GRADUATE MENTOR:
Elise Stickles

PROJECT TITLE:
Development of a metaphoric gesture video corpus

DESCRIPTION OF RESEARCH PROJECT:
The purpose of this study is to understand the types of metaphoric gestures (i.e., gestures that convey the source domain of a conceptual metaphor) that people produce in conjunction with different types of syntactic patterns in their speech. In this project we will developing and annotating a video corpus of gestures collected from online resources.

In conjunction with this corpus of naturally-occurring data, I am also running an experimental study to directly elicit the production of metaphoric gestures.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:
You will help collect data for the corpus by searching online video databases for metaphoric language, identifying metaphoric gestures in the videos, and annotating them for basic linguistic information. If you are familiar with gesture analysis or interested in learning it, you'll annotate the videos for gesture information as well. In addition to data collection and coding, you may also be involved in analyzing the data.

Depending on time and your interest, you may also run participants for the production study, but the primary focus of this project is the video corpus.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:
No prerequisites are required, but any of Ling 125 (Gesture, Cognition, & Culture); Ling C105/Cog Sci C101 (Mind and Language); or Ling 106 (Metaphor) are helpful.

Willingness to read/learn the related theoretical and experimental literature is more important.

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:
You should be interested in topics related to cognition and language, such as the interaction of gesture and language, metaphor theory, and social cognition. Familiarity with gesture analysis would be helpful, but that can be developed on the job. If you happen to be familiar with ELAN (video annotation software), it'd be very useful, but this is not a requirement.

For the production study, skills related to successfully running experimental sessions (reliability, ability to work with participants, good communication skills) are important as well.

HOURS PER WEEK OF ASSISTANCE NEEDED:
2 Units: 6 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:

FACULTY ADVISOR: Eve Sweetser
GRADUATE MENTOR:
Emily Cibelli

PROJECT TITLE:
Behavioral training of non-native phoneme perception and production

DESCRIPTION OF RESEARCH PROJECT:
For adult learners of a new language, the acquisition of sounds that are not part of the native inventory can be challenging. This project investigates the types of information and techniques that can be used to help learners acquire novel phonemic contrasts. The study consists of a multi-day training paradigm, where learners will listen and respond to non-native phonemes, with and without feedback. A separate production component will test how accurately they can produce the novel sounds, and the extent to which articulatory instruction can improve perception as well as production (and vice-versa). This project also serves as a preliminary step in the development of a neural (EEG) study which will investigate similar questions.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:
You will have two primary tasks on this project: (1) You will recruit, schedule, and run participants in a behavioral experiment in the Phonology Lab. (2) You will phonetically transcribe production data from the experiment using Praat.

You'll also read papers from the experimental literature related to the project. Depending on your interests and skills/experience, you may also be involved with: experimental design (learning E-Prime and/or Open Sesame experimental software, helping with the development of experimental materials), phonetic analysis, and statistical analysis (learning R and basic or advanced statistical tests).

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:
Required: LING 100, LING 110
Not required, but perks: LING 113, LING C160 (or other statistical or experimental coursework, inside or outside of the linguistics department)

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:
Prior experience with experimental design, phonetic analysis, and/or statistical analysis are a plus, but not mandatory for joining the project. However, a willingness to learn at least one of these aspects of design/analysis while involved in the project is recommended - I will help you learn or develop these skills.

A good "lab demeanor" is required for running experimental sessions - organization, reliability, friendliness, and a willingness to work with participants are critical to the study running smoothly.

HOURS PER WEEK OF ASSISTANCE NEEDED:
2 Units: 6 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:
Apprentices on this project can sign up for either 2 or 3 units.

FACULTY ADVISOR:   Keith Johnson
GRADUATE MENTOR:
Jevon Heath

PROJECT TITLE:
Conditioning speaker variation

DESCRIPTION OF RESEARCH PROJECT:
I am investigating how environmental factors affect the particular speech variants people use. I am doing this by manipulating experimental conditions, including the predictability of the response to be given, the familiarity of the voice being heard, how much attention speakers are paying to the form vs. the content of their responses, etc. I am then testing whether speakers' responses vary predictably given these different conditions, and whether individuals' prior linguistic experience has any predictable effect on features of their produced speech under these conditions.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:
You will help recruit and run subjects in experiments. You will also assist in data analysis and stimulus preparation using Praat. You may also assist in experiment design if interested.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:
Ling 110 is a prerequisite; Ling 113 and/or Ling 160 are a plus.

