Psych 56L/ Ling 51:
Acquisition of Language

Lecture 1
Introduction

Administrivia

Instructor:

Lisa Pearl, Department of Cognitive Sciences

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http://www.socsci.uci.edu/~lpearl

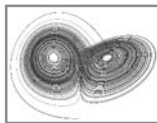Office Hours: T, 11:30am - 1pm

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Teaching Assistant:

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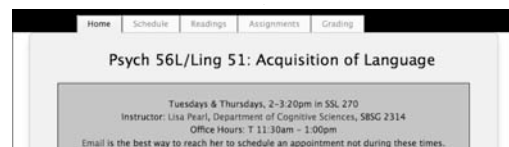
Office Hours: TBA

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Class web page:

http://www.socsci.uci.edu/~lpearl/courses/psych56L_2010win/index.html

Accessible from EEE, as well. Contains overview, schedule, readings, course assignment descriptions, and grading policies.

Psych 56L/Ling 51: Acquisition of Language

Tuesdays & Thursdays, 2-3:20pm in SSL 270
Instructor: Lisa Pearl, Department of Cognitive Sciences, SBSG 2314
Office Hours: T 11:30am – 1:00pm
Email is the best way to reach her to schedule an appointment not during these times.

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Readings will be from *Language Development (4th edition)*,
by Erika Hoff

Readings should be read by the day listed

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Assignments
Homework:

Three throughout the quarter. Collaboration is allowed and encouraged. However…

You may discuss the homework together, but you must write up your answers separately, and you must write the names of your collaborators on your assignment when you turn it in.

If you do not do both these things, it will be considered academic dishonesty and you will receive a 0 for that assignment.
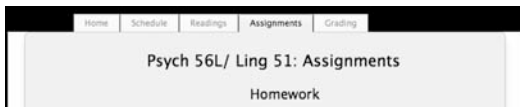
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Assignments
Homework:

Late homework will be accepted according to the late policy listed in the assignments section on the class webpage. If you cannot turn in the homework on time, take advantage of the policy to get some credit for your assignment. Seriously.

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Exams

Midterm exam:

There will be a midterm exam on 2/04/10. It will cover the material in weeks 1-4. Review questions will be available for each topic covered in class, and there will be a midterm review in class 2/02/10. Midterm exam questions will come from the homeworks and the review questions.

The midterm exam will be open-note, but non-collaborative.

If you are found collaborating with other classmates during the midterm exam, you will receive a 0.

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Exams

Final exam:

There will be a final exam in-class on 3/11/10. It will cover the material in weeks 1-10, with a strong focus on the material in weeks 5 - 10. Review questions will be available for each topic covered in class, and there will be a final exam review on 3/09/10. Exam questions will come from the homeworks and the review questions.

The final exam will be open-note, but non-collaborative.

If you are found collaborating with other classmates during the final exam, you will receive a 0.

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Grades

Homework: 50%
Midterm Exam: 20%
Final Exam: 30%

Your grades will be determined by *approximately* this scale:

96.50-100.00: A+	83.50-86.49: B …
93.50-96.49: A	80.00-83.49: B-
90.00-93.49: A-	76.50-79.99: C+
86.50-89.99: B+	73.50-76.49: C

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Extra Credit

You can earn up to 3 percentage points of extra credit two ways. (See the class web page under the "assignments" tab for more details.)

(1) Participate as a human subject in social science experiments for up to 3 hours (half an hour = half a percentage point).

(2) Write a four page paper about a topic in language acquisition.

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Schedule

"This is our wonderfully ambitious schedule. We'll attempt to keep with it, but it is subject to modification."

Topics:

Intro to Language Learning	(1/05-1/07)
Biological Bases of Language	(1/12-1/19)
Sounds	(1/21-1/28)
Words	(2/09-2/11)
Word & Sentence Structure	(2/16-2/23)
Language & Cognition	(2/25)
Childhood Bilingualism	(3/02)
Language in Special Populations	(3/04)

Knowledge of Language

It's so natural for us to produce and comprehend language that we often don't think about what an accomplishment this is.

