

## HONOURS SEMINAR: LEARNING WORDS

Winter 2011

PSYCH 453

Time: TUES 12:30-2:20

Location: HH 373

### INSTRUCTOR

Dr. Katherine White

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Office Hours: By appointment

### COURSE DESCRIPTION

Words are central to language. All levels of language – sound, meaning, and grammar – intersect at the level of the word. It is often believed that word learning is a simple task: the child observes her parents pointing to objects in the world and memorizes the spoken words associated with these objects. But learning object names is far more difficult than this. When a parent points to a dog in the yard and says “Look at the dog over there!”, how does the child know what object is being labeled? In a sentence full of words, how does she determine that “dog” is the word to be learned? How does she know what aspects of the word’s sound pattern to attend to? The task is even more complicated for words that express meanings other than object categories (e.g., words for actions, or words like “think”). In this seminar, we will ask what it means to know a word, and we will consider various proposals for how children learn words. These proposals include learning based on association, social cues, and the existence of dedicated biases that constrain children’s interpretations of word meaning.

### READINGS

There is no official textbook for this course. We will read selected chapters from the following book: Bloom, P. (2000). *How Children Learn the Meanings of Words*. Cambridge: The MIT Press. This book is available online, and so I will be able to provide you with the relevant chapters through the UW-ACE course website. Other readings listed on the syllabus will also be made available through the course website. Announcements will be posted to ACE or communicated over email. Please check both ACE and UW email regularly.

The Official Version of the Course Outline

If there is a discrepancy between the hard copy outline and the outline posted on ACE, the outline on ACE will be deemed the official version. Outlines on ACE may change as instructors develop a course, but they become final as of the first class meeting for the term.

### COURSE REQUIREMENTS

Participation (20% of your grade): As this is an honours seminar, it will not be sufficient for you to listen passively in class. Rather, you are expected to actively engage in class discussions. In order to be an informed participant in class, you will need to do the readings each week. Your participation grade will be determined by your preparedness (i.e., bringing in the articles being discussed, ability to answer questions posed by presenter, instructor, or other students), asking questions, and providing comments during the presentation.

Because it is difficult for everyone to participate in class regularly (we may run out of time, you may not feel comfortable talking on a particular day, or you may be absent\*), it will be possible to boost your participation grade by submitting a maximum of 4 paper responses during the semester. The due date for a paper response is one week from the date of the topic you are responding to. By completing this assignment, you will earn participation points for that week. You may write about any aspect of one or both of the articles for that week. Your paper response should be approximately 1 page (double-spaced). You may find it helpful to structure your critical response by answering one or two of the following questions:

1. What is the problem or issue being addressed?
2. Do you feel the data support the claims made by the authors?
3. Given the research question, did the investigators employ the best approach?
5. What are the short-term and/or long-term implications of the results?
6. Do you think the authors have any biases or assumptions that have affected their methodology or framing of the problem? Or their interpretation of the results?
7. Do you feel that anything has been missed by the paper(s) or that there is an alternative explanation for the results?

\*Note: to be able to apply a response paper to your participation grade, you must have notified the instructor of your absence in advance, and present a medical note within 48 hours of the missed class.

**Weekly questions (10% of your grade):** Each week, you should submit three questions about the readings to the instructor. The questions for each week should be submitted by the Monday evening preceding Tuesday's class. These questions will help get you thinking and serve as a foundation for you to comment during class.

**Discussion leader (30% of your grade):** During the first week of the semester, you will look over the syllabus topics and reading list. During class on January 11, we will assign topics to each student. You will serve as a discussion leader for that class and will present one of the assigned articles. You should aim to make your presentation approximately 30 minutes long. Because of the size of the course, two students will present per week. The discussion leaders do not need to submit weekly questions for that week. In doing your presentation, you should make sure to cover the following areas:

1. Background: what question was addressed and what other research on this topic is necessary to understand it?
2. Method: what general and specific methods were used?
3. Results: what was found?
4. Conclusion: what was the main conclusion and what logic and/or assumptions were used to reach that conclusion? Was the conclusion convincing?
5. News: what was new or important about the findings?
6. Implications: what are the broader implications of this article?
7. What do you think of the paper? What's good about it? What's bad about it?
8. What are some remaining questions about this topic?

**Critical review (25% of your grade):** You will do a critical review of the article you present (details will be provided in a separate file). If, at least one week before your class presentation, you determine that it will be difficult to write a review of your article, you may find a related article to review instead. *This article must be approved by the instructor.* Your first draft will be worth 15% and should be submitted

electronically to the instructor on the day of your class presentation (PRIOR to class). Your review should be 2-3 pages long (double-spaced). Your review will be returned the following week with comments from the instructor. Within one week of receiving the instructor's comments, you will rewrite your review. Your revised version should be based on the comments provided by the instructor. Your revised version will be worth another 10%. Your revised version will be assessed based on how thoroughly you addressed the comments.

Final write-up (15% of your grade): You will consider the various proposals for word learning that we have discussed in class (general perceptual/cognitive, lexical, pragmatic) and do a final write-up. Which approach to word learning do you find most convincing, and why? Can you think of an experiment (or variation on a previously discussed experiment) that would help to tease these explanations apart? You will need to use evidence from the term's readings to support your argument. We will discuss this assignment in more detail later in the semester. The write-up should be approximately 3-5 pages, and will be due one week after the last day of class (April 5<sup>th</sup>).

