



Date: 15 March 2011

To: Gerald Baldasty
Dean and Vice Provost, Graduate School

From: Lynne Werner 
Chair, Linguistics Program Review Committee

Re: Linguistics Committee Report

On behalf of the Review Committee for the Linguistics Department's 10-year Program Review, I submit the Committee's final report.

All of the Committee members have reviewed and endorsed the report.

Please feel free to contact me should you have any questions.

Cc: Ed Tyler, Dean and Vice Provost, Undergraduate Academic Affairs
Office of Academic Affairs and Planning, c/o David Canfield-Budde

University of Washington Linguistics Department Ten-Year Review Report of the Review Committee, March 2011

Members of the Review Committee:

Lynne A. Werner, Professor, UW Speech & Hearing Sciences (Committee Chair)

Steven L. Tanimoto, Professor, UW Computer Science and Engineering

Richard P. Meier, Professor, Department of Linguistics, University of Texas at Austin

Mary E. Beckman, Professor, Department of Linguistics, The Ohio State University

A. Synopsis

The field of linguistics plays multiple roles in the university and in society. It is responsible for research into the cultural transmission and diversity of languages, for contributing to a burgeoning industry that applies speech and language technologies, and for bridging the gap between the sciences and the humanities. The Department of Linguistics at the University of Washington has played all three of these roles admirably over the last 10 years. The Department now ranks among the top 15 to 20 Linguistics programs nationally. **The Review Committee recommends continuing status with a subsequent review in 10 years.**

In the Departmental Review of 1999-2000, the Review Committee made two major recommendations: That the Department maintain a high level of extramural funding and that the Department “explore all avenues leading to the hiring of a computational linguist.” The Department’s response to that review can only be characterized as brilliant. The faculty in Linguistics have increased extramural funding and have established research collaborations across campus. They have hired three computational linguists and have built a high-quality Computational Linguistics (CL) graduate program that is unique in its combination of flexibility and rigor. Furthermore, they had the wisdom to take advantage of an opportunity to establish an instructional program in American Sign Language (ASL) that attracts many students and is consistently oversubscribed.

The Department has continued to attract talented undergraduate and graduate students to the major. It provides general education coursework for undergraduates from across campus, and has increased its capacity to serve this constituency by successfully incorporating technology into its course offerings. The Department also provides fundamental coursework for students in other graduate programs.

To continue building on this excellent foundation the Linguistics Department will require additional space in a single location, as well as increased administrative staffing levels, to support its research and teaching programs. The Department and the College of Arts and Sciences must cooperate to increase levels of graduate student support. Both undergraduate and graduate curricula should be evaluated in light of the current status of the field and the Department. The administration of the Department should be structured in such a way as to encourage continued integration and collaboration between interest areas within the Department, and the Department should consider taking a leadership role in second language education at the University of Washington. A priority should be to build on its currently successful ASL instructional program and its strengths in language documentation to develop a research program in linguistic diversity. The Review Committee also considers the proposed change of the Computational Linguistics MA degree to an MS degree to be appropriate (see Appendix B).

Summary of specific recommendations of the Review Committee:

- Allocate resources to address the increasingly dire space needs.
- Allocate resources to provide more competitive support for doctoral students.
- Allocate resources to increase administrative support for research and teaching.
- Rethink the Department's pattern of administration to provide better integration and coordination of resource allocation within the Department.
- Foster a broader leadership role for Linguistics in second language education.
- Integrate and expand Department infrastructure in support of language diversity.
- Develop a Department plan for optimal strategic hiring that could include specialists in the linguistics of signed languages, in first language acquisition or psycholinguistics, and in formal semantics.

B. The review process

The Review Committee was sent its charge on March 18, 2010 by Vice Provost and Dean Gerald Baldasty and Associate Vice Provost and Associate Dean for Academic Affairs James Soto Antony. Subsequently, the Committee received the following documents: the Department's self-study report, the Academic Program Review Guidelines for 2010-2011, and the draft site visit agenda. The Committee was also given access to online copies of the Linguistics Review Charge to Department and the curriculum vitae of the regular faculty (faculty other than adjuncts and affiliates) and selected students. On January 18, the Committee was sent a Moderate Degree Change Proposal to change the name of the "Master of Arts (Computational Linguistics)" degree to "Master of Science (Computational Linguistics)" and agreed to include a consideration of this proposal in their review of the program.

In advance of the official site visit, internal members of the Review Committee, Lynne Werner and Steven Tanimoto, met with Department Chair Julia Herschensohn and were given a tour of the Linguistics Department's space and laboratory facilities, including rooms in Padelford Hall, the Lewis Hall Annex, and the Art Building. Photos taken on this tour were later shared with the external members of the Committee during the site visit.

The site visit itself roughly followed the planned schedule on February 14-15, 2011, with some minor modifications due to some meetings lasting longer than foreseen (see Appendix A). The Committee met with all of the regular faculty (including lecturers) with the exception of Ellen Kaisse, who could not be present. The Committee also met with many of the adjunct and affiliate faculty, as well as with most of the staff and with students from the undergraduate major and from the CL MA and the General Linguistics MA and PhD programs.