Or how we learned language in the first place.

About Language

Language is a complex system of knowledge that all children learn by listening to native speakers in their surrounding environment.

It includes sound structure, word structure, word meaning, sentence structure, mapping from sentence structure to meaning, unspoken rules of conversation…

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Stress pattern → gob lins

Individual sounds (in IPA) → g a b l ɪ n z

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goblin (plural) = goblin + s

gob lins

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About Language

Language is a complex system of knowledge that all children learn by listening to native speakers in their surrounding environment.

Goblins like children.

It includes sound structure, word structure, word meaning, sentence structure, mapping from sentence structure to meaning, unspoken rules of conversation…

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About Language

Language is a complex system of knowledge that all children learn by listening to native speakers in their surrounding environment.

Don't goblins like children?

Goblins like children.

It includes sound structure, word structure, word meaning, sentence structure, mapping from sentence structure to meaning, unspoken rules of conversation…

goblins

goblin (plural) = goblin + s

gob lins

g a b l ɪ n z

Some Terminology

Phonology: sounds and sound system of the language

g a b l ɪ n z   gob lins

Lexicon: Words and associated knowledge (word forms, word meanings, etc.)

goblins =

(not koblins)

Morphology: system for combining units of meaning together
(goblin + [plural] = goblins)

Some Terminology

Syntax: system for combining words into sentences

<div align="center">Goblins like children.</div>

Pragmatics: knowledge of language use

Don't goblins like children? = surprise if the answer is 'no'
(expectation is that the answer is 'yes')
Use this question format to show expectation of a 'yes' answer.

Kids Do Amazing Things

Much of the linguistic system is already known by age 3.

…when kids can't tie their own shoes or even understand the concept of 4.

What kids are doing: extracting patterns and making generalizations from the surrounding data mostly without explicit instruction.

Terminology: Patterns or "rules" of language = grammar

Knowledge of Language & Hidden Rules

Some examples from language:

You know that…

…*strop* is a possible word of English, while *stvop* isn't.

Knowledge of Language & Hidden Rules

Some examples from language:

You know that…

…"Who did you see who did that?" is not a grammatical question in English

(Instead: "Who did you see do that?")

Knowledge of Language & Hidden Rules

Some examples from language:

You know that…

  …In "She ate the peach while Sarah was reading", *she* ≠ *Sarah*

  but *she* can be *Sarah* in all of these:

  Sarah ate the peach while she was reading.
  While she was reading, Sarah ate the peach.
  While Sarah was reading, she ate the Peach.

Knowledge of Language & Hidden Rules

Some examples from language:

You know that…

  …the 's' in 'cats' sounds different from the 's' in goblins

  cats: 's' = /s/

  goblins: 's' = /z/

Possible objections to
a mental rule set

"Why should I believe I store a set of rules unconsciously in my mind? I just understand sentences because they make sense."

Possible objections to
a mental rule set

"Why should I believe I store a set of rules unconsciously in my mind? I just understand sentences because they make sense."

But why do some sentences make sense and others don't?

  Hoggle has two jewels.
  *Two Hoggle jewels has.

Possible objections to a mental rule set

Why can we recognize patterns even when some of the words are unknown?

'Twas brillig, and the slithy toves
did gyre and gimble in the wabe...

Possible objections to a mental grammar

"What about people who speak ungrammatically, who say things like 'We ain't got no bananas'? They obviously don't have grammars in their heads."

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Prescriptive vs. Descriptive Grammar

Prescriptive: what you have to be taught in school, what is prescribed by some higher "authority"

"Don't end a sentence with a preposition."
" 'Ain't' is not a word."

Possible objections to a mental grammar

"What about people who speak ungrammatically, who say things like 'We ain't got no bananas'? They obviously don't have grammars in their heads."

