

Psycholinguistics of Scalar Implicature

Harvard University, Spring 2015

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Tuesdays 3-5pm
Sever 215
Course iSite TBA
Office hours by appointment

Description

Experimental investigation using the methodologies of psycholinguistics is becoming increasingly central to the practice of linguists interested in semantic and pragmatic phenomena. Constant interplay between experimental and theoretical activities increasingly characterizes the practice of linguistics itself. Since investigation of scalar implicature is a particularly well-developed line of inquiry with a relatively well-defined scope, it provides an excellent opportunity to introduce students to theoretical-experimental research cycles in linguistics: on the one hand, its depth and maturity are sufficient to yield real understanding of both the content of the investigations and the many subtleties of the theory-evidence relationship, and on the other, it involves a sufficiently diverse array of researchers, methods, and types of evidence to represent the growing breadth of the scientific study of language.

This tutorial will provide an overview of current issues in scalar implicature from an experimental perspective, beginning with a brief introduction to the most basic theoretical assumptions required to understand the phenomenon, after which students should have a good conceptual understanding of the role of semantics and pragmatics in a theory of language processing. The course will then cover experimental investigations of such issues as the time course and effortfulness of implicature computation, the status of semantics and pragmatics in children's language acquisition, the relationship between theory of mind and scalar implicature, and the potential status of numerals as scalar items. Students will become familiar with the primary data from which arguments are made for the existence, time course, and effortfulness of scalar implicature, as well as with the basic facts from acquisition supporting these arguments and a cluster of related issues. Minimal background will be assumed and care will be taken both to introduce the theoretical and experimental hypotheses in the order of their logical dependency and to maintain a sufficiently narrow focus so that the course is relatively self-contained. Through exposure to various types of experimental evidence, students will finish this tutorial with an understanding of the diversity of on- and off-line experimental paradigms in psycholinguistics, including eye-tracking, self-paced reading, ERP, and offline judgment tasks, and should be able to (a) interpret experimental data in psycholinguistics and (b) evaluate the significance of data for linguistic theory.

Each week students will be required to present summaries of articles read outside of class or to submit short response papers to the readings. At the end of the course students will submit an original experiment proposal which addresses an open question about the acquisition, processing, or linguistic status of scalar implicatures.

Policies

This will be an article-based course with a focus on interpreting experimental data from psycholinguistics, and in particular, the theoretical-experimental research cycle. Meetings will consist of two blocks of 50 minutes with a 10-minute break in between. Each week students are required to either submit a summary of the article assigned for class or to give an in-class presentation of the article. Brief short-answer quizzes and in-class exercises may be given periodically during the discussion period to encourage close reading and foster perspective. At the end of the course students will be required to submit an experiment proposal based on one or more of the research questions addressed in the course.

Background/Prerequisites: This course is suitable for students with one or more courses in general linguistics, semantics, syntax, cognitive psychology, or psycholinguistics.

Grading:

Attendance & Participation:	30%
Presentations/Reading Responses:	40%
Final Paper:	30%

Since the articles are often complex, detail-oriented, and quantitative, the opportunity to ask questions and engage in open discussion of the readings is a critical aspect of this course. Students are required to attend and participate actively in every meeting. Unexcused absences will result in deduction from the Attendance & Participation portion of the grade.

With the exception of the first meeting and the final meeting, students have the choice to give a 20-minute presentation of the reading or to submit a 3-5-page response (due via email by 12pm the day before class). In case more than one student chooses to present, the article will be divided equally amongst the presenters, with each student expected to present for 20 minutes. Reading responses are short papers, written in a scientific register, expressing criticism of the reading, offering alternative interpretations of data presented, synthesizing the results of the reading with other materials encountered in or outside of class, or proposing new ways to answer (or refine answers to) the research questions raised in the reading. They can be brief, but must be concise and carefully written, and must demonstrate a good understanding of the experiment design, data, and implications for theory. Unexcused late submissions will not be accepted. Failure to complete any of the weekly assignments will result in a deduction from the Presentations/Reading Responses portion of the grade, unless the student chooses to write a make-up paper (6-8 pages) in response to an article from the optional reading list, in which case a fraction of the original weight of the grade commensurate with the quality of the paper can be earned back.

