LING646 Class Project

The class project is to design, implement, and collect pilot data for an experiment using cognitive neuroscience methods to investigate language processing. In order for this to be tractable within a semester, I advise that you use EEG as your recording method and that you use a paradigm involving serial visual word presentation, as stimulus presentation scripts and data analysis scripts are already available for these. If you are interested in going beyond this, speak with me first.

The class will be divided into two groups who will each design a separate paradigm. However, in order to maximize efficiency of data collection, the paradigms will ideally be short enough in duration (less than ~40 minutes) so that the two experiments can be combined into a single session.

The project will be evaluated in 5 separate stages across the semester:

1. First draft of group project proposals 10/11
   The project proposal does not need to be long, but it should include a definition of the problem to be examined, a literature review section, a materials section, a procedure section, and an analysis section. I suggest dividing the literature review across the whole group, so that everyone is responsible for summarizing one or two papers.

2. Stimuli and second draft of group project proposals 10/25
   Experimental stimuli (in the correct format to be entered into the stimulus presentation script) should be submitted along with a revised proposal draft responding to instructor feedback.

3. Group project raw data 11/15
   Raw data (fresh off the EEG presses) from at least 10 participants should be submitted.

4. Group project pre-processed ERP files 12/06
   Preprocessed (averaged) data from at least 10 participants should be submitted.

5. Class presentations 12/10
   Should include all of the same sections as the proposal, plus results and commentary on the strengths and weaknesses of this method for answering your questions of interest.

You will also each need to complete CITI Human Subjects Training, if you haven’t already, and email the certificate to me so I can put it on file.

At the end of the semester, you will each be asked to evaluate your own contributions to the project and the contributions of the other members of your group.