

LING 537 Advanced Syntax
 Fall, 2022
 Hajime Hoji
 Thursday 2-4:30

This course is designed to enhance students' ability to investigate core syntactic questions in a rigorous and data-driven manner. Students will learn new investigative techniques and apply them to their own languages (and the languages of others if time permits). The new investigative techniques are based on the correlational methodology discussed in a forthcoming volume *The Theory and Practice of Language Faculty Science*" (De Gruyter Mouton, to be edited by Hajime Hoji, Daniel Plesniak and Yukinori Takubo). The methodology makes it possible to accumulate knowledge about the language faculty¹ by deducing *definite* predictions about an *individual*², obtaining experimental results precisely in line with such predictions, and replicating the experimental results with any other individual, regardless of their "languages". This course is not meant for the students to attain a full understanding of the relevant conceptual background, experimental demonstration of the initial success of the said methodology, and other related issues such as pertaining to the relation between language faculty science and physics, although (brief) reference will be made to success dealing with Japanese, English, Mandarin Chinese, and Korean, and information will be provided as to where interested students learn more about that.

The course instead focuses on practical application of the said techniques, limiting the background discussion to the minimum. The main focus of the said application of the said techniques is that, as noted above, how we seek to deduce and obtain definite judgments from an individual speaker and replicate the judgments in/with any other speaker regardless of their "languages", hence truly looking into the universal aspects of the language faculty. Crucially, definite judgments (to be replicated universally) are not definite judgments on a particular sentence in a particular language. It is by pursuing definite correlational patterns of judgments that we can hope to deduce and obtain definite judgments from an individual speaker and replicate the judgments in/with any other speaker regardless of their "languages".

A rough idea about a possible organization of the course is provided below; this can be modified based on students' interest and backgrounds.³

Unit 1: Background			
	Pre-Reading	Class Content	Substantive HW
Class 1: Introduction	None	Introducing the syllabus and beginning to go over the content of Ueyama 1998 (especially its Appendix	None; but the students should start thinking about their previous work in light of the upcoming project. ⁴

¹ The part(s) of the mind hypothesized to underlie our ability to relate sounds/signs (henceforth, simply signs) to meaning.

² More precisely, his/her judgments on the paring of a sequence of sounds (such as corresponding to a sentence) and (a particular aspect) of its meaning.

³ Changes have been made to the below, as a consequence of the class moving from Tuesday to Thursday and losing two sessions. What is given below still has one session "extra", and we will address the issue in due course.

⁴ The course plan as presented here focuses on students' own past works on their own I-language(s) and more importantly their own self-experiments on their I-languages, as various "Substantive HWs" indicate. If students would, in addition, like to apply what they have learned to assess works by others, they can work on portions of Chomsky 1957 and 1986, to be specified, where we find Chomsky's early remarks on BVA and DR, Lasnik 1986 for binding conditions C/D (as conditions on coreference), and Barker 2012 for BVA and DR. If that turns out to be the case, the

		D) and the relevant background for Mouton Chapter 3.	
Class 2: Testability and progress	Mouton Chapter 3 on research programs	Discussion of progress in a language-faculty-based research program.	(This is about the presentations coming up on the fourth class.) Students are asked to take one of their past works and assess it in line with the discussion of Chapter 3 and other materials presented in class (including Feynman's "guess-compute-compare). They should make clear the hypotheses, predictions, and test thereof, and assess to what extent these meet the standards outlined.
Class 3: Other sources of MR	Ueyama 1998: Appendix D and Mouton Chapter 2	Conclude discussion of Ueyama 1998, again focusing on other sources of MR	Continue the above
Class 4: Self-Assessment	None	Students present their "Self-Assessment" project	None
Unit 2: Introducing Correlations			
Class 5: Starting from first principles	Mouton Chapter 4	Why LFS (language faculty science) looks the way it does.	None
Class 6: BVA, DR, and Coref correlations	Mouton Chapter 5 (first half)	The "Coref+DR→BVA" correlation	Answering questions about the material from this class.
Class 7: Further discussion of correlations	Mouton Ch. 5 (second half)	Continue the discussion of the above	(This is about the presentations for the ninth class.) Students should attempt to replicate (or disconfirm) the basic reconstruction/weak crossover paradigm in their own I-language and present the results to the class. (Guideline

course plan will be modified to accommodate student presentation of those works, in the form of presenting a very concise "summary" of the readings which focuses on assessing the main hypothesis-prediction-data aspects of the relevant part of the papers in question. This should include testing the predictions in question (if possible) against one's own I-language.

