Seminar in Applied Linguistics:
Applied Psycholinguistics
Fall 2020

Instructor:	Hyunah Ahn		
E-mail:	prosodygal@snu.ac.kr	Office Hours:	By appointment
Class Room:	On-line class via Zoom	Class Hours:	R 1:00-4:00pm

Last Updated: October 22, 2020

1 COURSE DESCRIPTIONS

This course aims to introduce students to literature in second language (L2) sentence processing, on-line experimental methods, and statistical analyses of linguistic data using R. Each session will be mainly composed of lecture, presentation, and method workshop. For literature, we will cover issues such as the role of age, working memory, and additional languages in language learning (and processing). Workshop sessions will walk students through the process of conducting online experiments and analyzing experimental data using R step by step.

In this class, all enrollees will be required to replicate an existing experiment on line and practice statistically analyzing collected data. Everyone will be provided with ample guidance throughout the process. Contact the instructor ahead of time (or earlier at the beginning of the semester) if you would like to design and conduct your own study instead of replicating an existing experiment.

This semester, we will begin by reading three **Special Issues** from the journal ***Bilingualism: Language and Cognition***. Those who are planning to take this course are strongly advised to start reading the three Special Issues as early as possible.

Due to COVID-19, all class meetings will occur on line via Zoom. All experiments will also be conducted on line. This syllabus will be updated constantly. Please be eco-friendly and do not print it out until the beginning of the semester. The syllabus includes a few quests hidden. Read everything from the first to the last pages carefully and complete all the quests before 8PM on Wednesday, September 2, 2020. This will account for 1 percentage point of your final grade (as part of your participation score).

2 LEARNING OBJECTIVES

At the end of the semester, students will be able to...

- Identify current issues in L2 sentence processing
- Critically review research studies involving experimental methods and statistical analyses
- Form falsifiable hypotheses via a proper operationalization of constructs in question
- Design experiments that can reliably test the hypotheses
- Statistically analyze collected data using R
- Report the results of their project both orally and in writing

3 REQUIREMENTS

Attendance & Participation			**10%**
	Hidden Quests	1%	
	AMLaP participation & Reflection	3%	
Article presentations			**20%**
	Pecha Kucha on commentary (3% each x 3)	9%	
	Full-length article	11%	
Assignments	500-word abstract on a research article	10%	**40%**
	Comments & questions on research articles	10%	
	R homework assignments	10%	
	Experiment Design OR Replication	10%	
Proposal	Proposal presentation	10%	**30%**
	Written proposal	20%	

3.1 Attendance & Participation

Each session is packed with information and skipping a session will make it very difficult for you to catch up in the next session. All students are expected to actively participate in all class discussions and activities. In addition to attendance and participation, I would also encourage everyone to attend **the 26th Architectures and Mechanisms for Language Processing (AMLaP) Conference** to be held between Sep 3-5, 2020 in Potsdam, Germany. Luckily for us, the conference will be held on line and will be open to everyone for free. Please check out https://amlap2020.org/program/ for more information. Carefully review their program and attend at least three sessions (either talk or poster presentations) and ask the presenter(s) a question each. Sharing your experience of attending a conference session and your questions and the presenters' responses will be your homework assignment as part of your attendance and participation score. We will have a short session on reflecting on the conference attendance in the second week.

3.2 Article Presentations

Each enrollee is required to give two different types of article presentations. The first is a Pecha Kucha Presentation. A Pecha Kucha presentation is a special form of presentation where each presenter is given about 7 minutes to give a presentation. A presenter is allowed to use only 20 presentation slides, for each of which s/he can speak only for 20 seconds. This semester, we are reading three different Special Issues from the journal *Bilingualism: Language and Cognition*. Each Special Issue is composed of an editorial, a keynote article, 14 to 15 commentaries, and a response article. An overview is given by the instructor, which covers the editorial and the keynote article. Each student has to give one Pecha Kucha presentation per Special Issue that covers 2-4 commentaries, each of which is 1 or 2 pages in length. You should give three Pecha Kucha presentations in total. Quest 1: What is your favorite song? Send me a YouTube link for it.

