

Syllabus

January 11, 2022

1 Class Coordinates

Instructor: Florian Schwarz	Office: 311-C, 3401-C Walnut
Class times: M/W 10:15-11:45	Email: florians@ling.upenn.edu
Class location: Seminar room, Linguistics Department (3401-C Walnut, Suite 300)	Office hours: TBD

2 Course Description

This course complements the introduction to Experiments in the study of meaning in natural language in LING 455. A large focus will be practical aspects of designing and implementing experiments, using a selection of current topics from the experimental semantics and pragmatics literature for illustration and inspiration, e.g., pronouns and definite reference, presuppositions, quantifiers and domain restriction, generics (plus many more, can be adjusted based on student interests). We'll start with some foundational aspects of studying meaning empirically and experimental design in general. We'll consider a wide range of key experimental task paradigms, such as truth-value judgments and picture sentence matching, acceptability ratings, reading time studies, and visual world eye tracking. For implementation, we will introduce the PCIBex platform at <https://farm.pcibex.net> and its relevant functionalities. Students will develop a project on a topic area of their choice, either individually or in small groups, with the aim of a fully implemented experiment and at least some pilot data at the end of the semester. This can build on prior work of their own, recent work in the literature, or start something new. Next, they will formulate their own question, decide on a suitable task paradigm, and begin fleshing out a full experiment implementation, integrating the methodological aspects we cover as we go along. The project will then be presented and written up in a term paper.

3 Requirements

- **Homework: 20%** (E.g., PCIBex coding exercises; critiques and development of experimental designs)
- **Active participation in class and on class discussion platform: 15%**
- **2-3 In-class presentations: 15%** (15 min of presenting an experiment from the literature to the class)
- **Semester project & term paper: 40%**
 - 2-3 progress presentations
 - PCIBex implementation
 - abstract
 - collect data (minimally pilot data)
 - term paper
- **Participate in subject pool experiments: 10%** (3 hours worth of experiment participation through <https://upenn.sona-systems.com/>, plus a brief discussion forum post on the experience, specifically with regards to experimental design aspects. If any obstacles to this arise, you can instead do additional short written posts on experiments on discussion platform, which should take comparable amount of time)

Doing the work on time throughout the semester is central for the class. In order to really understand fundamental aspects of experimental work on meaning, you have to apply them yourself. Homework has to be turned in on time to make sure that you don't fall behind.

Projects will involve designing an experiment that addresses a question about meaning in natural language, broadly construed, implementing it on PCIBex, and collecting and analyzing at least some pilot data, and ideally a full data set. Resources and references for project topics will be made available, and the relevant technical skills will be introduced early in the class. Investigations of phenomena in languages other than English are especially welcome, in particular if you are a native speaker of another language or have easy and reliable access to one.

4 Readings & Resources

Introductory survey articles on many relevant topics can be found in, and will be made available electronically: Cummins, C. and Katsos, N. (2019). *The Oxford Handbook of Experimental Semantics and Pragmatics*. Oxford University Press.

Original articles from the current research literature will be made available for the specific topics to be covered. Lecture notes and further readings will also be made available online.

The platform for experiment implementation that we will make use of is PCIBex, publicly available at <https://farm.pcibex.net>. We will also work through relevant parts of its extensive documentation at <https://doc.pcibex.net>.