Ling 70600 Introduction to Psycholinguistics: Eye-Tracking
Fall 2023, Wednesday 4:15-6:15pm
Room ......, CUNY Graduate Center

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Individual meetings are encouraged, preferably on Wednesdays before and after the class. Please email me to schedule one. Other days are also occasionally possible.

SYLLABUS
[draft version (subject to change)]

Brief Course Description
Psycholinguistics is a broad field of research ranging from speech perception to sentence processing to language development to bilingualism. Throughout the course we will consider the relationship between theoretical linguistic concepts and constructs and psycholinguistic data through the lens of one particular method, i.e., the Visual World eye-tracking Paradigm (VWP). We discuss what language is, how it is organized, represented, and acquired, and what cognitive factors influence it, with the focus on both production and comprehension. We will delve into current and ongoing issues in psycholinguistics while examining the basic processes underlying speech production and perception, word recognition, processing of morphology, and sentence processing. We will explore these issues from cross-linguistic and cross-populational perspectives. The course will also incorporate a lab component that will provide the students with an opportunity to design and conduct their own pilot VWP experiment.

The course has no prerequisites and does not assume any particular background. Special attention will be afforded to topics of particular interest to students registered for the class. We explore both classic and recent psycholinguistic literature on eye-tracking, the point above all being to clarify what questions are being asked, for what reason, and to assess the arguments that are typically pursued and the evidence on which those arguments are based.

Learning Objectives
- Learn foundations of psycholinguistic research conducted with the Visual World eye-tracking Paradigm (VWP).
- The course is reading intensive. You will learn to think critically about the VWP research and to summarize research in writing through interactive reading and note taking (Single, 2009).
- Think about the broad theoretical questions, review the literature, read articles, and synthesize the material, thinking critically about scientific information.
- Conduct a simple pilot study using an EyeLink 1000+ eye-tracker. Write an original brief report grounded in a review of relevant literature in the APA-format for an experimental article.
- Practice oral presentation and work in a small research team of two students.
Assigned Reading

There is no prescribed textbook for the course. However, if you feel that you would like to learn more about specific topics in psycholinguistics that we will be covering from the point of view of other behavioral methods, I recommend two general textbooks, Traxler (2012) and Sedivy (2019), listed in the Readings section below. Typically, there will be one obligatory reading and one or more optional readings assigned in support of each class. All assigned/optional readings are made available on Blackboard.

Course Requirements and Assessment

1. Interactive Notes (IN; Individual; 20 pts)

As noted on the Class Meeting Schedule, you are expected to write interactive notes (1-page long) for each of the 11 required readings. The interactive notes approach is presented in the book by Peg Boyle Single (2009), Ch. 3, that you will master in the course of the semester. You need to write interactive notes for 10 out of the 11 required readings of your choice (there is always at least one life event that will preclude you from doing all of the interactive notes). They should be posted on BB by 10pm on Sunday before the class and be accessible for class discussion. The interactive notes are graded from 0 to 2 pts (‘0’ no notes, ‘1’ satisfactory notes, ‘2’ excellent notes).

2. "Reading" the Relevant Journals (J#; Individual; 10 pts)

Each week you will "read" about the most recent studies in a designated journal. You will access the journal and read through the titles and abstracts for the 2020 volume (in case of journal embargo, "read" the 2019 volume). Find all the articles that used the VWP as a method and create an APA-formatted reference page with these articles. Use an * to mark the articles that you find interesting/important and to which you may want to return later. The J list should be posted on the Blackboard by 10pm on Sunday before the class and be accessible for class discussion. The J lists are graded as 0 (no list) or 1 pt.

I strongly encourage you to start using one of the two reference management software—Mendeley or Zotero, both for this class and beyond, to track references for all your writing projects. This is especially critical if you are already thinking about your Master’s thesis or Ph.D. dissertation.

3. An Eye-Tracking Pilot, Brief Report, and Presentation (Exp; Group; 200 pts)

To give you hands-on experience with designing, conducting, and writing up about an eye-tracking experiment, the program will make accessible to you an EyeLink eye-tracker. You will learn how to calibrate a participant, run an experiment, and process eye-movement data. You will have an entire semester to carry out your pilot.

This is a group project to be implemented by groups of 2-3 students. Contemporary psycholinguistic research is not conducted as individual projects anymore so you will pair up with another student to practice working in a small team. You are encouraged to team up with a student different from you (different level: Master’s or Ph.D.; different program: Linguistics, SLH, Psychology).