The Committee asked the faculty for their views of where the field of linguistics is going and where their own work fits in the field, and for any comments they might have on the future of the department. Junior faculty members were also asked about mentoring support. Graduate students were asked about the adequacy of financial support, their perceptions of the program, and ideas for improvement. Undergraduates were asked about the structure of the majors and the quality of advising, as well as about course offerings and so on. The staff was asked about their roles and the adequacy of support for them. Affiliate and adjunct faculty were asked to describe their roles in the Linguistics Department and interactions between their primary departments and Linguistics.

C. The value of linguistics to the university and in society

There are three facts about language and linguistics that provide the context for our assessment of the role of the Department within the University and within the larger community.

1. Understanding cultural transmission and diversity. The first fact stems from a fundamental property of our species. We humans are distinguished by the fact that we have evolved the most complex animal communication system known. This communication system has allowed us to have efficient and extensive cultural transmission, which in turn has allowed us to develop an enormously diverse set of cultural systems, including the thousands of languages which are the strands that link us to our ancestors, letting us choose to be part of the audience for conversations between Socrates and Plato, lectures by Lao-tzu, and countless other stories and encapsulated bits of wisdom. As the science that studies language, linguistics can and should take a leadership role in enabling research that preserves this heritage for languages that are dead or dying and in promoting an appreciation of the rich diversity of human cultures today.

In this role, there is a natural intersection between the Department of Linguistics and the research and teaching missions of the various language departments, the Anthropology, Sociology, and Communication Departments, and many other programs across the university, including American Ethnic Studies and American Indian Studies. Courses such as LING 101 (Fundamentals of Pronunciation for Language Learners), LING 233 (Introduction to Language and Society), and LING 411 (Native Languages and Language Families of Washington State) are just a few examples of the many ways in which Linguistics contributes to the general education of UW students as well as to the research and outreach missions of the University.

2. Exploiting speech and language technology. The second fact stems from the history of the field of linguistics in the 20th century and the role that it played in the development of computer science and speech and language technology. In the 1950s, Chomsky's application of set theory and automata theory to develop the mathematics for formal language theory revolutionized computer science. It helped in laying the essential groundwork for the development of computer compilers and modern programming languages such as ALGOL, Pascal, and Java. The application of formal language theory to the description of natural language syntax, in conjunction with Shannon's information theory, is the foundation of modern natural language processing technology. Similarly, the application of formal language theory to the description of natural language phonology, in conjunction with Fant's acoustic theory of speech production and other advances in signal processing, is the foundation of modern text-to-speech synthesis and automatic speech recognition technology.

In the decades since, linguists and linguistically-trained language specialists have continued to contribute to this "computing revolution" as speech and language technology has burgeoned into a thriving industry that has changed the world, with applications in language-based internet search engines (including Person Finder sites such as <http://japan.person-finder.appspot.com/>), assistive technology for the disabled, and so on.

3. Bridging the science / humanities gap. The third fact stems from the relationship between the first two. Everyone is an intuitive expert on his or her own language. For that reason, speech and language data offer an accessible and engaging vehicle for developing analytic thinking, as well as computational skills and numerical reasoning. Therefore, the Department of Linguistics can and should play many different roles in helping to resolve what CP Snow called the "two cultures" problem, the breakdown of communication between the sciences and humanities.

A good linguistics department can fill such a bridging role for the university's students by ensuring that basic courses such as LING 201 (Introduction to Linguistic Theory and Analysis) are accessible and well taught. A successful basic course attracts undergraduates from many different majors and lets them interact with each other as they learn about language in all of its diversity at the same time as they acquire the analytic tools that they need to understand language structure. A good linguistics department teaches courses that are foundational for many different doctoral programs, ranging from the language departments to Philosophy, Psychology, and Speech and Hearing. A good linguistics department can fill such a bridging role for the university's faculty by having an active and well-rounded faculty who engage in research collaborations with colleagues across the university. A closely related metric looks for evidence of good collaborative advising of graduate students who are writing theses or dissertations on topics that require interdisciplinary expertise.

The emergence of the interdisciplinary subfield of computational linguistics as a distinct focus at many universities in North America and elsewhere also offers much potential for service to the University and for outreach to the community. The North American Computational Linguistics Olympiad, which in the Seattle and Puget Sound area is organized by the University of Washington Department of Linguistics, is just one example of how the field of linguistics, and this particular department of linguistics, is reaching out to high school students. Developing this area of linguistics is especially important now as speech and language technology begins to provide an infrastructure for vastly expanding the sources of linguistic data and for creating new computational tools for research in linguistics and language more generally. Computational tools are at the heart of experimental research in areas such as phonetics, sociolinguistics, and second language acquisition, and they are becoming increasingly important in all areas of language by supporting large corpus-based investigations of language usage and change.

D. The quality of the department

These many roles that linguistics can fill in the university and in the larger community framed our assessment of the quality of the instruction, research, and public service contributions of the UW Department of Linguistics, to which we now turn.

At the University of Washington today, Linguistics is at the center of a large and vibrant network of collaborations involving both quantitative, highly empiricist methods and in-depth qualitative methods. For example, Richard Wright holds an adjunct appointment in the Department of Speech and Hearing Sciences, in which he has developed several fruitful collaborations. His expertise in phonetics led to collaboration with Pamela Souza, who studies the effect of hearing aid processing on speech perception. This collaboration resulted in NIH funding for Wright, in the form of a subcontract to Souza's research grant. Wright continues to collaborate with Kelly Tremblay, another Speech and Hearing Sciences faculty member, with interests in the neural mechanisms underlying perceptual learning. Alicia Wassink has collaborated with Carol Stoel-Gammon and her students in Speech and Hearing Sciences; the result was at least three peer-reviewed publications. Similarly, Emily Bender holds an adjunct appointment in Computer Science and Engineering and is a co-PI on an IARPA grant led by Mari Ostendorf of Electrical Engineering. The MA program in Computational Linguistics, of course, represents a heavily collaborative effort involving the Departments of Linguistics, Electrical Engineering, and Computer Science and Engineering (CSE). Linguistics also offers both undergraduate and graduate courses that attract students in each of these departments. Linguistics courses are co-listed with Psychology, as well as with Speech and Hearing Sciences.