The other is a regular presentation on a full-length research article. You should give a presentation on one of the articles for 20 minutes and lead discussions for the remainder of the hour.

3.3 Assignments

A 500-word abstract: Once everyone is assigned a research article to present, a 500-word conference abstract style summary of the article should be submitted by **8PM on Wednesday, October 28, 2020**. The specific format of the abstract will be discussed at Writing Workshop 1 (in class on October 15).

Comments and questions on reading: Each of the research articles in the schedule will be discussed in class. Each participant should read every article carefully and post comments and/or questions on eTL by **8PM on the night before class**.

R homework assignments: Starting from the second week, a homework assignment on R scripts will be given for the following week. The homework assignments should be submitted by **8PM on Wednesday in the following week**.

Experiment Design/Replication Either individually or in groups, participants should design a novel experiment OR replicate an existing study on line. Participants are encouraged to use PennController for IBEX (https://www.pcibex.net/) for online experimentation. If you have specific research questions, please let the instructor know as early as possible.

3.4 Proposal

Throughout the semester, each participant is expected to come up with their own research proposal. The proposal should have an overview of background and motivation for the study, original research questions clearly outlined, experimental methods described in detail, and predictions laid out based on existing findings. Quest 2: What was the most interesting research article you read recently? Send me a citation information of the article in the APA style.

Proposal presentation: The overview of the proposal should be presented in a conference presentation style. Each team (or individual) will be given 20 minutes to present the outcome of their project, and a 10-minute Q & A session will follow.

Written proposal: A research paper of no shorter than 3000 words (including tht title, author name(s), subheadings, figure and table titles, end notes, and references) should have Intro, Background, Method, and Predictions, and it must be submitted by **11:59PM on Wednesday, December 25, 2020**.

4 REFERENCES

4.1 On Statistics

Crawley, Michael J. (2015). *Statistics: An introduction using R.* Wext Sussex, UK: Wiley.

Crawley, Michael J. (2013). *The R book.* West Sussex, UK: Wiley.

4.2 Special Issue on Critical Period Hypothesis

4.2.1 Editorial

Abutalebi, J., & Clahsen, H. (2018). Critical periods for language acquisition: New insights with particular reference to bilingualism research. *Bilingualism: Language and Cognition, 21*(5), 883-885. https://doi.org/10.1017/S1366728918001025

4.2.2 Keynote Article

Mayberry, R. I., & Kluender, R. (2018a). Rethinking the critical period for language: New insights into an old question from American Sign Language. *Bilingualism: Language and Cognition, 21*(5), 886-995. https://doi.org/10.1017/S1366728917000724

4.2.3 Commentaries (1-2 pages)

Abrahamsson, N. (2018). But first, let's think again! *Bilingualism: Language and Cognition, 21*(5), 906-907. https://doi.org/10.1017/S1366728918000251

Bialystok, E., & Kroll, J. F. (2018). Can the critical period be saved? A bilingual perspective. *Bilingualism: Language and Cognition, 21*(5), 908-910.https://doi.org/10.1017/s1366728918000202

Birdsong, D., & Quinto-Pozos, D. (2018). Signers and speakers, age and attainment. *Bilingualism: Language and Cognition, 21*(5), 911-912. https://doi.org/10.1017/S1366728918000226

Bley-Vroman, R. (2018). Language as "something strange". *Bilingualism: Language and Cognition, 21*(5), 913-914. https://doi.org/10.1017/S136672891800024X

DeKeyser, R. M. (2018). The critical period hypothesis: A diamond in the rough. *Bilingualism: Language and Cognition, 21*(5), 915-916. https://doi.org/10.1017/S1366728918000147

Emmorey, K. (2018). Variation in late L1 acquisition? Bilinguliam: Language and Cognition, 21(5), 917-918. https://doi.org/10.1017/S1366728918000196

Flege, J. E. (2018). It's input that matters most, not age. *Bilingualism: Language and Cognition, 21*(5), 919-920. https://doi.org/10.1017/S136672891800010X

Hyltenstam, K. (2018). Second language ultimate attainment: Effects of maturation, exercise, and social/psychological factors. *Bilingualism: Language and Cognition, 21*(5), 921-923. https://doi.org/10.1017/s1366728918000172

