# LGCS 121: Psycholinguistics

Fall 2015 Monday & Wednesday 1:15-2:30pm Edmunds 217

**Instructor:** Laura Johnson

Email: laura.johnson@pomona.edu

Office: Edmunds 203

Office hours: Tuesday 1:00-3:00pm and by appointment

Course website: https://sakai.claremont.edu

#### **OVERVIEW**

Psycholinguistics is an interdisciplinary field that combines the approaches of cognitive psychology, linguistics, and neuroscience to study how language is produced, comprehended, and represented in the mind. This course provides an overview of language processing in the context of more general cognitive systems. We will cover a range of topics, including the neuroscience of language, language acquisition, bilingualism, speech perception, speech production, and syntactic processing.

#### **READINGS**

Language in Mind: An Introduction to Psycholinguistics, 1st Edition, by Julie Sedivy

This textbook is required and may be purchased at Huntley Bookstore or online. An ebook version is available from the publisher's website.

In addition to the assigned textbook chapters, we will also be discussing experimental papers, reviews, and book chapters from other sources. All of these will be available for download on Sakai. During a typical week, we will cover the textbook and other background material on Mondays. On Wednesdays, we will discuss the more complex primary source articles.

Other course materials, including presentation slides, handouts, and links to relevant webpages, will also be available on Sakai.

### **COURSE REQUIREMENTS**

All written assignments will be submitted to your individual drop box on Sakai. No paper copies are necessary. I will also be grading and providing feedback on your work using Sakai.

With the exception of the in-class presentation, note that all assignments are due on days when we do not meet for class! This is intended to prevent the assignments from interfering with your ability to complete the readings for each class. The exams and written assignments are due on Fridays by 5pm. The weekly discussion questions will be due on Tuesdays by midnight.

**Take-home Exams (2 x 20%):** There will be two take-home exams, which will consist of essay questions relevant to the readings, presentations, and class discussions up to that point in the course. You will be allowed to use the readings and any other resources you would like, but you must do your own work and refrain from discussing the questions with anyone else. Please submit your exams to your drop box on Sakai. The first exam will be due on Friday, October 16, and the second exam will be due on Friday, December 11.

**Discussion Questions (10 x 1%):** In order to get you thinking critically about the material, you will be asked to write two discussion questions for the Wednesday readings most weeks (see the schedule for due dates). These questions should be based on the readings and posted to the discussion forum on Sakai by Tuesday evening at midnight. These questions will be graded based on depth and creativity. Each of the 10 sets of questions will be worth 1% of your grade.

**Participation (10%):** Because this is a discussion-based course, your daily participation is extremely important. A large proportion of our class time will be spent discussing the readings, so it is essential that you arrive on time and prepared to contribute.

**Paper:** The biggest portion of your grade will be based on the final paper. In this paper, which should be approximately 10-15 pages long, you will write a literature review on a topic related to psycholinguistics, and then propose an experiment to explore it further. The literature review should cite at least five scholarly articles, and should be used to introduce the scientific question that your experiment will attempt to answer. You won't actually be carrying out the experiment, so feel free to be creative. However, it is important that your proposed experiment is a well-designed and controlled scientific study, and you should use it to test a specific and well-developed hypothesis. Your paper should end with a description of predicted results for your experiment.

There will be three written assignments related to the paper:

- 1. **Proposal (5%):** A general description of your paper topic, along with a brief outline, will be due on Friday 10/23. I'd be happy to discuss your ideas with you beforehand and help you narrow down a topic.
- 2. **Rough Draft (10%):** A complete rough draft of your paper will be due on Friday 11/20. I will return it to you by Monday 11/30 with extensive comments and suggestions for possible revisions.
- 3. *Final Draft (20%):* The final draft of your paper will be due during finals week on Friday 12/18. The final draft should reflect significant revisions and expansion of the ideas from the rough draft.

**Final Presentation (5%):** During our last week of class, you will give a presentation about your final paper and proposed experiment. By now you will have put a great deal of work into developing what will almost certainly be interesting ideas, so why not share them with the class? It will also be a great opportunity to get some last-minute feedback. The presentation will be worth 5% of your grade.

#### **GRADING**

### Grade Breakdown:

Take-home Exam #1: 20% Take-home Exam #2: 20% Discussion Questions (10 x 1%) 10% Participation: 10%

Final Project

Proposal: 5% Rough Draft: 10% Final Paper: 20% Final Presentation: 5%

# **Grading Scale:**

By default, the following scale will be used to assign letter grades. If necessary, grades will be curved up, but they will not be curved down. Scores will not be rounded (e.g., according to the default scale, 89.99% is a B+, not an A-).