On the humanities side, faculty in Linguistics are affiliated with the Departments of Asian Languages and Literature, Spanish and Portuguese Studies, Slavic Languages and Literatures, the Ellison Center for Asian, East European and Central Asian Studies, and the Canadian Studies Center, among others. The Department's strong program and course offerings in sociolinguistics attract students from across campus. Linguistics offerings, including those most relevant to the science of second language acquisition, attract students in language departments and are even required of students in the MA for Teachers of English to Speakers of Other Languages program of the Department of English. Linguistics can further strengthen its ties with other language departments by offering leadership in the creation of interdisciplinary programs focused on language pedagogy. Noteworthy, too, is the development of the ASL program. ASL is taught in very popular courses attracting students from many programs. In keeping with the Department's focus on the close relationship between language and cultural diversity, Lecturer Lance Forshay, together with CSE Professor Richard Ladner, teaches a course on Deaf Studies. The Department has also supported ASL-oriented programs in other departments, such as Speech and Hearing Sciences and Special Education.

One way to appreciate the quality of the Department is to note how much of this network has developed in response to the last self-study in 1999. At that time, the Review Committee stated that Linguistics at UW was in transition from being a small department with strengths in Romance and Athabaskan linguistics and a narrow focus on four of the five core subfields (semantics, syntax, morphology, and phonology). The development of a phonetics lab and the then-recent hiring of Richard Wright and Alicia Wassink represented an expansion in language coverage to include specialization in the indigenous Austronesian languages of Taiwan and the creole languages of the Caribbean, as well as a new breadth of coverage of subfields, which the Review Committee deemed "a wise move." That Committee strongly endorsed the Department's stated goal to "explore all avenues leading to the hiring of a computational linguist" and agreed that "it would be a natural move" to develop a professional masters program in computational linguistics.

A fair summary is that, in the intervening decade, the Department has made good on all of this promise. Sharon Hargus, Richard Wright and Alicia Wassink have continued to build a cohesive set of programs in anthropological linguistics, laboratory phonology, phonetics and sociophonetics. Faculty resources have been reallocated or newly allocated to make strategic hires that have increased breadth enormously. With the hiring of Barbara Citko in the syntax search of 2005 and then of Edith Aldridge subsequent to Frederick Newmeyer's retirement, the Department has increased language coverage to include specialization in the Slavic languages, Chinese and Japanese historical linguistics, and other languages in the very large Austronesian language family. With the hiring of Betsy Evans and the successful retention of Alicia Wassink in 2007, the Department has solidly established a program of research on variation in English dialects across the State of Washington, which nicely complements Sharon Hargus's collaboration with Elder Virginia Beavert to document the Yakama dialect of Sahaptin. By tapping computational linguists in industry such as William Lewis and James Hoard to be Affiliate Faculty, and by hiring Emily Bender in 2004 and then Fei Xia a year later to develop an excellent professional masters program that is unique on this continent, the Department has capitalized brilliantly on its location in order to provide a valuable service to a leading local industry as well as to the University. The two senior CL faculty each have won prestigious NSF CAREER awards. This is in addition to earlier NSF awards such as Fei Xia's grant with Scott Farrar to apply NLP technology to develop resources for understudied languages. The recent

hiring of Gina-Anne Levow means that the CL program now has expertise in spoken language data as well as in text data. Moreover, the program has evolved to be flexible enough to serve also as an alternative route into the PhD program for some students. This was possible because of the early emergence of a cohesive network of collaborations and cooperation across the computational linguistics lab, the phonetics lab, and the sociolinguistics lab.

E. The graduate programs

The Department of Linguistics offers five graduate degree programs. The Committee asked about the relative number of students enrolled and graduated from each program, and from the Department's response, it seems that no students have been working toward the specialist MA and PhD degrees in Romance Linguistics for some time. Therefore, the Committee focused primarily on assessing the original generalist MA and PhD programs and the new specialist professional MA in Computational Linguistics (CLMA).

The last is a degree that was established only in 2005, but has already graduated 43 students. The program is rigorous and offers good training in computational skills to qualified linguists as well as good training in linguistics for computer engineers. The faculty has been extremely responsive to student needs for flexibility and distance learning options, and the placement record after graduation is very good. The CLMA students who met with the Review Committee were unanimous in their praise of the CL faculty and of the program. The ones with experience on the job market agreed that a change in degree type from MA to a Master of Science would be appropriate and helpful in job searches (see Appendix B).

The older MA in Linguistics differs from the CLMA in serving primarily as preparation for entry into the PhD program in Linguistics, and the Committee took this into account in applying the following metrics that can be used in comparing similar programs across institutions: number of graduates, job placement ratio, and time to degree.

