

Final Project

Ling 433/633 – Acoustic Phonetics – Spring 2009

You are expected to team up with 1 other student (2 with permission) in the class and complete a research project. The research project is graded in three parts.

	portion of final grade	due date
Proposal	10%	April 8
Presentation	10%	May 11-18
Paper	20%	May 20

The proposal should be no more than one page and should clearly set out one or more specific question to be answered, along with some indication of the procedure(s) that will be followed to answer those questions. Presentations should be clear, concise, and accessible to everyone. The duration of presentations will be determined in part by the number of groups. Papers should be no longer than 15 pages (excluding figures).

For the most part topics are relatively wide open, provided they relate to the class material. If you are unsure whether a particular idea makes for a good topic, let's talk about it.

Topic Ideas

1. Compare the speech of different dialects of English (at least for a couple of sounds). These can be production or perceptual studies. For example, how are the acoustic and articulatory properties of vowels in Baltimore English the same or different as those in Long Island English?
2. Compare the speech of different languages. These can be production or perceptual studies. For example, are the acoustic and articulatory properties of Spanish [a] the same as English [a]? Also, how do English speakers perceive retroflex sounds in Hindi?
3. Investigate sound-wave communication of a non-human species, such as (some species of) birds, whales, dolphins, chimpanzees. What are the articulatory and acoustic characteristics of these sounds? How does their perceptual apparatus compare to ours?
4. Investigate the human speech of those with defects, such as stuttering, lisping, or other problems with motor coordination or motor planning. You can research their symptoms, causes, and available treatment options.
5. Investigate the articulatory or acoustic characteristics of singing, such as yodelling, throat singing, sopranos, etc.
6. More generally, study the articulatory and acoustic character of atypical speech.
7. Phonetic research. Something not clear in the text? Pick a topic in phonetics and do some further research on it. The references in the textbook and in the other texts recommended for the course provide plenty of papers to get started.

8. Technology. For example, how do speech recognition systems work? You can research the successes and failures of speech recognition technologies. Alternatively, you can program and implement some aspect of a speech recognition system, or some of the techniques used by phoneticians to analyze the speech signal that are discussed in class.