade, Kirchner, Flemming, and Boersma. The second topic is context effects on phoneme recognition, that is, the way in which recognizing a phoneme depends on the context in which it occurs. Many of the specific phenomena studied by functionalists concern the effects of context on the speaker's ability to express a contrast or the listener's ability to detect it, so these topics are not as unrelated as they might first appear. Work for the course will involve reading primary sources and carrying out and writing up the results of an experiment designed to test a hypothesis stimulated by the reading.

720 Proseminar on Semantic Theory

The Proseminar in semantics is intended as transitional between the first-year graduate courses 610/620 and research seminars in semantics. Topics for proseminars vary from year to year, hence they can be taken for credit more than once.

730 Proseminar on Phonological Theory

The phonology proseminar serves as a transition between the foundational work of the LING 603/606 course sequence and advanced research seminars. The topic varies from year to year, so this course may be repeated for credit. Topics in recent years have included: the grammar and the lexicon; the theory of constraints; computational phonology; phonological variation and exceptionality; experimental phonology; and sentence prosody and the syntax-phonology interface. Requirements usually include class presentations and a final term paper.

740-748 Structure of Language Courses

Phonology and syntax of a language other than English. Emphasis on the application of current linguistic theory to analytical problems presented by that language and the testing of current theoretical hypotheses by reference to those problems. An informant is generally used. Within each of these courses, languages vary from year to year; any of them may be repeated for credit.

751 Topics in Phonology

The topic of this research seminar varies from year to year, so it may be repeated for credit. This course is typically a cooperative venture, with faculty, students, and visitors contributing the result of their research. Topics in recent years have included: alternative architectures for Optimality Theory; phonological acquisition; and focus and intonation.

752 Topics in Syntax

The proseminar in syntax is intended as transitional between the first-year graduate courses 601/604 and the research tutorial 810. Topics for proseminars vary from year to year, hence they can be taken for credit more than once.

The proseminar in syntax is a combination seminar and reading group, focusing on a range of new and interesting results on topics that are of the most interest to the participants.

753 Topics in Semantics

(Description changes from year to year.) This semester's seminar will be on the semantics of inflectional heads and will focus on the question how inflectional heads interact with quantifier phrases and adverbs so as to force those elements to appear in a particular order. The seminar will be a research seminar, which means that we will be trying to find answers to questions that do not yet have an answer. To profit from the seminar, participants must be willing to become actively engaged in the topic, and they should have some familiarity with states of mind related to losing one's way or groping in the dark. The seminar will meet twice a week on Monday and Wednesday. The Monday session will be lecture style and is open to everyone interested. The Wednesday session will be workshop style and will be restricted to registered students. To get attuned to the topic, I recommend simultaneous reading of Anna Szabolsci (ed.): "Ways of Scope Taking" (Dordrecht, Kluwer 1997), and Guglielmo Cinque: "Adverbs and Functional Heads" (Oxford 1999). If after looking at those books, you are obsessed by the question whether the meaning of inflectional heads might have something to do with the line-up constraints on quantifier phrases and adverbs, you are ready for the seminar. Remember, however, that losing your sleep over those questions might negatively affect your night vision and orientation skills.

810 Research Tutorial: Syntax

(Description changes from year to year.) Intensive investigation of a previously unexplored topic in syntax under close faculty supervision. Recent topic: Predicate Fronting, Determiner Phrases, Binding Theory or Disjunctions.

820 Developments in Laboratory Phonology

(Description changes from year to year.) The goal of this course is to determine what kind of object a listener perceives when hearing a speech sound. To a phonologist, the only important perceptual attributes of that sound are the correlates of distinctive features, as perceiving these makes it possible for the listener to recognize what phoneme the speaker uttered and thereby identify the intended morpheme. For this purpose, the properties of speech sounds as perceptual objects are of no consequence, so long as the perceptual object corresponding to one phoneme or distinctive feature value can be reliably distinguished from a minimally different phoneme or the contrasting feature value. To the phonetician, on the other hand, the nature of these perceptual objects is one of the central empirical and theoretical problems. The phonologist and phonetician must share

an interest in what kind of perceptual objects speech sounds are, if they are to work out how perception influences phonological representations and alternations. And as in other inquiries into the nature of speech sounds, very useful information about what kind of perceptual objects speech sounds are comes from perturbing or challenging the mechanisms listeners use to perceive them. In this course, we will look at the perceptual challenges presented by non-speech analogues and foreign speech sounds, stimuli which may reveal more about speech sounds as perceptual objects than native speech sounds do because they expose the workings of the mechanisms that produce those objects. Once we are done discussing the perception of non-speech analogues and foreign speech sounds, we will turn to considering the way in which speech sounds' perceptual properties determine what phonological contrasts are possible and where those contrasts may be realized.

Recent Research Grants

Language Comprehension: Mechanisms of Co-Variation.

Lyn Frazier, Charles Clifton (Psychology), National Institutes of Health, 2008-2013.

Investigations in Optimality Theory: Typology, Learning, and Modeling

John McCarthy and Joe Pater, National Science Foundation (BCS-0813829), 2008-2012.

Situation Understanding Bot Through Language and Environment

Chris Potts and Andrew McCallum (Computer Science), Department of Defense, 2007-2012.

Multi-Representational and Multi-Layered Treebank for Hindi/Urdu

Rajesh Bhatt, National Science Foundation, 2008-2011.

Expressive Content and the Semantics of Contexts.

Christopher Potts, National Science Foundation, 2007-2010

The Project on Epistemology and Indexicality in Navajo, Tibetan and English

Margaret Speas and Tom Roeper, National Science Foundation, 2006-08.

Language Comprehension

Lyn Frazier and Charles Clifton (Psychology), National Institutes of Health 2000–08.

Context Effects on Sensitivity, Bias, and Parsing Phonetic Information

John Kingston, NIDCD, 2004–07.

The Russian Genitive of Negation: Integration of Lexical and Compositional Semantics

Barbara Partee and Vladimir Borschev, National Science Foundation, 2004-07.

Language Processes in Reading

Lyn Frazier and Keith Rayner (Psychology), NIH, 2001-07.

Processing of Ellipsis.

Lyn Frazier and Charles Clifton (Psychology), National Institutes of Health, 2002 - 2006.