The UW Linguistics Department has produced 33 doctorates since the last self-study. There is a healthy job placement record, with more than a third (12) of these PhDs holding jobs in language-related industries, and nearly half (14) in faculty positions related to their degrees. These faculty positions include appointments in language departments, where linguists often are hired to coordinate language teaching, and at least one graduate who is an assistant professor in a strong Communicative Sciences and Disorders Department with an adjunct appointment in a high-ranked Linguistics Department. This placement record speaks to the value of the good graduate training across a broad range of subfields that is available to students in the Linguistics doctoral program.

The Department seems not to keep close track of time to degree, and referred the Committee to records at <http://www.washington.edu/admin/factbook/OisAcrobat/OisPDF.html - anchor2> that are maintained by the UW administration. Reviewing the records for these 33 graduates since the last self-study, the Committee determined that the time to degree has been long by comparison to top-tier programs. The numbers have fluctuated around 8 to 9 years, with apparently only one of the 33 PhDs granted in the last decade taking fewer than 6 years to complete. (Six years is more typical of top-tier programs such as Stanford's. Indeed, many departments that guarantee funding conditioned on "satisfactory progress" toward the PhD degree, have established program requirements that are aimed at graduation within 5 years.)

The comparatively long average time to degree seems to be due to a combination of several problems that need to be addressed in order for the UW program to reach the national ranking that it otherwise seems to deserve. One problem is the lack of competitive financial support for

doctoral students. A doctoral student who is employed on a faculty research grant that is related to the student's own research interests will necessarily progress faster than one who is cobbling together rent money from odd jobs unrelated to linguistics.

A second problem is the graduate program requirements, which emphasize introductory course work and term papers at the MA level, at the expense of early engagement in extended research in the student's chosen areas of specialization. Establishing program requirements that can work to impart the necessary breadth and depth of training while preserving a reasonable time to degree is a difficult problem that is resolved in different ways in different top-tier linguistics programs. For example, some programs have few or no required courses and ensure breadth by specifying that the student complete two research papers before starting the dissertation that cover topics chosen from distinct sets of core areas, such as phonetics/phonology for one paper versus syntax/semantics for the other. The UW faculty should look carefully at the program requirements for other programs to see if there is a more optimal model for some aspects of the UW requirements, given the local staffing constraints. For example, it might help if the MA thesis were replaced by the first "generals" paper in the default case. That is, make successful completion of the first in-depth research paper be the prerequisite for admission to the PhD program, with the paper being optionally filed as a thesis if the student wants an MA on the way toward the PhD. Further, the current requirements put the onus on each graduate student to choose a two-member faculty supervisory committee during the first two quarters after matriculation. It might be better to assign a (potentially temporary) first-year supervisory committee as soon as an admitted applicant commits to the UW program, so that a student who does not already have a clear idea about what the dissertation area will be does not flounder during this crucial first year.

F. The undergraduate majors and service courses

The Department of Linguistics has more than 130 undergraduate majors. Both the students and the faculty believe that the Department offers a high-quality program of study for its majors, preparing them for graduate study or careers in many fields.

Linguistics courses are popular with non-majors, generating hefty enrollments. Both the quality of the course offerings and the fact that the courses meet General Education Requirements make those courses attractive to students. Laura McGarrity, who teaches several of these classes, is highly regarded by students and has been nominated for the Distinguished Teaching Award. By sharing McGarrity's appointment with the Department of Communication, the Department was able to add an outstanding instructor to its teaching staff. While the Department has considered developing large-section versions of other courses of broad interest to all undergraduate students, the lack of large classrooms has discouraged efforts in that direction. Within the current curriculum, the Department should determine whether other courses meet (or could be minimally restructured to meet) General Education Requirements; for example, LING 270 (Introduction to Perl Programming for Linguists) might be restructured to be accessible to students outside of Linguistics who have taken only LING 100 (Fundamentals of Grammar). The Department might also develop a related undergraduate course that is comparable to the LING 178 (The Mathematics of Language and Linguistics) course offered at the University of Arizona. This could be part of a longer-term effort to bring the undergraduate curriculum into closer parity with the growth in CL offerings at the graduate level.

The relatively new courses in ASL have been especially popular. Five sections of ASL 101, 102, or 103 (Elementary American Sign Language I, II, and III) are offered each quarter and an

intensive version is offered in the Summer Quarter (ASL 134, Intensive First Year ASL). The courses are oversubscribed each quarter, with hundreds of students on waiting lists. Due to demand, a second-year sequence, ASL 201, 202, and 203 (Intermediate American Sign Language I, II, and III), is now being offered as well. The ASL Lecturers Lance Forshay and Kristi Winter are enthusiastic about growing this program.

The Department has been highly innovative in the use of technology to increase the capacity of its undergraduate courses, including the introductory courses in linguistics, phonetics, and sociolinguistics. For example, these courses are managed using Moodle, so that handling quizzes and homework assignments is less labor-intensive. These approaches are currently being expanded to other undergraduate courses. The Department has also cooperated with other departments to staff courses creatively. For example, Sharon Hargus and anthropologist Laada Bilaniuk together designed LING 203 (Introduction to Anthropological Linguistics), a course that meets multiple General Education Requirements.

Undergraduate majors are happy with the quality of advising. However, both undergraduate students and the undergraduate program advisor noted that it is often difficult for majors to enroll in required courses in a timely way. As a result, students sometimes end up taking an advanced course prior to taking core courses. Greater coordination between scheduling and advising is needed to prevent such difficulties.