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:
Skills related to running experimental sessions – reliability and good communication skills. No special experience is needed, although familiarity with writing computer scripts can come in handy.

HOURS PER WEEK OF ASSISTANCE NEEDED:
2 Units: 6 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:
The research project description given above encompasses several different experiments, not all of which will be run this semester. If particular facets of this line of research specifically interest you, I am happy to privilege their execution.

FACULTY ADVISOR: Keith Johnson
GRADUATE MENTOR:  
Matthew Faytak

PROJECT TITLE:  
Evaluating inter- and intra-categorical variation in Kom

DESCRIPTION OF RESEARCH PROJECT:  
This project is part of ongoing research on the Kom language, spoken by about 250,000 people in northwestern Cameroon. Limited work with consultants living in the United States suggests not only unusual phonetic and phonological phenomena (for instance, two vowels produced with significant frication, approximately /z/ and /v/) but also complex patterns of inter-speaker variation in the production of these sounds (depending on the speaker, a particular set of stems may be produced with /z/, /v/, or /i/).  

The current project aims to assess this variability (and its acoustic dimensions) by analyzing demographic information, recorded elicitation from two wordlists, and an attitudinal survey collected from 26 Kom speakers.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:  
Work will consist of several related tasks, the most important and time-consuming being segmenting and annotation of audio data using Praat. Phenomena to be investigated include the acoustics of all 12 vowel phonemes and their major allophones, time-course data for certain internally dynamic (i.e. diphthongal) categories, and some more coarsely-grained information (lexical choice, presence of category merger, etc.).  

Other forms of data will also be coded and organized, especially the results of the survey. Eventual analysis of coded data will likely involve the apprentice, but this ultimately depends on their availability and the amount of progress made over the course of the semester.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:  
LING 110 - Phonetics and Phonology.

Completion of LING 113 and/or LING 160 are a bonus but are not required.

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:  
Apprentices should be familiar with the Praat software and TextGrid files generally. Familiarity with Python is a plus but not required (and can easily be learned during the semester!).

HOURS PER WEEK OF ASSISTANCE NEEDED:  
3 Units: 9 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:  

FACULTY ADVISOR:  Keith Johnson
GRADUATE MENTOR:
Herman Leung

PROJECT TITLE:
Wiyot Digital Database

DESCRIPTION OF RESEARCH PROJECT:
Wiyot is an Algic language whose last speaker died in 1964. However, a wealth of materials remain that are still of tremendous use for linguistic research and revitalization efforts in the Wiyot Tribe, including hundreds of pages of field notes, texts, two grammars, and numerous recordings.

In this project, we will continue to digitize the above materials into an online searchable database that serves both linguists and the Wiyot community, with close collaboration with the Wiyot Tribe. The database will be hosted at [http://linguistics.berkeley.edu/~wiyot](http://linguistics.berkeley.edu/~wiyot) (implementation in progress).

The main components of the database include a dictionary, a morpheme glossary, an archive of sentences, and audio files. We will be implementing more advanced search options and research tools such as tagged search and concordance. Long-term goals include constructing a tree bank and facilitating reconstruction efforts between Wiyot and Yurok.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:
The apprentice will gain hands-on experience in helping ongoing efforts in creating the database from scratch. Primary tasks will involve scanning documents, formatting text data, editing audio files, and analyzing linguistic information (such as determining parts of speech and parsing morphemes) as more data is inserted into the database.

For candidates with coding/programming experience, tasks involving regular expressions, natural language processing, or webpage design/coding may be involved.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:
Required: Ling 100
Recommended but not strictly required:
- Ling 170 in any language
- Experience with a polysynthetic language and/or morphological analysis

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:
- The apprentice should be comfortable with basic coding in general, but willingness to learn (with limited guidance) is most important.
- Candidates with coding/programming experience may get to use the following (not required): Python, MySQL, HTML, PHP, JavaScript, Git
- Previous experience in audio transcription is also helpful.
- Meticulous attention to detail is a must.

HOURS PER WEEK OF ASSISTANCE NEEDED:
2 Units: 6 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:
Feel free to contact me at ermanh@berkeley.edu if you have questions about the project.

FACULTY ADVISOR:  Peter Jenks
GRADUATE MENTOR:
Shinae Kang

PROJECT TITLE:
Effects of morphological structure on speech perception

DESCRIPTION OF RESEARCH PROJECT:
This project expands on the similar study conducted during Fall 2014. All the administrative work (i.e. IRB approval) has been completed.