A	93-100%	C	73-76%
<b>A-</b>	90-92%	C-	70-72%
B+	87-89%	D+	67-69%
В	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	$\mathbf{F}$	<60%

# **SCHEDULE**

(\* means that discussion questions are due the night before class)

Week	Date	Topic		
1	W 9/02	Introduction		
2	M 9/07	Language in Other Species?		
	W 9/09	Language in Other Species? — Discussion*		
3	M 9/14	Language and the Brain		
	W 9/16	Language and the Brain — Discussion*		
4	M 9/21	Language Disorders		
	W 9/23	Language Disorders — Discussion*		
5	M 9/28	Language Acquisition: Sounds and Words		
-	W 9/30	Language Acquisition: Sounds and Words — Discussion*		
6	M 10/05	Language Acquisition: Syntax		
	W 10/07	Language Acquisition: Syntax — Discussion*		
7	M 10/12	Bilingualism		
,	W 10/14	Bilingualism — Discussion		
	Take-home Exam #1 due by 5pm on Friday 10/16			
8	M 10/19	NO CLASS — FALL BREAK		
	W 10/21	In-class meetings to discuss project proposal		
	Project P	Project Proposal due by 5pm on Friday 10/23		
9	M 10/26	Language and Thought		
-	W 10/28	Language and Thought — Discussion*		
10	M 11/02	Speech Perception		
	W 11/04	Speech Perception — Discussion*		
11	M 11/09	Word Recognition and the Lexicon		
	W 11/11	Word Recognition and the Lexicon — Discussion*		
12	M 11/16	Syntactic Processing		
	W 11/18	Syntactic Processing — Discussion*		
	Rough Draft due by 5pm on Friday 11/20			
13	M 11/23	Discourse and Inference		
J	W 11/25	NO CLASS		
14	M 11/30	Speech Production & Speech Errors		
•	W 12/02	Speech Production & Speech Errors— Discussion*		
15	M 12/07	Final Project Presentations		
	W 12/09	Final Project Presentations		
	<b>Take-hon</b>	Take-home Exam #2 due by 5pm on Friday 12/11		
Finals Week	Final Paper due by 5pm on Friday 12/18			

#### READING LIST

Chapters listed are from the textbook, *Language in Mind*. Please read the whole chapter, unless page numbers are specified.

### 9/02 Introduction

# 9/07 Language in Other Species?

- Chapter 2: Origins of Human Language
- Chapter 12: Language Diversity, pp. 471-492

## 9/09 Language in Other Species? — Discussion\*

- Berwick, R. C., Friederici, A. D., Chomsky, N., & Bolhuis, J. J. (2013). Evolution, brain, and the nature of language. *Trends in Cognitive Sciences*, 17(2), 89-98.
- Gibson, K. R. (2012). Language or protolanguage? A review of the ape language literature. In M. Tallerman & K. R. Gibson (Eds.), *The Oxford handbook of language evolution* (pp. 46-58). Oxford, UK: Oxford University Press.

### 9/14 Language and the Brain

• Chapter 3: Language and the Brain

# 9/16 Language and the Brain — Discussion\*

- Hickok, G., & Poeppel, D. (2007). The cortical organization of speech processing. *Nature Reviews Neuroscience*, *8*, 393-402.
- Kutas, M., & Hillyard, S. A. (1980). Reading senseless sentences: Brain potentials reflect semantic incongruity. *Science*, *207*, 203-205.

### 9/21 Language Disorders

 Caplan, D. (2003). Aphasic syndromes. In K. M. Heilman & E. Valenstein (Eds.), Clinical neuropsychology (4<sup>th</sup> ed., pp. 14-34). New York, NY: Oxford University Press.

# 9/23 Language Disorders — Discussion\*

- MacKay, D. G., James, L. E., Hadley, C. B. (2008). Amnesic H.M.'s performance on the language competence test: Parallel deficits in memory and sentence production. *Journal of Clinical and Experimental Neuropsychology*, *30*(3), 280-300.
- Ullman, M. T., Corkin, S., Coppola, M., Hickok, G., Growdon, J. H., Koroshetz, W. J., & Pinker, S. (1997). A neural dissociation with language: Evidence that the mental dictionary is part of declarative memory, and that grammatical rules are processed by the procedural system. *Journal of Cognitive Neuroscience*, *9*(2), 266-276.

### 9/28 Language Acquisition: Sounds and Words

- Chapter 4: Learning Sound Patterns
- Chapter 5: Learning Words, pp. 145-161

# 9/30 Language Acquisition: Sounds and Words — Discussion\*

- Hespos, S. J., & Spelke, E. S. (2004). Conceptual precursors to language. *Nature*, 430, 453-456.
- Saffran, J. R., Aslin, R. N., & Newport, E. L. (1996). Statistical learning by 8-month-old infants. *Science*, *274*, 1926-1928.
- Werker, J. F., & Tees, R. C. (1984). Cross-language speech perception: Evidence for perceptual reorganization during the first year of life. *Infant Behavior & Development*, 7, 49-63.