The final paper (10-15 pages) will be an experiment proposal including at least (1) a literature review covering the results of relevant studies from class (and any additional studies used in research), (2) a careful description of the experimental design and methodology, (3) a thorough explanation of predictions, and (4) a summary of possible outcomes and how they might be interpreted. Proposals will be evaluated on the basis of the depth of their engagement with existing literature on the specific question addressed and with the larger theoretical context, their clarity and logical structure, and the thoroughness and quality of the ideas presented.

Readings: Texts for this course will be made available in digital form in the “Course Documents” section of the course iSite. Weekly readings listed on the Schedule are mandatory; a list of optional readings features texts which augment the primary readings and are eligible for make-up papers (see above).

Office Hours: Office hours provide an occasion for students to ask clarification questions, follow up on in-class discussions, seek feedback on past assignments, or receive guidance while preparing a future assignment. Each student is required to meet with the instructor for office hours at least once. Individual appointments may be scheduled by email. Students with no background in psychology or psycholinguistics may find the quantitative materials particularly challenging; those who find themselves struggling to meet the course requirements for this reason may earn up to 5% of the original grade in extra credit by attending all office hours or meeting individually with the instructor on a weekly basis.

Schedule

#	Date	Pre-Class Reading	Assignment Due	Topic
1	2/3	None	None	Intro to Scalar Implicature
2	2/10	Horn, Laurence R. "Implicature." <i>Encyclopedia of Cognitive Science</i> (2006).	Reading Response 1 OR Presentation 1	Intro to Scalar Implicature
3	2/17	Bott, Lewis, and Ira A. Noveck. "Some utterances are underinformative: The onset and time course of scalar inferences." <i>Journal of memory and language</i> 51.3 (2004): 437-457.	Reading Response 2 OR Presentation 2	Semantics vs. Pragmatics: Evidence for the Post-Semantic Computation of Scalar Implicatures
4	2/24	Huang, Yi Ting, and Jesse Snedeker. "Online interpretation of scalar quantifiers: Insight into the semantics-pragmatics interface." <i>Cognitive psychology</i> 58.3 (2009): 376-415.	Reading Response 3 OR Presentation 3	The Processing of Scalar Implicatures
5	3/3	Noveck, Ira A. "When children are more logical than adults: Experimental investigations of scalar implicature." <i>Cognition</i> 78.2 (2000): 165-188.	Reading Response 4 OR Presentation 4	Scalar Implicature & Acquisition
6	3/10	Pijnacker, Judith, et al. "Pragmatic inferences in high-functioning adults with autism and Asperger syndrome." <i>Journal of autism and developmental disorders</i> 39.4 (2009): 607-618.	Final paper outline due (Final draft due in ~1.5 weeks)	Scalar Implicature and Autism Spectrum Disorders

Optional Reading

Gamut, L. T. F. Chapter 6, "Pragmatics: Meaning and Usage" from *Logic, Language, and Meaning, volume 1: Introduction to Logic. Vol. 1*. University of Chicago Press, 1991.

Barner, David, Neon Brooks, and Alan Bale. "Accessing the unsaid: The role of scalar alternatives in children's pragmatic inference." *Cognition* 118.1 (2011): 84-93.

Bergen, Leon, and Daniel J. Grodner. "Speaker knowledge influences the comprehension of pragmatic inferences." *Journal of Experimental Psychology: Learning, Memory, and Cognition* 38.5 (2012): 1450.

Barner, David, and Asaf Bachrach. "Inference and exact numerical representation in early language development." *Cognitive psychology* 60.1 (2010): 40-62.

Huang, Yi Ting, Elizabeth Spelke, and Jesse Snedeker. "What exactly do numbers mean?" *Language Learning and Development* 9.2 (2013): 105-129.