Pronunciation is enormously variable. Although it is possible to observe certain patterns in the variation, we still do not know how, exactly, people can navigate the continuous acoustic stream to identify discrete linguistic categories, such as words or morphemes.

This project explores the hypothesis that there is a link between patterns of pronunciation variation that can be observed in speakers, and tendencies of speech perception that can be observed in listeners. In particular, we will explore how well listeners can hear grammatical morphemes when they are pronounced in different ways. Are they more likely to identify a word that is probable, or are they more likely to identify a word that corresponds to the patterns of phonetic variation we can observe in speakers?

These questions addressed in the study will be investigated by a number of perception experiments. We expect to see the link between one's production and perception during their speech behavior more clearly.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:
1. Run experimental subjects
2. Help create experimental stimuli, both by recording the stimuli and manipulating pitch and duration of the stimuli.
3. Help create experiment script by Opensesame (python-based open source experiment building software)
4. Analyze acoustic patterns in the experimental stimuli and in the recordings of the subjects.
5. Code data and create plots illustrating the results.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:
1. Linguistics 100 (required) - basic knowledge in Linguistics term and knowledge
2. Linguistics 110 (required)
3. Linguistics 160 (desirable but not required)

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:
1. Familiarity with Praat (required)
2. Familiarity with R, including base graphics (strongly desired; if apprentice is not familiar with R, then s/he should gain familiarity through a two-hour, free introduction offered through the D-Lab)
3. Familiarity with OpenSesame (mildly desired)

HOURS PER WEEK OF ASSISTANCE NEEDED:
2 Units: 6 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:
This is a joint study with Clara Cohen (Ph.D., Berkeley, <a href="mailto:cpccohen@berkeley.edu" target="_blank">cpccohen@berkeley.edu</a>) extending the question raised in her dissertation. Prospective apprentice will be provided with a necessary background and prior knowledge about the study, so that he/she can better understand this follow-up project.
This project is a great opportunity to get familiarized with and learn some of the key tools used in experimental linguistics.

**FACULTY ADVISOR:** Keith Johnson
GRADUATE MENTOR:
Hannah Sande

PROJECT TITLE:
Online Guébie database

DESCRIPTION OF RESEARCH PROJECT:
We will be creating an online database of Guébie, a Kru language spoken in Côte d'Ivoire, based on nine months of original data collection both in the US and in the field. The data consists of short texts and extended amounts of elicitation materials. These will be entered, glossed, tagged, and aligned to audio if the audio exists. The completed database will serve three main functions: 1) I will write a script to turn database entries into a Guébie dictionary, 2) The database will be queryable, allowing us to quickly answer phonological and syntactic questions about the realization of phonemes or morphemes in a given context, and 3) The database will have the capability to reproduce example sentences in LaTeX, making them easy to find and type up later.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:
The apprentice and I will work through my fieldnotes, entering the data into the database and glossing it. If correctly glossed, the database will be searchable and useful for future Guébie research. The majority of the data is glossed within the fieldnotes, and the apprentice would be helping to enter the data into the database. If the apprentice feels comfortable doing so, he/she can help me gloss the remaining data before entering it. The apprentice will gain a linguistic knowledge of Guébie, and will learn data entry and maintenance skills.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:
Ling 100 necessary, plus some or all of Ling 110, 115, 120.

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:
The apprentice should be willing and eager to spend time learning the linguistic structure of Guébie. He/she should have easy access to a computer and internet, and an apprentice who speaks French is preferred. The database is original and unique to this project, so no prior database skills are needed. The apprentice will be trained on how to enter data into the database.

HOURS PER WEEK OF ASSISTANCE NEEDED:
1 Unit: 3 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:

FACULTY ADVISOR: Larry Hyman and Peter Jenks
GRADUATE MENTOR:  
Hannah Sande

PROJECT TITLE:  
Phonetic correlates of stress in Amharic

DESCRIPTION OF RESEARCH PROJECT:  
Amharic is a Semitic language whose stress pattern has not yet been described. The goal of this project is to determine the phonetic properties of stressed syllables in Amharic. We will be looking at pitch, intensity, and length in Amharic syllables to determine the phonetic correlates of stress. This project will provide phonetic proof for an analysis of Amharic stress, which on the surface appears to be a crosslinguistically unique pattern.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:  
The primary goal of the apprentice involves segmenting and annotating of Amharic audio data using Praat. Phenomena to be investigated include length, pitch, and intensity in order to discover the phonetic correlates of stressed syllables in the language. The apprentice will also be responsible for organizing and maintaining his or her findings.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:  
Minimum Ling 110, best if also has taken 113 and/or 160

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:  
Apprentices should be familiar with the Praat interface and TextGrid files.