Several undergraduate majors typically participate in research as part of the Department Honors Program, and these students often present their work at the University's Undergraduate Research Forum. A greater number of undergraduates might be involved in research, if research opportunities were more widely advertised to students who are planning their coursework in the major.

The Department should carefully consider the constituencies for its undergraduate course offerings and integrate those offerings with existing language instruction courses. For example, the ASL program could be better integrated into the undergraduate program by developing a minor in ASL for linguistics majors and other students with an interest in Deaf studies. Greater integration with spoken language programs might be achieved by creating special sections of LING 100 that are geared toward students studying particular second languages, and by creating a set of language minors for linguistics majors as well as linguistics minors for undergraduate majors in the various language departments. Several of such minors could be easily created by taking advantage of existing courses such as LING/GERMAN 220 (Origins of the Germanic Languages) to make minors in German, Dutch, and other major Germanic languages, and by augmenting the current Romance Linguistics undergraduate major with minors in each of the four largest modern Romance languages, developed in cooperation with Spanish and Portuguese Studies and French and Italian Studies. Other minors might require more creative solutions that take advantage of the presence of linguists who are adjunct faculty in several other language departments and of the particular language specializations of current linguistics faculty. Developing and administering these new minors will require restructuring of Department-internal staff responsibilities as well as organizational support at levels above the Department.

G. The path ahead

This section brings together and develops observations about what would be required in order for the Department to continue on its current trajectory to become a leading program nationally and internationally, a program that can contribute maximally in its roles in the University and in the economy and culture of the State of Washington. We couch these observations as suggestions

about the allocation or reallocation of resources and changes to organizational structure that could help to create an environment in which the Department, the College, and the University as a whole can work together to allow the program to achieve its full potential.

1. Allocate resources to address the increasingly dire space needs. Not only because of growth, but also because of the change in the balance of research methodologies (more computational and laboratory-based research, and less desk and whiteboard scholarship), the Department has completely outgrown the space that it was originally given in Padelford Hall. The overflow has been partly taken up using graduate-student outposts in Lewis Annex (known to the RAs as the “trailer park”) and former studio-art space in the Art Building, where linguistics TAs are given desks. Yet not all faculty have their own offices. The undergraduate program suffers from the fact that Dr. Laura McGarrity, who teaches hundreds of students per term, does not have her own office. The amount of space allocated to Linguistics is clearly too little for the Department at this stage of its development. Moreover, the spread-out nature of graduate student space, with students sitting far from faculty offices and far from seminar locations, depresses the frequency of their informal interactions with faculty.

While small spaces for research and graduate teaching labs have been eked out from the Padelford maze, these lab spaces are not only small for the activities they house, but are not physically of the quality expected for the types of research they support. For example, the small recording room in Richard Wright’s lab serves all of the laboratory speech recording needs for Department research, included funded research in collaboration with colleagues in Electrical Engineering, Speech and Hearing, and Computer Science. Yet it is not a proper sound booth and is inadequate even for currently funded projects. For example, it is too small to seat two talkers to record dialogue, and it is not sufficiently isolated acoustically from the Stevens Way traffic to make long recordings without interruption.

The department needs more space, and it should be better concentrated in one area or one building.

2. Allocate resources to provide more competitive support for doctoral students. The most critical factor limiting the quality of the PhD program at this time is lack of competitive funding, whether teaching assistantships, research assistantships, or fellowships. This impacts recruitment, time to degree, and morale. Although graduate-student funding is not a simple problem to fix, particularly during a time of economic hardship, there are some actions that can be taken. First, the department needs to rethink the way that it allocates current resources (e.g., CLMA revenue), and it needs to be less reticent about taking risks to commit to funding. Second, the department needs much better support for bringing in grants that can provide research assistantships to students.

While the majority of the department’s PhD students who need financial support seem to find ways to obtain it, often by accepting teaching offers from language programs, these arrangements are difficult to set up at recruitment time. Consequently, strong applicants often turn down the University of Washington in favor of programs that can offer solid support packages. By carefully managing some limited recruitment funds that would be garnered from existing revenue sources and that would be used primarily to back up promises of funding through other (slightly risky) funding arrangements (such as TA appointments in language programs), the department may have a shot at getting more of its high-promise graduate applicants to matriculate.

Research assistantships are an important source of PhD student funding. The department has already seen a notable growth in RAs. In order to permit this growth to continue, it is important

to find ways to better support the grant application activity within the department and to encourage more faculty to engage in funded research. Part of this support should take the form of improved staff support for the proposal development and submission process. This point leads to the more general issue of administrative support, discussed next.

3. Allocate resources to increase administrative support for research and teaching. In order to support increased proposal-writing activity for research funding, another staff member should be added. This person's primary responsibility should be in proposal and grant support. This may include budget development, human subjects compliance, coordination with similar staff in other departments, budget activity report handling, annual reports, grant-related travel and purchasing, and graduate student appointment handling. It seems likely that a person appropriate to fill this staff position would also have the skills to maintain the Department's web page, and to turn it into a more effective tool for advertising the Department to potential students, to potential future employers of graduates from the Department's bachelors, masters, and doctoral programs, and to potential funding sources for current student and faculty research. This position should be funded in part with indirect-cost-return funds.