			will be provided about how much they need to check.)
Class 8: Guest Lecture (might need to be moved based on guest's schedule)	TBD by guest	The guest will present his research results and will answer questions from students not only about his research but also about the materials discussed in class so far.	Continue to work on the above in light of hopefully better understanding from today's class.
Class 9: First self-experiment	None	Students present their first self-experiment	None
Unit 3: Further Investigations:			
Class 10: Replication in other I-languages	Mouton Chapter 6	Discussion of replication in other I-languages	Students should come up with and submit a draft topic for their final projects for feedback
Class 11: Practical Implementation discussion	Mouton Chapter 8. Hoji 2015: Sections 4.3, 4.4, and 4.5	Discussion of various practical issues regarding implementing non-self experiments.	Work on final project
Class 12: Workshop day	None	Instead of a pre-set lecture, students discuss (either as a group or one-on-one) the issues in their final project with the instructor for help	Work on final project
Class 13: Some Extensional topics	TBD	Some space for talking about further issues of interest, or, if necessary, catching up if things have gotten off track.	Work on final project
Class 14: Final Presentations	None	Students present their experiments for feedback before final writeup.	Students make any adjustments and/or extensions based on the feedback and then write up their experiments in some form. (Not graded on the "success" of the experiment, just the adherence to the correct process)

The focus of these investigations will be a longstanding question in generative literature: how can the (un)availability of certain interpretations be made to reveal the structure of a given sentence? While such questions are often tacitly addressed, establishing a definite and testable link between our basic theoretical elements (Merge, c-command, etc.) and individual judgments that survive rigorous investigation (in the form of a rigorous attempt at disconfirmation of predictions) is challenging. In order to address them, students will learn to (a) formulate both universal and I-language particular hypotheses that lead to testable

predictions, (b) understand the kinds of factors that cause predictions to fail and how to address them, and (c) conduct experiments in line with (a) and (b).

As a case study, we will consider the availability of interpretations such as bound variables (BVA), distributive readings (DR), and coreference (Coref) (and possibly others, including “sloppy-identity readings”, if time permits) in various “basic” sentence patterns. Such interpretations have long been argued to have a link to the structure of the sentences involved (often via c-command), but data are often contradictory, both in the sense of seeming to contradict the hypotheses in question and in the sense of different individuals disagreeing with one another. What we will see, however, is that such issues can be overcome if we broaden our perspective to include both structural and non-structural effects on interpretation, the latter including those that induce apparent inter-speaker variation and intra-speaker judgmental fluctuation/shifts. With these in hand, a definitive link between structure and interpretation can be established, offering a fundamental research tool for anyone attempting to study the (syntactic component of) language faculty in a rigorous manner.”

References

“Mouton” above refers to:

Hoji, Plesniak, and Takubo, forthcoming (the planned publication is in November 2022), *The Theory and Practice of Language Faculty Science* (De Gruyter Mouton)

Mouton Chapter 2: “On Non-individual-denoting So-words” (Ueyama)

Mouton Chapter 3: “Research heuristics in language faculty science” (Mukai)

Mouton Chapter 4: “The key tenets of language faculty science” (Hoji)

Mouton Chapter 5: “Detection of c-command effects” (Hoji)

Mouton Chapter 6: “Replication: Predicted correlations of judgments in Japanese” (Hoji)

Mouton Chapter 8: “Implementing experiments on the language faculty” (Plesniak)

Chomsky, Noam. 1957. *Syntactic Structures*. The Hague: Mouton & Co.

Chomsky, Noam. 1976. “Conditions on rules of grammar”, *Linguistic Analysis* Vol 2: pp. 303-351.

Barker Chris. 2012. “Quantificational binding does not require c-command”, *Linguistic Inquiry* 43(4). 614-633.

Hoji, Hajime. 2006. “Assessing competing analyses: Two hypotheses about “scrambling” in Japanese. In Ayumi Ueyama (ed.), *Theoretical and empirical studies of reference and anaphora: Toward the establishment of generative grammar as an empirical science* (A report of the Japan Society for the Promotion of Science Grant-in-Aid for Scientific Research (B), Project No. 15320052), 139–185. Fukuoka: Kyushu University.

Hoji, Hajime. 2015. *Language faculty science*. Cambridge: Cambridge University Press.

Lasnik, Howard. 1986 “On the necessity of binding conditions”, in *Essays on Anaphora*, Kluwer.

Plesniak, Daniel. 2022. *Towards a correlational law of language: Three factors constraining judgement variation*. Los Angeles, CA: University of Southern California dissertation.

Ueyama, Ayumi. 1998. *Two Types of Dependency*. Los Angeles, CA: University of Southern California dissertation.