HOURS PER WEEK OF ASSISTANCE NEEDED:  
1 Unit: 3 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:  

FACULTY ADVISOR:  
Larry Hyman and Peter Jenks
GRADUATE MENTOR:
Jonathan Manker

PROJECT TITLE:
The Effect of Lexical Class on the Spread of Sound Change
(IRB approved)

DESCRIPTION OF RESEARCH PROJECT:
This project will investigate the relationship between lexical categories (nouns, verbs, adjectives, etc.) and the spread of sound changes throughout the lexicon. The experiments will test whether simulated sound changes spread more readily to new words that are in similar lexical classes or if there is no non-phonetic effect. I am already running one perceptual experiment to test for this effect involving phonetic accommodation which will continue into spring 2015. I may also be running another experiment with a similar aim.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:
At this point in my project the apprentice will be helping to collect data, measuring and analyzing the data with my help, and contacting and scheduling subjects.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:
Ling 100, Phonetics (Ling 110), Experimental Phonetics (113) is also useful.

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:
Phonetics, mathematical and analytical skills, using spreadsheets.

HOURS PER WEEK OF ASSISTANCE NEEDED:
1 Unit: 3 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:
I am already working with Ashley Song this semester and if she re-applies into the program I'd be happy to have her again.

Also, Keith Johnson is my advisor for this project although Andrew Garrett is my official advisor.

FACULTY ADVISOR: Keith Johnson
GRADUATE MENTOR: Clare Sandy

PROJECT TITLE: The phonetics of the Karuk accentual system

DESCRIPTION OF RESEARCH PROJECT:
The prosodic system of Karuk involves both tone and stress, but it is unclear to what degree each is phonologically active, and if both, how they interact. Pitch (high tone) is the primary correlate of what has been analyzed as accent in Karuk, but metrical factors such as syllable shape clearly interact with the placement of tone. The aim of this project is to identify and quantify the acoustic correlates of the metrical system, such as vowel and consonant length, and intensity. A desired outcome of this research is a scale of syllable weight in Karuk. The results will inform work on the interaction of phonology and morphology in the language.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:
The apprentice will assist in measuring vowel and consonant lengths in accented and unaccented syllables in Karuk words. In particular, the work will involve segmenting audio files, running Praat scripts on the files and verifying that the scripts worked as intended.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:
Ling 100, Ling 110

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:
Experience working with Praat and database or programming experience is a plus, but not required.

HOURS PER WEEK OF ASSISTANCE NEEDED:
2 Units: 6 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:

FACULTY ADVISOR: Andrew Garrett
GRADUATE MENTOR: Christine Sheil

PROJECT TITLE: Scottish Gaelic Database

DESCRIPTION OF RESEARCH PROJECT: We will continue developing a database of Scottish Gaelic. This entails inputting sentences from narratives along with the English translations, glossing the sentences and tagging them for particular syntactic constructions. We will also work to improve the workings of the database itself for ease of search and the user interface. The end goal of the project is to have a large corpus of glossed and tagged sentences which is searchable and available online.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT: Part of the work will be a somewhat mundane inputting of sentences. The apprentice will be responsible for glossing the sentences appropriately and for identifying particular syntactic constructions. The apprentice will also help to identify how the database can be improved.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED: Ling 120 (concurrent enrollment is ok)

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE: Knowledge of a Celtic language and/or Python is desirable but not necessary. An interest in morphological and syntactic structure, especially of a potentially unfamiliar language, is required.

HOURS PER WEEK OF ASSISTANCE NEEDED: 1 Unit: 3 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE: 

FACULTY ADVISOR: Line Mikkelsen
GRADUATE MENTOR:
Kayla Carpenter

PROJECT TITLE:
Eel River Athabaskan (Wailaki) Description Project

DESCRIPTION OF RESEARCH PROJECT:
Eel River Athabaskan (often commonly referred to as Wailaki) is an indigenous language of California, last spoken fluently in the 1940's or so. The goal of this project is to produce a grammatical description of the language from archive documents. Students assisting in this project will digitize, and parse Wailaki texts, word lists, and other forms of past documentation.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:
Students assisting with this project will work with handwritten notes, texts, and some typewritten materials. Students will help in the creation of a searchable lexicon and text database of the language.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:
Students who have completed a minimum of Linguistics 100 will be best suited to this project.