By appointing a full-time grant-support specialist, some of the current staff members' time may be turned over to better supporting the teaching mission of the department. In general, there is a need to reorganize staff responsibilities in some way such that the problems with timing of course offerings are resolved and undergraduate teaching/advising is better integrated with the research programs of the Department. A possibility that might contribute in this direction is to include the undergraduate advisor in a curriculum committee that includes staff who work with a faculty team to do course scheduling (see next point). Although course scheduling impacts faculty and is constrained by classroom availability, its greatest impact is on students. Careful attention to all these factors can help make the undergraduate program maximally effective.

In addition to providing greater staff support, there are some ways in which teaching and research can be made to work together more effectively. For example, currently course credit for research is almost exclusively reserved for honors majors who are writing BA theses. We would suggest that a new independent study course be developed which would allow undergraduates to assist in the research projects of faculty members and/or their doctoral students. Students would receive course credit for their participation and would be graded on a pass/fail basis. A mechanism should be developed to make it easier for faculty with research opportunities to coordinate with faculty who teach undergraduate courses at all levels, so that students can be recruited into research even before declaring their majors. Targeting undergraduates early should also help to increase diversity among the majors. In addition, graduate students can often serve as mentors to undergraduates. Developing a mechanism for undergraduates to work with graduate students for course credit could help to distribute the undergraduate-advising load and allow graduate students to engage in more data intensive research. It could also help in recruiting both graduate and undergraduate students into established research groups and amplify faculty members' abilities to broaden involvement in their projects. This, in turn, would bolster and broaden the infrastructure for obtaining and maintaining external funding for research across the Department.

Lastly, the department should think carefully about how to allocate Department revenues, so that faculty time is not wasted looking for small pots of money to support recurring expenses such as LDC and MATLAB subscription fees. It would appear that the Department could offer some recurring support to labs, such as the sociolinguistics lab, that constitute a departmental resource.

4. Rethink the department pattern of administration. The Department had the foresight after the last self-study to establish a Linguistic Advisory Board that has helped in a very successful outreach effort to alumni, donors, and the general public. This effort resulted in a major increase in endowment and in building a network of solid relationships with local industry and various community groups. These relationships were critical both in implementing goals set out in the Strategic Plan, such as developing the CL program, and in responding to the opportunity to establish the ASL program. Julia Herschensohn, as Department Chair for the last 11 years, has done an admirable job of shepherding the Department through this period of growth, during which the department has established itself as a high-quality program making unique contributions to the field and to the University.

With the current diversity of programs and research directions, it is time for the Department to consider its internal governance structure, to think creatively of mechanisms for distributing administrative responsibility so as to avoid placing an unreasonable burden on the next Chair. For example, a Curriculum Committee might be formed to consider restructuring the graduate curriculum, adding to the undergraduate curriculum and monitoring curricular issues that will undoubtedly arise in the future. Given the expansion in quantitative research and the need to provide facilities in support of this effort, a Research Resources Committee may also prove useful. Finally, an Executive Committee of the Chair, CLMA Program Director, Graduate Program Coordinator, and the Chairs of the Curriculum and Research Resources Committees could be formed to coordinate teaching and research activities and to attempt to optimize the allocation of resources to these activities. By distributing governance in this way, the Department may be better positioned to identify instances in which taking a small financial risk could lead to a sizable benefit in support of faculty research and graduate student recruitment.

5. Foster a broader leadership role for Linguistics in second language education. The Department of Linguistics should take advantage of its unique relationship to the other departments involved in language instruction. Given the expertise of its faculty in second language acquisition, its success in integrating technology into Linguistics teaching, and the strong ties among linguists housed in various academic departments, the Department can play a leadership role in building a center of excellence in language pedagogy. The Language Center currently supports technology in language instruction, including ASL instruction, and undergraduate Linguistics teaching. The Language Center can serve as a hub in efforts to bring technology and computational linguistics concepts to language instruction University-wide.

An important attendant objective is to find ways to foster research connections and facilitate collaborative advising of graduate students who study the linguistics of particular languages and language families. The establishment (by a consortium of federal agencies including the NSA) of the Center for Advanced Study of Language at the University of Maryland attests to the importance of such research. The CASL mission is “to defend and protect our country by improving our language readiness and capabilities.” The University of Washington, too, could contribute more to this national priority by tapping existing strengths in the linguistics of many of the world’s major languages.

For some languages, there are programs already in place that perhaps need only to be coordinated better across departments. For example, the existence of the specialist degree programs in Romance Linguistics recognizes the importance of French, Portuguese, and Spanish, as national languages in the Americas. Could these degree programs be revamped, in collaboration with linguists in the Division of French and Italian Studies and the Division of Spanish and Portuguese, to take better advantage of the Department’s new strengths in CL?

For other languages and language families, new programs may need to be developed. For example, given the long and continuous history of a strong linguistics faculty in the Department of Asian Languages and Literatures, it is astonishing there is no degree track in Chinese Linguistics or in Japanese Linguistics. Could the already existing connections to Linguistics faculty with language expertise in several of these languages be exploited to develop a multidisciplinary degree or a minor?

These are questions that would need to be addressed at some appropriate level above the individual departments. The Division of Humanities might recruit linguists across the Division to establish a Division-level committee or advisory board to review existing programs and strengths and develop a coordinated strategic plan for maintaining and exploiting UW strengths in many of the world's major languages.

