LING 641 - Psycholinguistics II, Spring 2013
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Monday/Wednesday, 12:00-1:30, 1108B Marie Mount Hall

OBJECTIVES
This course is concerned with classic and contemporary challenges in the study of language learning and language processing, and with possible ways of combining these areas.

Traditional rationalist approaches to grammar learning (e.g., in the Principles and Parameters approach) have reached a crisis point, because (i) learning models are not as straightforward as anticipated, (ii) cross-language variation is more acute than was assumed previously, and (iii) developmental evidence for parameter setting is less than overwhelming. However, the underlying learning problem (e.g., need for abstract generalizations) has not changed significantly, and the recent wave of research on distributional learning has tended to avoid the hard problems that motivated parameter-setting models. Nevertheless, this line of research has uncovered important insights that may turn out to be invaluable in resolving the ‘hard’ problems.

Meanwhile, research on real-time language processing has seen important developments in recent years. More refined questions are being asked about how grammatical information is encoded, how information is accessed and retrieved from memory, how speakers compare expectations with input, and how they process ungrammatical input. Many of these findings are potentially relevant to understanding existing findings about grammatical development and to framing the language learning problem.

In both of these areas, more precise understanding of how typical language learning succeeds, and of how fluent adult language use proceeds, is clearly relevant to understanding other conditions of language use, such as atypical or second language learning, or language processing breakdown.

Continuing the goals of Psycholinguistics I (LING 640) the course covers the issues and results of psycholinguistics and also the nuts and bolts of psycholinguistic methods. However, the course has a greater focus on exploring directions for new research. The course also presupposes more background in linguistic theory than was the case for LING 640.

REQUIREMENTS
(i) Be prepared and be engaged in the course (15%)
(ii) Lab and writing assignments (iv) + (iii) together 85%
(iii) Main class project: development and write-up of a novel group research project
The class project will be on a topic that we will develop together. In the past this has sometimes led to conference presentations or to publications (e.g., Conroy et al., 2009, Linguistic Inquiry; Omaki et al. 2007, CUNY Conference; Kush et al. 2009, CUNY Conference).

READINGS
Readings will be available electronically, either through the university libraries or from a class readings page. Location to be announced in class. Please save trees!

GRADES
In order to give you more opportunity to receive credit for ‘going the extra mile’, the course will use a grading scale that allows for a greater spread. Don’t compare your scores on your assignments to other classes and conclude “the grading is really tough in this course”; compare it against this scale – it shows that there’s a lot of room within the A-range for recognizing really good work.

A = 80%+   A- = 75-80%
B+ = 70-75%  B = 65-70%  B- = 60-65%  etc.

(Note that Graduate School rules require a cumulative GPA of B or higher for continued enrollment.)
### TENTATIVE SCHEDULE [sure to evolve]

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1. Jan 23</td>
<td>Introduction – Overview &amp; Defining the problem</td>
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<tr>
<td>2. Jan 28</td>
<td>Introduction (cont.)</td>
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<tr>
<td>3. Jan 30</td>
<td>What children know (… and how we find out)</td>
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<td>4. Feb 4</td>
<td>What children know (… and how we find out)</td>
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<td>5. Feb 6</td>
<td>What children know (… and how we find out)</td>
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<tr>
<td>6. Feb 11</td>
<td>What children know (… and how we find out)</td>
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<tr>
<td>7. Feb 13</td>
<td>Learning models: Principles &amp; Parameters</td>
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<td>8. Feb 18</td>
<td>Learning models: Principles &amp; Parameters</td>
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<td>9. Feb 20</td>
<td>Challenge: variability</td>
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<tr>
<td>10. Feb 25</td>
<td>Distributional learning with rich hypotheses (= UG)</td>
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<td>11. Feb 27</td>
<td>Distributional learning w/o UG</td>
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<tr>
<td>12. Mar 4</td>
<td>NO CLASS - CP AWAY</td>
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<td>13. Mar 6</td>
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<tr>
<td>14. Mar 11</td>
<td>Parsers &amp; Grammars</td>
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<tr>
<td>15. Mar 13</td>
<td>Parsers &amp; Grammars</td>
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<tr>
<td>17. Mar 27</td>
<td>Parsing: Generation &amp; Selection</td>
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<td>18. Apr 1</td>
<td>Parsing: Generation &amp; Selection</td>
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<tr>
<td>19. Apr 3</td>
<td>Memory encoding and retrieval</td>
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<td>20. Apr 8</td>
<td>Memory encoding and retrieval</td>
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<td>21. Apr 10</td>
<td>Constraints and Illusions</td>
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<td>22. Apr 15</td>
<td>Constraints and Illusions</td>
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<td>23. Apr 17</td>
<td>Constraints and Illusions</td>
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<td>24. Apr 22</td>
<td>Child language processing</td>
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<td>25. Apr 24</td>
<td>Child language processing</td>
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<td>26. Apr 29</td>
<td>Child language processing</td>
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<td>27. May 1</td>
<td>Production: Grammatical Encoding</td>
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<td>28. May 6</td>
<td>Production: Grammatical Encoding</td>
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<tr>
<td>29. May 8</td>
<td>Production: Grammatical Encoding</td>
</tr>
</tbody>
</table>
CITATIONS (selected)