Lillo-Martin, D. (2018). Differences and similarities between late first-language and second-language learning. *Bilingualism: Language and Cognition, 21*(5), 924-925. https://doi.org/10.1017/S1366728918000159

Long, M. H., & Granena, G. (2018). Sensitive periods and language aptitude in second language acquisition. *Bilingualism: Language and Cognition, 21*(5), 926-927. https://doi.org/10.1017/S1366728918000184

Newport, E. L. (2018, Nov). Is there a critical period for L1 but not L2? *Bilingualism: Language and Cognition, 21*(5), 928-929. https://doi.org/10.1017/S1366728918000305

Reh, R., Arredondo, M., & Werker, J. F. (2018, Feb 14). Understanding individual variation in levels of second language attainment through the lens of critical period mechanisms. *Bilingualism: Language and Cognition, 21*(5), 930-931. https://doi.org/10.1017/S1366728918000263

Verissimo, J. (2018). Sensitive periods in both L1 and L2: Some conceptual methodologial suggestions. *Bilingualism: Language and Cognition, 21*(5), 932-933. https://doi.org/10.1017/S1366728918000275

White, L. (2018). Nonconvergence on the native speaker grammar: Defining L2 success. *Bilingualism: Language and Cognition, 21*(5), 934-935. https://doi.org/10.1017/S1366728918000214

Woll, B. (2018). The consequences of very late exposure to BSL as an L1. *Bilingualism: Language and Cognition, 21*(5), 916-917. https://doi.org/10.1017/S1366728918000238

Quest 3: Have you conducted or participated in a linguistic experiment? Send me a short description of your experience.

4.2.4 Author's Reponse

Mayberry, R. I., & Kluender, R. (2018b). Rethinking the critical period for language: New insights into an old question from American Sign Language. *Bilingualism: Language and Cognition, 21*(5), 938-944. https://doi.org/10.1017/S1366728918000585

4.3 Special Issue on Parsing and Working Memory in Bilingual Sentence Processing

4.3.1 Editorial

Abutalebi, J., & Clahsen, H. (2017). Memory retrieval and sentence processing: Differences between native and non-native speakers. *Bilingualism: Language and Cognition, 20*(4), 657-658. https://doi.org/10.1017/S136672891700027X

4.3.2 Keynote Article

Cunnings, I. (2017a). Parsing and working memory in bilngual sentence processing. *Bilingualism: Language and Cognition, 20*(4), 659-678. https://doi.org/10.1017/S1366728916000675

4.3.3 Commentaries (1-2 pages)

Dillon, B. (2017). A short discourse on reflexives: a reply to Cunnings (2016). *Bilingualism: Language and Cognition, 20*(4), 679-680. https://doi.org/10.1017/s1366728916000973

Dussias, P. E., Beatty-MartÍNez, A. L., & Perrotti, L. (2017). Susceptibility to interference affects the second and the first language. *Bilingualism: Language and Cognition, 20*(4), 681-682. https://doi.org/10.1017/s1366728916001024

Futrell, R., & Gibson, E. (2017). L2 processing as nonisy channel language comprehension. *Bilingualism: Language and Cognition, 20*(4), 683-684. https://doi.org/10.1017/S1366728916001061

Gabriele, A., Fiorentino, R., & Covey, L. (2017). Understanding the symptoms and sources of variability in second language sentence processing. *Bilingualism: Language and Cognition, 20*(4), 685-686. https://doi.org/10.1017/s1366728916000961

Hamrick, P., & Ullman, M. T. (2017). A neurocognitive perspective on retrieval interference in L2 sentence processing. *Bilingualism: Language and Cognition, 20*(4), 687-688. https://doi.org/10.1017/s136672891600081x

Hopp, H. (2017). Individual differences in L2 parsing and lexical representations. *Bilingualism: Language and Cognition, 20*(4), 689-690. https://doi.org/10.1017/s1366728916000821

Jacob, G., Lago, S. O. L., & Patterson, C. (2017). L2 processing and memory retrieval: Some empirical and conceptual challenges. *Bilingualism: Language and Cognition, 20*(4), 691-693. https://doi.org/10.1017/s1366728916000948