6. Integrate and expand Department infrastructure in support of language diversity. In recent decades, theoretical linguistics has held out the goal of identifying the Universal Grammar that, by hypothesis, all children bring to the task of language acquisition. On this view, children have innate knowledge of fundamental linguistic properties that are true of all human languages. Yet the goal of understanding how children can acquire any of the world's more than 6000 spoken languages or its hundreds of signed languages can only be achieved if linguists know the limits of linguistic diversity. On this view, by tracing linguistic diversity we gain a scientific understanding of what it is that is common to all languages and to all language learners. Such an understanding will likely make a fundamental contribution to our understanding of human origins. There are other, however, equally compelling reasons for probing human linguistic diversity. Different linguistic communities are associated with different cultural groups. The grammars and vocabularies and rhetorical styles of those different communities are fundamental expressions of the cultural heritages of those groups. By describing different languages and dialects, linguists contribute to the humanistic understanding of human cultural diversity. So, for example, by describing the different languages and dialects of the Pacific Northwest, we better understand the mosaic of cultures that make up this region. Without knowledge of linguistic diversity, we cannot understand whether an African-American child's "error" patterns are due to a language disorder or whether those "errors" are, in fact, fully grammatical patterns in what may be the child's native dialect of English, African-American Vernacular English.

We applaud the Department's efforts to make sure that its research and teaching programs probe the diversity of human languages. Here are just a few examples: Betsy Evans and Alicia Wassink are studying the English dialects of the Pacific Northwest, as well as the English-based Creole of Jamaica. Sharon Hargus is documenting the Native American languages of the Pacific Northwest. Scott Farrar is developing computational tools that will assist in language documentation.

One of the most obvious ways in which human languages can differ is through their channel of transmission; most languages are spoken and heard, but many languages are signed and seen. By developing its program in ASL, the Department of Linguistics has placed this aspect of language diversity front and center in its undergraduate course offerings. The Department has also hired two Deaf faculty members to teach ASL and Deaf studies; these two faculty members are members of a group that has historically been largely unrepresented in American higher education.

How should the ASL program grow? The most fundamental answer is that it should be firmly connected to the general linguistics program, by hiring a tenured or tenure-track faculty member whose research and teaching interests center on signed languages. That new hire should

be a fluent signer of ASL who can interact easily with the Deaf lecturers in the language program. This, we think, is the single greatest hiring priority for the UW's Department of Linguistics. Such a faculty member would be expected to compete for NSF and/or NIH funding, and accordingly, that new hire should be provided generous lab space and start-up funds. Such a hire would also allow the Department to develop a minor in ASL and Deaf studies; by making such a hire, the Department would be able to significantly augment its course offerings on the linguistics of signed languages. Such a hire would also allow the Department to compete for graduate students who are interested in research on the linguistics of signed languages. In particular, the Department should aspire to educating Deaf doctoral students in linguistics. Hiring a tenure-line faculty member in the linguistics of signed languages is crucial to the continued health of the ASL language program and to its future growth. Further decisions on how to grow the ASL program (e.g., developing an ASL major, developing an interpreter training program, developing a program to train high school ASL teachers, etc.) should be deferred until after a new faculty member joins the Department.

7. Develop a Department plan for optimal strategic hiring. We would propose that the Department consider the following tenure-track hires, ranked by order of priority:

- (i) Linguistics of signed languages. As noted above, we consider this to be an immediate priority. This new faculty member might be expected to undertake some administrative responsibilities with respect to the ASL language program. Accordingly, the faculty member might be given a teaching reduction. This hire would also fill a gap left on the broader UW faculty by the departure of David Corina (Psychology) to UC Davis.
- (ii) First language acquisition and/or psycholinguistics. The Department currently lacks coverage in either first language acquisition or adult psycholinguistics, although it does have coverage in second language acquisition. This hire would fit well with the increasingly experimental and quantitative orientation of the UW department. Many young researchers who are active in the linguistics of signed languages have substantial training in either first language acquisition or psycholinguistics; consequently this second search should be guided in part by the outcome of the first search in sign linguistics.
- (iii) Formal semantics. The Department has between 4 and 6 researchers in syntax, depending on how one factors in the computational linguistics faculty. In contrast, the Department has a single semanticist. Moreover, unlike many philosophy departments across the country, UW's Department of Philosophy does not appear to have significant strengths in semantics. The single semanticist in Linguistics appears to have little latitude in his teaching. Both his research program, and the Department's teaching program, would benefit from the hiring of an additional semanticist. There is a good chance, too, that such a person could be a specialist in one or more of the indigenous languages of the Americas, complementing the Department's strength in the phonology of Athabaskan languages. Whatever the language specialization, however, that person is likely to add further breadth of language coverage and could be another bridge between linguists in other departments and the faculty in syntax, if he/she works on issues concerning the syntax/semantics interface.

One final suggestion: in its next search in phonology, we would encourage the Department to seek a "laboratory phonologist" and/or "computational phonologist" who can integrate with the computational linguistics and phonetics programs. Increasingly, phonology is moving toward experimental approaches; consequently, phonology has increasingly incorporated experimental phonetics and computational modeling in its methods. No longer does phonology constitute a

Linguistics Program Review
2010 - 2011

pencil-and-paper discipline. This discipline-wide shift in phonology fits well with the longstanding directions of UW's department.

In sum, we urge that the Department think ahead about the potential effect of future retirements in the currently strong core area of phonology, and also (more immediately) to develop a plan to make at least three hires in the next years. We would hope that this plan would gain the Dean's support, as soon as the current economic crisis wanes.