### 10/05 Language Acquisition: Syntax

- Chapter 6: Learning the Structure of Sentences
- Chapter 11: The Social Side of Language, pp. 421-449

### 10/07 Language Acquisition: Syntax — Discussion\*

- Marcus, G. F., Vijayan, S., Bandi Rao, S., & Vishton P. M. (1999). Rule learning by seven-month-old infants. *Science*, 283, 77-80.
- Trueswell, J. C., & Gleitman, L. R. (2011). Learning to parse and its implications for language acquisition. In M. G. Gaskell (Ed.), *The Oxford handbook of psycholinguistics* (pp. 635-655). Oxford, UK: Oxford University Press.

# 10/12 Bilingualism

- Bialystok, E., Craik, F. I. M., & Luk, G. (2012). Bilingualism: Consequences for mind and brain. *Trends in Cognitive Sciences*, *16*(4), 240-250.
- Kroll, J. F., Bobb, S. C., Hoshino, N. (2014). Two languages in mind: Bilingualism as a tool to investigate language, cognition, and the brain. *Current Directions in Psychological Science*, *23*(3), 159-163.

# 10/14 Bilingualism — Discussion

- Bialystok, E., Craik, F. I. M., Klein, R., & Viswanathan, M. (2004). Bilingualism, aging, and cognitive control: Evidence from the Simon task. *Psychology and Aging*, 19(2), 290-303.
- Emmorey, K., Luk, G., Pyers, J. E., & Bialystok, E. (2008). The source of enhanced cognitive control in bilinguals: Evidence from bimodal bilinguals. *Psychological Science*, *19*(12), 1201-1206.

### 10/19 NO CLASS

# 10/21 Meetings to discuss project proposal

### 10/26 Language and Thought

- Chapter 12: Language Diversity, pp. 492-509
- Gleitman, L. & Papafragou, A. (2005). Language and thought. In K. J. Holyoak & R. G. Morrision (Eds.), *The Cambridge handbook of thinking and reasoning* (pp. 633-661). New York, NY: Cambridge University Press.

## 10/28 Language and Thought — Discussion\*

- Boroditsky, L. (2001). Does language shape thought?: Mandarin and English speakers' conceptions of time. *Cognitive Psychology*, *43*, 1-22.
- Papafragou, A., Massey, C., & Gleitman, L. (2002). Shake, rattle, 'n' roll: The representation of motion in language and cognition. *Cognition*, *84*, 189-219.

# 11/02 Speech Perception

- Ingram, J. C. L. (2007). Chapter 5: The problem of speech perception. In *Neurolinguistics: An introduction to spoken language processing and its disorders*. New York, NY: Cambridge University Press.
- Ingram, J. C. L. (2007). Chapter 6: Speech perception: Paradigms and findings. In *Neurolinguistics: An introduction to spoken language processing and its disorders*. New York, NY: Cambridge University Press.

### 11/04 Speech Perception — Discussion\*

- D'Ausilio, A., Pulvermüller, F., Salmas, P., Bufalari, I., Begliomini, C., & Fadiga, L. (2009). The motor somatotopy of speech perception. *Current Biology*, 19, 381-385.
- Lotto, A. J., Hickok, G. S., & Holt, L. L. (2009). Reflections on mirror neurons and speech perception. *Trends in Cognitive Sciences*, *13*(3), 110-114.
- McGurk, H., & MacDonald, J. (1976). Hearing lips and seeing voices. *Nature*, 264, 746-748.

### 11/09 Word Recognition and the Lexicon

• Chapter 7: Word Recognition

# 11/11 Word Recognition and the Lexicon — Discussion\*

- Moss, H. E., & Gaskell, M. G. (1999). Lexical semantic processing during speech comprehension. In S. Garrod & M. Pickering (Eds.), *Language processing* (pp. 59-99). East Sussex, UK: Psychology Press.
- Shafto, M., & MacKay, D. G. (2000). The Moses, Mega-Moses, and Armstrong illusions: Integrating language comprehension and semantic memory. *Psychological Science*, *11*(5), 372-378.

# 11/16 Syntactic Processing

• Chapter 8: Understanding Sentence Structure and Meaning

### 11/18 Syntactic Processing — Discussion\*

- Crocker, M. W. (1999). Mechanisms for sentence processing. In S. Garrod & M. Pickering (Eds.), *Language processing* (pp. 191-232). East Sussex, UK: Psychology Press.
- Gibson, E., & Pearlmutter, N. J. (1998). Constraints on sentence comprehension. *Trends in Cognitive Sciences*, *2*(7), 262-268.

### 11/23 Discourse and Inference

• Chapter 10: Discourse and Inference

## **11/25** NO CLASS

# 11/30 Speech Production & Speech Errors

• Chapter 9: Speaking: From Planning to Articulation

# 12/02 Speech Production & Speech Errors — Discussion\*

- Fromkin, V. A. (1971). The non-anomalous nature of anomalous utterances. *Language*, 47(1), 27-52.
- Jaeger, T. F., Furth, K., & Hilliard, C. (2012). Phonological overlap affects lexical selection during sentence production. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 38*(5), 1439-1449.

# 12/07-12/09 Final Project Presentations