Juffs, A. (2017). Construct operationalization, L1 effects, and context in second language processing. *Bilingualism: Language and Cognition, 20*(4), 694-695. https://doi.org/10.1017/S1366728916000900

Kaiser, E. (2017). On the role of discourse-level information in second-language sentence processing. *Bilingualism: Language and Cognition, 20*(4), 698-699. https://doi.org/10.1017/s1366728916001012

Keating, G. D. (2017). L2 Proficiency matters in comparative L1/L2 processing research. *Bilingualism: Language and Cognition, 20*(4), 700-701. https://doi.org/10.1017/s1366728916000912

Malko, A., Ehrenhofer, L., & Phillips, C. (2017). Theories and frameworks in second language processing. *Bilingualism: Language and Cognition, 20*(4), 702-703. https://doi.org/10.1017/s1366728916001000

Montrul, S., & Tanner, D. S. (2017). Individual differences and retrieval interference in L2 Processing. *Bilingualism: Language and Cognition, 20*(4), 704-705. https://doi.org/10.1017/s136672891600095x

Omaki, A. (2017). Linking learning and parsing in bilingual sentence processing. *Bilingualism: Language and Cognition, 20*(4), 706-707. https://doi.org/10.1017/s1366728916000985

Tremblay, A., & Coughlin, C. E. (2017). Cue-Weighting mechanism and bilingualism. *Bilingualism: Language and Cognition, 20*(4), 708-709. https://doi.org/10.1017/s1366728916001036

Wagers, M. W. (2017). Sources of variability in linguistic memory systems. *Bilingualism: Language and Cognition, 20*(4), 710-711. https://doi.org/10.1017/s1366728916000997

4.3.4 Author's response

Cunnings, I. A. N. (2017b). Interference in Native and Non-Native Sentence Processing. *Bilingualism: Language and Cognition, 20*(4), 712-721. https://doi.org/10.1017/s1366728916001243

4.4 Special Issue on Heritage Language Sentence Processing

4.4.1 Editorial

Abutalebi, J., & Clahsen, H. (2020). Heritage languages, infants' language recognition, and artificial grammars for bilingualism research. *Bilingualism: Language and Cognition, 23*(1), 2-3. https://doi.org/10.1017/S1366728919000762

4.4.2 Keynote Article

Polinsky, M., & Scontras, G. (2020a). Understanding heritage languages. *Bilingualism: Language and Cognition, 23*(1), 4-20. https://doi.org/10.1017/s1366728919000245

4.4.3 Commentaries (1-2 pages)

Embick, D., White, Y., & Tamminga, M. (2020). Heritage languages and variation: Identifying shared factors. *Bilingualism: Language and Cognition, 23*(1), 21-22. https://doi.org/10.1017/s1366728919000476

Felser, C. (2020). Do processing resource limitations shape heritage language grammars? *Bilingualism: Language and Cognition, 23*(1), 23-24. https://doi.org/10.1017/s1366728919000397

Flores, C., & Rinke, E. (2020). The relevance of language-internal variation in predicting heritage language grammars. *Bilingualism: Language and Cognition, 23*(1), 25-26. https://doi.org/10.1017/s1366728919000464

Gürel, A. (2020). Towards a comprehensive model of heritage language development. *Bilingualism: Language and Cognition, 23*(1), 27-28. https://doi.org/10.1017/s1366728919000439

Kupisch, T. (2020). Towards modelling heritage speakers' sound systems. *Bilingualism: Language and Cognition, 23*(1), 29-30. https://doi.org/10.1017/s1366728919000385

Lohndal, T. (2020). Predicting outcomes in heritage grammars. *Bilingualism: Language and Cognition, 23*(1), 31-32. https://doi.org/10.1017/S1366728919000403

Meisel, J. M. (2020). Shrinking structures in heritage languages: Triggered by reduced quantity of input? *Bilingualism: Language and Cognition, 23*(1), 33-34. https://doi.org/10.1017/s1366728919000452

Montrul, S., & Mason, S. A. (2020). Smaller vocabularies lead to morphological overregularization in heritage language grammars. *Bilingualism: Language and Cognition, 23*(1), 35-36. https://doi.org/10.1017/s1366728919000427