Linguistics Program Review
2010 - 2011

Appendix A: Site Visit Agenda

Linguistics Program Review
February 13-15, 2011

All meetings in Gerberding 100 (CIDR Conference) unless otherwise indicated

Sunday, February 13

6:30pm Review Committee Working Dinner

Monday February 14

8:30-9:30 Departmental leadership
9:30-9:45 Full Professor – Sharon Hargus
9:45-10:00 Full Professor – Karen Zagona
10:00-10:15 Break
10:15-10:45 GPC, GPA
10:45-11:00 Associate Professor – Toshiyuki Ogihara
11:00-11:15 Associate Professor – Alicia Beckford Wassink
11:15-11:30 Associate Professor – Richard Wright
11:30-11:45 Assistant Professor – Betsy Evans
11:45-12:00 Assistant Professor – Fei Xia
12:00-1:00 Undergraduates, pizza
1:00-1:30 Break
1:30-1:45 Introductory Linguistics Lecturer – Laura McGarrity
1:45-2:30 Grads, CLMA
2:30-3:00 ASL Lecturers – Lance Forshay, Kristi Winter
3:00-3:15 Undergraduate Adviser – Michael Scanlon
3:15-3:30 Assistant Professor – Barbara Citko
3:30-3:45 Assistant Professor – Edith Aldridge
3:45-4:30 Grads, General Linguistics, LSUW
4:30-5:00 Adjunct and Affiliate faculty
5:00-5:15 Acting Assistant Professor – Scott Farrar
6:30pm Review Committee Working Dinner

Tuesday, February 15

8:30-9:00 Sociolinguistics, Socio Lab, Padelford B5G
9:00-9:30 Phonology-Phonetics, Phonetics Lab, Padelford A216
9:30-10:00 CL program, Treehouse Lab, Padelford B-202A
10:00-10:15 Break
10:15-10:30 Full Professor – Julia Herschensohn
10:30-11:00 Staff
11:00-11:15 Associate Professor – Emily Bender
11:15-11:30 Assistant Professor – Gina Levow
11:30-12:00 Syntax-Semantics

Linguistics Program Review
2010 - 2011

12:00-2:00 Review Committee Executive Session and Lunch

2:00-2:30 BREAK

2:30-3:30 Exit Discussion I, review committee with:

James Antony, Associate Vice Provost and Associate Dean, Graduate
School (meeting chair)

Douglas Wadden, Executive Vice Provost

John D. Sahr, Associate Dean, Undergraduate Academic Affairs

Robert Stacey, Divisional Dean for Arts & Humanities, College of
Arts & Sciences

Julia R. Herschensohn, Chair, Linguistics

Nancy J. Kenney, Associate Professor, Psychology and Women Studies
[Graduate School Council representative]

David Canfield-Budde, Academic Program Specialist, Graduate School

3:30-4:30 Exit Discussion II

As above, but without departmental representatives

4:30-5:00 Review Committee Debriefing Session (committee only)

Appendix B Memo from external reviewers re: proposed CL Program degree change

From: Mary E. Beckman, Professor, Department of Linguistics, Ohio State University
Richard P. Meier, Professor & Chair, Dept. of Linguistics, University of Texas at Austin
To: Washington State Higher Education Coordinating Board
Re: Proposed moderate degree change, Master of Arts in Computational Linguistics
Date: March 14, 2011

As part of the Review Committee for a regular 10-year program review of the Department of Linguistics, we reviewed the Master of Arts in Computational Linguistics (CLMA) and assessed the proposed moderate degree change in the type of the degree to a Master of Science in Computational Linguistics (CLMS). In making this assessment, we compared the current CLMA to two other programs that seem most similar to it: (1) the Master of Science in Human Language Technology, offered by the Department of Linguistics, University of Arizona, and (2) the Master of Science in Language Technologies, offered by the School of Computer Science, Carnegie Mellon University.

The current CLMA at the University of Washington is a professional degree that was established in 2005, and that produced its first graduate in 2006. Like the two comparison programs, the CLMA at UW is a program that is designed first of all to prepare students for careers in a highly technical field, Computational Linguistics (CL). The program requirements include a sequence of required courses and electives, culminating in successful completion of a mentored project or a thesis demonstrating mastery of the skills and knowledge relevant for a career in developing speech and language technology. The courses are challenging. Even the introductory courses require prior skills in computing. (The Department also offers a series of prerequisite courses leading toward a certificate of competence in these background skills, which students who do not have the full required background can take. These courses do not count toward the degree.) The evaluation via the project or thesis is appropriately rigorous.

The faculty have been extremely responsive to student needs for flexibility and distance learning options, and the placement record after graduation is very good. This makes the UW program unique in its combination of flexibility and rigor. The program has a strong history of placement of graduates with industrial employers such as Microsoft and Google. Other graduates have used their degrees to gain admission to highly competitive doctoral programs. These include departments of computer science such as the one at CMU. In their proposal to change the degree type, the CL faculty argue that, "Especially in the current job market, the title of the degree is important in helping graduates get their foot in the door. The current situation, in which the name of the Master of Arts degree title does not properly match its content, puts our graduates at a disadvantage." We concur with this assessment, noting that the change in title would also be better match for graduates who are applying for doctoral programs in computer science. Thus, we deem a change in title highly appropriate and endorse the proposal.



Mary E. Beckman, Ph.D.



Richard P. Meier, Ph.D.