Prescriptive vs. Descriptive Grammar

Descriptive: what you pick up from being a native speaker of the language, how people actually speak in their day-to-day interactions

The dwarf is who Sarah first talked *with*.

"You're horrible!" "No, I *ain't* - I'm Hoggle!"

Possible objections to
an unconscious rule set

"When I talk, the talk just comes out - I'm not consulting any rule set."

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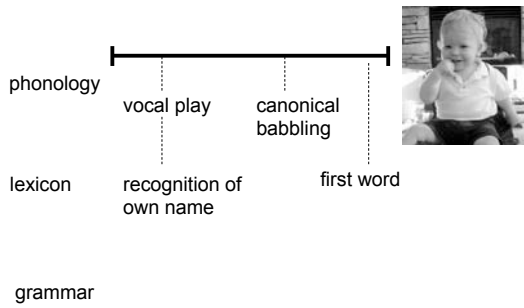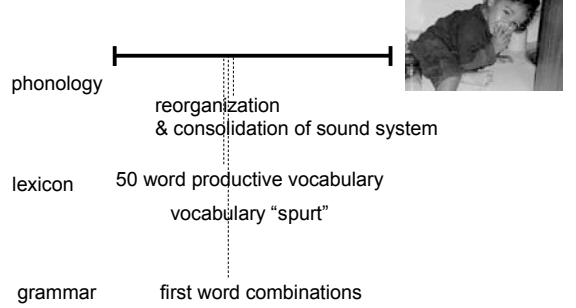
Analogy: wiggling your fingers

When you want to wiggle your fingers, you "just wiggle them".

But your finger-wiggling intention was turned into commands sent by your brain to your muscles, and you're never conscious of the process unless something interferes with it. Nonetheless, there *is* a process, even if you're not aware of it.
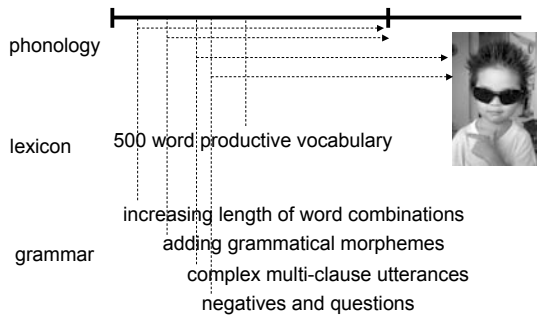

Timeline of Language Development: Year 1

phonology

vocal play   canonical babbling

lexicon   recognition of own name   first word

grammar

Timeline of Language Development: Year 2

phonology

reorganization & consolidation of sound system

lexicon   50 word productive vocabulary

vocabulary "spurt"

grammar   first word combinations

Timeline of Language Development: Year 3-3.5

phonology

lexicon

500 word productive vocabulary

grammar

increasing length of word combinations
adding grammatical morphemes
complex multi-clause utterances
negatives and questions

Why study language development?

The big picture, theoretically speaking:

"Cognitive scientists now agree that it is necessary to understand how the mind works in order to explain human behavior, but they do not agree on how the mind works. The study of language acquisition still plays a central role in the debate over how to characterize human cognition, for the same reason that language acquisition played a central role in the cognitive revolution. That is, it is so difficult to explain how language acquisition is possible that accounting for language acquisition is a test not likely to be passed by inaccurate cognitive theories." - Hoff, p.8

Why study language development?

More practically speaking, applications of language development research:

(1) Understanding how normal language development proceeds so that we can help children who have problems with their language development (language pathology)

(2) Understanding how learning more than one language works, and how to best teach children who are learning multiple languages simultaneously (language pedagogy)

The Interaction of Theory & Practice

These two areas aren't always separate - insights from one can help understanding in the other.

Example: Research on children with autism (Tager-Flusberg, 1994, 2007)

Autistic children have severe communicative deficiencies. However, they still acquire language structure.
Conclusion: Learning language involves more than learning how to fulfill a need to communicate.

What this means: applied language development research influences understanding of the process of language development

Questions?