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:
Experience with HTML or CSS coding is desired but not needed.

HOURS PER WEEK OF ASSISTANCE NEEDED:
1 Unit: 3 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:
Materials produced/reproduced will directly aid tribal language revitalization efforts.

FACULTY ADVISOR:  Line Mikkelsen
GRADUATE MENTOR:
Sarah Bakst

PROJECT TITLE:
Individual variation in consonant production: An ultrasound and acoustic study.

DESCRIPTION OF RESEARCH PROJECT:
It is well known yet seldom spoken about that individual speakers, even within a single speech community, vary with respect to articulatory strategies during speech production. This project is a follow-up to a study we are currently running in the Phonology Lab which seeks to determine to what extent differences in articulatory strategy may be attributed to physiological differences (e.g. palate size and shape, angle of dentition), as opposed to dialectical (or idiolectical) differences. To this end, this study uses ultrasound imaging to investigate variation in production of consonants within and across individual speakers of English, and will examine the timing of speech articulators involved (including but not limited to the tongue tip and blade, the tongue body, and the glottis). We will further compare the articulatory differences with acoustic analyses of the resulting audio to determine the potential that these differences are perceptible to other English speakers.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:
The apprentice's responsibilities will vary depending on experience, skill level, and interest. The apprentice might help by assisting with acquisition, organization, and analysis of ultrasound images, or by analyzing sound recordings in Praat, or by recruiting and scheduling participants. The apprentice will also be welcome to participate in discussion of the data and its interpretation, as well as the theoretical implications of the study’s results, subject to his or her interest in the topic.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:
Completion of Ling 100 required; completion of 110 is strongly preferred. Concurrent or previous enrollment in Ling 113 is recommended.

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:
Experience with Praat preferred. Experience with Python and R not required but may come in handy. Reliability, adaptability, and good interpersonal skills also desirable.

HOURS PER WEEK OF ASSISTANCE NEEDED:
2 Units: 6 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:

FACULTY ADVISOR:  Susan Lin
GRADUATE MENTOR:
Oana David

PROJECT TITLE:
Building a database of frame semantic and construction grammatical annotation of English verbs based on naturally-occurring sentences

DESCRIPTION OF RESEARCH PROJECT:
Frame semantics and construction grammar are two sides of the same coin when analyzing the understanding of lexemes in context. That is, to know how the verb “break” will be interpreted in any given sentence, one needs to distinguish the different senses of “break” in sentences like “break a plate” (physical breakage), “my iPod broke” (no physical breakage; non-functionality), and “her heart broke/he broke her heart” (metaphoric; emotional state). The same can be said of identifying when verbal arguments can and cannot manifest overtly in a sentence: consider “he applied” (acceptable to mean he applied for the job), but not *“he applied” (to mean he applied the band-aid to his knee).

This study is oriented towards building a large tagged corpus of the varying frame semantics and constructional behavior of verbs in the wide variety of sentences in which they naturally tend to appear. Aside for multiple frames being available to the same verb, other factors in the way senses of verbs can manifest will be tracked in the database: e.g., whether arguments are pronouns, whether the meaning is metaphoric, and the tense and aspect of the verb. The study starts with a small core set of verbs of interest to the researcher, and a small core set of parameters already known to interact with frame semantics (the bulk of verbs for now pertain to the domains of CUTTING and BREAKING, as well as verbs that allow no overt instantiation of core arguments, which is a diverse set). But as the database grows, there is room for innovation and extension to more verbs and more parameters, as they become evident in the data. There is also a plan to extend to Romance languages and to Japanese over the course of the next year.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:
The apprentice would:
1. Learn how to do basic frame semantics and construction grammar analysis;
2. Tag verbs for this information in a structured database based on their use in particular sentences (we are aiming for entering several hundred lines by the end of the semester);
3. Periodically run frequency counts and statistics on the database to see if any interesting patterns arise (using both Excel and R);
4. Experiment with multiple data entry programs to see which is most efficient for our type of data. We are currently working in Excel since it is both user-friendly and the data is versatile, but we will try new programs this semester and transfer the data over if we find a better program. I hope to migrate to an online-interactive form, for multiple users.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:
The applicant should have basic knowledge of linguistics, especially syntax and semantics, at least at the level of Ling 100, but a very motivated applicant can come in with a Ling 5-level of background. Ideally the applicant would have some basic background in cognitive linguistics, especially frame semantics and construction grammar (Ling 105, 106), but again, some applicants may just be very quick to catch up, and I am willing to teach crucial principles along the way.
SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:
I will teach the apprentice all they need to know about corpus statistics and database construction, as applies to this project, but if the student comes in with existing experience and knowledge in these domains, all the better!

