Experimental Linguistics Lab Assignment
PCIbex Exercises & Final Project Proposal

Your name

Weeks 11–12

1 Mini-replication of Sprouse et al. (2016)

Follow along the tutorial in:

`https://github.com/sunwooj/course-expling/tree/master/PCIbex`

The sample javascript file (.js) is included in the packet. You can use it as a starting template to build your own experiments.

2 PCIbex Assignments

Choose **two** from the following three experiments outlined in sec. 2.1–sec. 2.3. Create the two experiments in PCIbex, using the seed materials provided in the Github repository. Provide the links in the designated areas below.

2.1 Assignment I: Forced Choice Tasks

Objective Create a mini version of the first experiment outlined in Brasoveanu and Dotlačil (2015). The experiment should have the following properties:

- It has a mock consent page at the beginning, with a checkbox
- A given participant sees each of the 4 conditions once, i.e., a total of 4 target trials, and all 4 fillers in random order, i.e., 8 trials total
- The item * condition pairing is determined by a latin-square type pseudo-randomization

Sample text stimuli can be found under `asmt1-semantics-scope-resultative` folder. You will need to create a .csv.

Assignment I Include the url of the completed experiment on scope and resultatives.

`https://your-scope-experiment-url`

2.2 Assignment II: Incorporating Auditory Stimuli

Objective Imagine an experiment in which we want to test whether the derivation of positive epistemic bias from Preposed Negation Questions (henceforth PNQs) is systematically modulated by focus prosody. (As entertained in slides from first few weeks of the class.)

Stimuli We might want to include the following types of stimuli, broken down into 3 main experimental conditions, instantiated as 3 items (brackets [ ] represent focus prosody):

Items	Conditions	Stimuli
1	PNQ-NPF	[민우가] 이모를 부르지 않았니?
1	PNQ-POF	민우가 이모를 부르지 [않았니]?
1	PQ-NPF	[민우가] 이모를 불렀니?
2	PNQ-NPF	유민이가 [월요일에] 오지 않았니?
2	PNQ-POF	유민이가 월요일에 오지 [않았니]?
2	PQ-NPF	유민이가 [월요일에] 왔니?
3	PNQ-NPF	유라가 매미한테 [물리지] 않았니?
3	PNQ-POF	유라가 매미한테 물리지 [않았니]?
3	PQ-NPF	유라가 매미한테 [물렸니]?

NPF stands for non-polarity focus; POF stands for polarity focus. PQ stands for polar questions. The sound files corresponding to each item * condition pairing can be found under: `asmt2-phonology-semantics-focused-pnqs` > `sounds` folder.

Hypothesis Based on native speaker intuitions, we may formulate the following hypothesis: PQs don't give rise to any positive epistemic bias. PNQs do give rise to positive epistemic bias, but polarity focus weakens the perceived bias.

Experiment design

1. **The general task** Participants rate the perceived epistemic bias of the speaker after hearing the auditory stimuli
2. **Further details of the design**
   - Dependent variable(s): Speaker certainty/bias ratings
   - Conditions: PNQ-NPF, PNQ-POF, PQ-NPF

Assignment II Include the url of the completed experiment on focused PNQs.

`https://your-focused-pnq-experiment-url`

2.3 Assignment III: Incorporating Visual Stimuli

Objective Create a mini-adaptation of an experiment along the vein of Barner et al. (2011) and Jasbi and Frank (2017). The experiment should have the following properties:

- It has a mock consent page at the beginning, with a checkbox
- A given participant sees each of the 6 conditions (2 types of pictures * 3 types of quantificational sentences) once, i.e., a total of 6 target trials
- The item * condition pairing is determined by a latin-square type pseudo-randomization

The image files can be found under `asmt3-pragmatics-scalar-implicature` > `images` folder. You will need to create a .csv.

Assignment III Include the url of the completed experiment on scalar implicatures.

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https://your-scalar-implicature-experiment-url
```

3 Your final project proposal

The proposal should be 1–2 pages in length. It will later be used as a skeleton for writing up your final paper. Please fill out the following information (and comment out the instructions):

A brief review of the previous literature Do some research on the background literature associated with your research topic. Make a .bib file of key references, and briefly summarize the theoretical landscape, making sure to cite the key references.

Motivation for the current study Identify a gap or an unresolved issue that you would like to address in your project.

Hypothesis In 1-2 sentences, formulate the main hypothesis you would like to test in this experiment.

Experiment design

1. **The general task** In 1-2 sentences, briefly describe the type of task that participants will engage with in your experiment.
2. **Further details of the design** What are the key dependent variables you will measure? What are the factors being manipulated? What are the levels? Is the experiment between-subjects? Within-subjects? Mixed?

- Dependent variable(s):
- Factors & levels:
- Other details:

Predictions In 1-2 sentences, formulate the predictions you have.

Questions (Optional) If any, list the questions you have on designing and implementing the experiment.

References

Barner, D., N. Brooks, and A. Bale (2011). Accessing the unsaid: The role of scalar alternatives in children's pragmatic inference. *Cognition 118*(1), 84–93.

Brasoveanu, A. and J. Dotlačil (2015). Strategies for scope taking. *Natural Language Semantics 23*(1), 1–19.

Jasbi, M. and M. C. Frank (2017). The semantics and pragmatics of logical connectives: Adults' and children's interpretations of and and or in a guessing game. In *Proceedings of Cognitive Science*.

Sprouse, J., I. Caponigro, C. Greco, and C. Cecchetto (2016). Experimental syntax and the variation of island effects in English and Italian. *Natural Language & Linguistic Theory 34*(1), 307–344.