Using the general topics from the Class Meeting Schedule and in consultation with me, each group will come up with a simple research question that lends itself well for an investigation with the Visual World eye-tracking Paradigm. It can come from any week (##3-13), a language other than English is preferred. Once you have your research question and design, you will implement it in Experiment Builder, and then run two participants who are the speakers of the language you are working with and who you will need to recruit as volunteers. After conducting the experiment with two participants, you will run simple descriptive statistics and create coarse- and fine-grained time-course graphs (with R or Excel).

As a group, you will write a brief report (between 2,000 and 4,000 words) in the APA-format (7th Ed.), with the required components (title page, Abstract, Introduction, Method, Results, Discussion, References, Tables/Figures, Appendix) and present your work as an oral talk on Dec. 6.
Important Deadlines for the Experiment

(1) Research question and design ....................................................... 25 October, 2023
(2) Data collection (2 participants) ................................................... 8 November, 2023
(3) Data analysis .............................................................................. 29 November, 2023
(4) PowerPoint presentation .......................................................... 6 December, 2023
(5) Report is due .................................................................................. 13 December, 2023

(1)-(5) should be submitted electronically through the BB assignments. The deadline for the report is December 13, by 4pm, and it is firm. No late submissions will be accepted unless there is an emergency. The report and the PowerPoint presentations will be graded on the scale of ‘0’ to ‘100’, in the increments of 5 pts.

(1) Grading Scale (Max. 230 pts = 100%)
A ......................................................................................................................... 92% >
A- ....................................................................................................................... 90-92%
B+ ..................................................................................................................... 87-89%
B .......................................................................................................................... 83-86%
B- ......................................................................................................................... 80-82%
C .......................................................................................................................... 70-79%
D .......................................................................................................................... 60-69%
F ........................................................................................................................... < 60%

The standard components not included into the syllabus are:

Plagiarism

Special accommodation

Ask me for specifics, if you need them.
<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>READING</th>
<th>ASSIGNMENTS</th>
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<tbody>
<tr>
<td>1. Aug. 30</td>
<td>Overview</td>
<td>Single (2009): Ch. 3</td>
<td>IN1; J1: JML</td>
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<td></td>
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<td>22. Ronderos et al. (2019)</td>
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<td>23. Huettig et al. (2011)</td>
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<td>4. Sept. 20</td>
<td>Spoken word</td>
<td>3. Allopeña et al. (1998)</td>
<td>IN3; J3: J. of Speech-Lang-</td>
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<td>5. Sept. 27</td>
<td>Sentence</td>
<td>4.1 Kamide et al. (2003)</td>
<td>IN4; J4: Bilingualism: Lang &amp;</td>
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<td>processing</td>
<td>4.2 Tanenhaus et al. (1995)</td>
<td>Cognition</td>
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<td>7. Oct. 11</td>
<td>Discussion: Exp.</td>
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<td>acquisition</td>
<td>27. Sedivy (2010)</td>
<td>Language</td>
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<td>31. Sekerina &amp; Trueswell (2011)</td>
<td>Language Acquisition Disorders</td>
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<td>12. Nov. 15</td>
<td>Analyzing eye-</td>
<td>10. Ito &amp; Knoeferle (2022)</td>
<td>IN10; J10: Behavior Research</td>
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<td>tracking data</td>
<td>32. Stone et al. (2020)</td>
<td>Methods</td>
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<td>13. Nov. 22</td>
<td>NO CLASS</td>
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<td>impairments</td>
<td>12. Andreu et al. (2013)</td>
<td>choice</td>
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<td>15. Dec. 6</td>
<td>Presentations</td>
<td>No class (BB submission)</td>
<td>Exp. (4): Report</td>
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Readings

Background textbooks:

Required

W1 (Aug. 30): Overview

W2 (Sept. 6): Visual World eye-tracking Paradigm (VWP) as a method

W3 (Sept. 13): How it all began

W4 (Sept. 20): Spoken word recognition

W5 (Sept. 27): Sentence processing


W6 (Oct. 4): New era: Prediction

W7 (Oct. 11): Discussion of the experiment’s design

W8 (Oct. 18): Language acquisition
W9 (Oct. 25): Morphology: Grammatical gender


W10 (Nov. 1): Semantics: Anaphora


W11 (Nov. 8): Bilingualism


W12 (Nov. 15): Analyzing eye-tracking data


W14 (Nov. 29): Language impairments – Choose one from 11-13


Optional