Dabrowska, E. (2012). Different speakers, different grammars: Individual differences in native language attainment. *Linguistic Approaches to Bilingualism*. (Special journal issue, with commentaries, including one by CP.)


This is just our random notes (from long ago …)

TOPICS
ASSIGNMENTS/ACTIVITIES
600 vs 800-LEVEL STUDENTS

In the past we’ve covered …
  Learnability basics
  Some findings about what children know when (TVJT's etc.)
  Grammar in parsing
  Traditional parsing obsessions: ambiguity resolution etc.; generation & selection
  Modularity discussions

We can articulate the state of our understanding of the learning problem
  What do children need to learn, and why is this so hard?
  What is the problem with parametric models of learning: lots!
  What is the problem with distributional models of learning
  What do we know about children’s grammatical abilities … and change?

We can articulate our understanding of how adults generate and recognize structures
  Classic debates over ambiguity resolution - what is it all about?
  Grammatical basis of real-time computation; active structure generation
  Failures of grammatical faithfulness - retrieval and confusion, memory

Principle B - from the perspective of the learning problem it doesn’t fit in, until you see that the analyzer can assign interpretations that are not really coming from the grammar.

Lewis et al. - fine-grainedness of representations. (Masaya etc. results). Given that, how can one access them in time.

Combining learnability a la Tenenbaum w/ Goro etc. Also Tenenbaum & Xu.

some thoughts on acquisition-y things to cover:

going clear on learning mechanism vs. representational space:

representational space: this likely goes quite early
chomsky 75 - reflections on language (first talks about subj-aux issue)
gallistel 07 - parameter setting in bees (solar ephemeris), French Chomsky volume
snyder 95 - or the language paper, or the new book

  Pullum - Lewis/Elman, etc.
  What’s most instructive about the Chomsky paper is … [? Note-taking failed]
  Logical problem in SLA??

learning but not explicit about representational space:
mintz
in the sentence processing stuff, if we could talk a lot about predictive parsing, including your stuff, filled gaps, hale, levy, the "rational analysis" guys, then perhaps we can be more explicit about bringing this back to learning. how does grammar drive prediction? how does child use informativeness to build grammar, so that predictive parsing is possible? i think there's some possibly relevant stuff by anne christophe where she explicitly makes the connection between what is informative in parsing and learning being the same thing (at least at the level of word segmentation (determiners as predictive cues))

other places where acquisition meets parsing:
i’m hoping to have a paper finished in jan on the stuff i talked about at cuny a couple of years ago (verb learning easier with pronominal subject than full NP), which argues for weighing parsing cost against informativity in acquisition.

something by anne fernald on growth in parsing efficiency bewteen 1-3 yrs of age. does this make predictions about learning?

also, we could do takuya’s stuff, hitting what's so hard about semantic acquisition