Muysken, P. (2020). The case for contact induced-change in Heritage Languages. *Bilingualism: Language and Cognition, 23*(1), 37-38. https://doi.org/10.1017/s1366728919000373

Pearl, L. S. (2020). Leveraging monolingual developmental techniques to better understand heritage languages. *Bilingualism: Language and Cognition, 23*(1), 39-40. https://doi.org/10.1017/s1366728919000361

Putnam, M. T. (2020). Separating vs. shrinking. *Bilingualism: Language and Cognition, 23*(1), 41-42. https://doi.org/10.1017/s1366728919000415

Sekerina, I. A., & Laurinavichyute, A. K. (2020). Heritage speakers can actively shape not only their grammar but also their processing. *Bilingualism: Language and Cognition, 23*(1), 43-45. https://doi.org/10.1017/s1366728919000440

Serratrice, L. (2020). What counts as the baseline in child heritage language acquisition? *Bilingualism: Language and Cognition, 23*(1), 46-47. https://doi.org/10.1017/s1366728919000518

Valian, V. (2020). Variability: Definitions of language and language learning. *Bilingualism: Language and Cognition, 23*(1), 48-49. https://doi.org/10.1017/s1366728919000609

4.4.4 Author's response

Polinsky, M., & Scontras, G. (2020b). A roadmap for heritage language research. *Bilingualism: Language and Cognition, 23*(1), 50-55. https://doi.org/10.1017/s1366728919000555

5 TENTATIVE SCHEDULE

Dates	**1:00-1:50pm** Presentations	**2:00-2:50pm** Lecture/Discussion	**3:00-3:50pm** Statistics
9/3	[Welcome!]	[Course Overview]	Fundamentals
9/10	Mayberry & Kluender (2018a)	Discussion	Data frames
9/17	Commentary Pecha Kucha	Discussion	Central tendency
9/24	[Designing an experiment]	Cunnings (2017a)	Variance
10/8	Commentary Pecha Kucha	Discussion	~~Single samples~~
10/15	Writing Workshop 1	Polinsky & Scontras (2020a)	~~Two samples~~
10/22	Commentary Pecha Kucha	Discussion	Single samples
10/29	Writing Workshop 2	Two samples	Regression 1
11/5	Cunnings et al. (2017)	Regression 2	Regression 3
11/12	Keating et al. (2011)	Writing Workshop 3	ANOVA 1
11/19	Montero-Melis & Jaeger (2019)	[Analyzing data]	ANOVA 2
11/26	Perdomo & Kaan (2019)	[Scripting an experiment]	Multiple regression
11/3	Hopp (2016)	[Running an experiment]	Mixed effects models
12/10		[Analyzing data]	
12/17		[Mini-Conference]	

Notes

(1) Underlined articles are to be presented by students.

(2) Sessions within [ ] require no reading ahead of session.

(3) Writing workshop 1: 500-word abstract writing
Writing workshop 2: Peer Review
Writing workshop 3: Research paper organization

5.1 Articles for student presentations

Cunnings, I., Fotiadou, G., & Tsimpli, I. (2017). Anaphora Resolution and Reanalysis during L2 Sentence Processing. Studies in Second Language Acquisition, 39(4), 621-652. https://doi.org/10.1017/s0272263116000292

Hopp, H. (2016). Learning (not) to predict: Grammatical gender processing in second language acquisition. Second Language Research, 32(2), 277-307. https://doi.org/10.1177/0267658315624960

Keating, G. D., VanPatten, B., & Jegerski, J. (2011). Who was walking on the beach? – Anaphora resolution in Spanish Heritage speakers and adult second language learners. Studies in Second Language Acquisition, 33, 193-221. https://doi.org/10.1017/S0272263110000732

Montero-Melis, G., & Jaeger, T. F. (2019). Changing expectations mediate adaptation in L2 production. Bilingualism: Language and Cognition, 23(3), 602-617. https://doi.org/10.1017/s1366728919000506

Perdomo, M., & Kaan, E. (2019). Prosodic cues in second-language speech processing: A visual world eye-tracking study. Second Language Research. https://doi.org/10.1177/0267658319879196