HOURS PER WEEK OF ASSISTANCE NEEDED:
2 Units: 6 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:
I have selected the 2-unit option, but I will take students for any number of hours per week. More hours is preferable, but fewer is fine too. I am also happy to take two students at fewer hours per student.

Also, I am happy to train the students in what they have to do, and how to perform frame analysis, so not knowing frame semantics right now should not be a deterrent to anyone; all I need is apprentices who are open-minded, eager to learn, and preferably interested in the material.

FACULTY ADVISOR:  Eve Sweetser
GRADUATE MENTOR:
Florian Lionnet

PROJECT TITLE:
Documentation of Laal (Chad)

DESCRIPTION OF RESEARCH PROJECT:
The goal of this project, funded by the DOBES (Documentation of Endangered Languages) program of the Volkswagen Foundation, is to provide a linguistic and anthropological documentation of Laal, a language isolate spoken in two villages along the Chari river, in southern Chad. The linguistic documentation aims at providing the first full description of Laal, in the form of a grammar, a dictionary and a collection of interlinearized and annotated texts and audio/video recordings, documenting language use and oral literary repertoire. http://dobes.mpi.nl/projects/laal/

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:
The apprentice will use ELAN and Toolbox software to time-align, parse and gloss Laal texts (already transcribed and translated). This will involve learning how to use Toolbox and ELAN. The apprentice will also learn about the grammar of Laal, one of the rare isolates in Africa. In addition, the apprentice may take part in other tasks if s/he wishes to, such as editing the dictionary or texts for publication, or pursuing a research question using the Laal corpus.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:
Ling 100

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:
- The texts and dictionary entries are translated into French. Passive understanding of French, even if limited, is thus required. However, active competence is not necessary: the apprentice will not have to produce anything in French. A passive high school level competence in French, of fluency in a Romance languages such as Spanish, should be enough.
- The apprentice will be trained to use any software necessary.

HOURS PER WEEK OF ASSISTANCE NEEDED:
2 Units: 6 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:

FACULTY ADVISOR: Larry Hyman and Sharon Inkelas
GRADUATE MENTOR:  
Kenneth Baclawski

PROJECT TITLE:  
Description and Analysis of Eastern Cham and Moken Syntax

DESCRIPTION OF RESEARCH PROJECT:  
Eastern Cham and Moken are two Austronesian languages spoken in Mainland Southeast Asia. The broad goal of this project is to describe and analyze various syntactic properties of these languages, keeping in mind both their Austronesian heritage and contact languages like Vietnamese and Thai. At this stage, I am creating databases from my own and Professor Jenks’ fieldwork. Data includes elicitation, texts, and conversations.

DESCRIPTION OF WORK APPRENTICE WOULD DO ON THE PROJECT:  
The apprentice will help input, parse, and search Eastern Cham and Moken texts, using the Fieldworks Language Explorer (FLEx). This will first require some familiarity with FLEx software and the languages themselves, background that will be provided as needed. There are numerous possibilities for additional projects, if the apprentice wishes to analyze the data on their own, ranging from historical linguistics to syntax and pragmatics.

PREREQUISITE COURSEWORK THAT APPRENTICE SHOULD HAVE COMPLETED:  
Ling 100; Ling 120 preferred, but not necessary.

SPECIAL SKILLS OR EXPERIENCE THAT THE APPRENTICE SHOULD HAVE:  
Nothing beyond introductory experience with linguistic analysis, as gained in Ling 100. Experience with FLEx software or any Southeast Asian or Austronesian language would be advantageous.

HOURS PER WEEK OF ASSISTANCE NEEDED:  
2 Units: 6 hours a week of work

ADDITIONAL INFORMATION YOU MAY WISH TO PROVIDE A PROSPECTIVE APPRENTICE:  

FACULTY ADVISOR:  
Peter Jenks