### Assignments

Late assignments will not be accepted, except in the case of personal illness or family emergency (see below). Written assignments should be typed.

### Grading Summary

Participation: 20%

Weekly Questions: 10%

Discussion Leader: 30%

Article Review: 25%

Final Write-up: 15%

### UW POLICY ON MISSED ASSIGNMENTS AND TESTS

*(copied verbatim from the UW guidelines. Note that there are no tests in this course)*

Students are entitled to a rescheduling of tests or an extension of deadlines for legitimate medical reasons. It is your responsibility to inform the instructor of your illness and provide documentation in a timely manner. If there is undue delay, the instructor reserves the right to refuse an extension or makeup. The timing of the extension or makeup will be at the discretion of the instructor.

Students who are requesting accommodation for course requirements (assignments, midterm tests, final exams, etc.) due to illness should do the following:

\*(Preferably) inform the instructor by the due date for the course requirement that you will be unable to meet the deadline and that documentation will be forthcoming

\*Seek medical treatment as soon as possible and obtain a completed UW Verification of Illness Form: [http://www.healthservices.uwaterloo.ca/Health\\_Services/verification.html](http://www.healthservices.uwaterloo.ca/Health_Services/verification.html). Please be aware that a note on a prescription pad is not an acceptable medical certificate.

\*Submit the UW Verification of Illness Form to the instructor within 48 hours of the due date

In the case of a missed assignment deadline, the instructor will either:

\*Waive the course component and re-weight remaining term work as she deems fit according to circumstances and the goals of the course OR \*Provide an extension

In the case of bereavement, the instructor will provide similar accommodations to those for illness. Appropriate documentation to support the request will be required.

If you miss an assignment deadline for a reason other than serious personal illness or family emergency (documentation required in both cases), you will not be granted an extension.

Students who are experiencing extenuating circumstances should inform their academic advisors regarding their personal difficulties. If you feel that you have a medical or personal problem that is interfering with your work, you should contact your instructor and Counseling Services as soon as possible. Problems may then be documented and possible arrangements to assist you can be discussed at the time of occurrence rather than on a retroactive basis.

Accommodation for Students with Disabilities:

Note for students with disabilities:

The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.

### COMPLAINTS, ACADEMIC INTEGRITY, ACADEMIC OFFENSES

Concerns about the Course or Instructor (Informal Stage)

We in the Psychology Department take great pride in the high quality of our program and our instructors. Though infrequent, we know that students occasionally find themselves in situations of conflict with their instructors over course policies or grade assessments. If such a conflict arises, the Associate Chair for Undergraduate Affairs (Dr. Colin Ellard) is available for consultation and to mediate a resolution between the student and the instructor. Dr. Ellard's contact information is as follows:

Email: [cellard@uwaterloo.ca](mailto:cellard@uwaterloo.ca) Ph 519-888-4567 ext 36852

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. See Policy 70 and 71 below for further details.

Academic Integrity, Academic Offenses, Grievance, and Appeals

To protect course integrity, as well as to provide appropriate guidance to students, course outlines in the Faculty of Arts must include the following note on avoidance of academic offenses:

Academic Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility.

**Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about 'rules' for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 – Student Discipline, <http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm>

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 – Student Petitions and Grievances, Section 4, <http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm>

**Appeals:** A student may appeal the finding and/or penalty in a decision made under Policy 70 – Student Petitions and Grievances (other than regarding a petition) or Policy 71 – Student Discipline if a ground for an appeal can be established. Read Policy 72 – Student Appeals, <http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm>.

Academic Integrity website (Arts):

[http://arts.uwaterloo.ca/arts/ugrad/academic\\_responsibility/html](http://arts.uwaterloo.ca/arts/ugrad/academic_responsibility/html)

Academic Integrity Office (UW):

<http://uwaterloo.ca/academicintegrity/>

## COURSE SCHEDULE

<u>Date</u>	<u>Topic</u>
1-4-11	<b>Organizational Meeting</b>
1-11-11	<b>Introduction to issues in word learning</b> Bloom, Chapter 1
1-18-11	<b>Finding words in speech</b> General: Jusczyk, P. W. (1997). The Discovery of Spoken Language. Cambridge: The MIT Press. Pages 93-109.  Article 1: Brent, M. R. & Siskind, J. M. (2001). The role of exposure to isolated words in early vocabulary development. <i>Cognition</i> , 81, B33-B44.  Article 2: Jusczyk, P. W. & Aslin, R. N. (1995). Infants' detection of the sound patterns of words in fluent speech. <i>Cognitive Psychology</i> , 29, 1-23.
1-25-11	<b>The word spurt</b> General: pages from Bloom, Chapter 2  Article 1: Reznick, J. S. & Goldfield, B. A. (1992). Rapid Change in Lexical Development in Comprehension and Production. <i>Developmental Psychology</i> , 28, 406-413.  Article 2: Nazzi, T. & Bertoncini, J. (2003). Before and after the vocabulary spurt: two modes of word acquisition? <i>Developmental Science</i> , 6, 136-142.
2-1-11	<b>Fast mapping</b> General: pages from Carey, S. (1978). The Child as Word Learner. In J. Bresnan, G. Miller and M. Halle (Eds) <i>Linguistic Theory and Psychological Reality</i> . Cambridge, MA: MIT Press, 264-293.

	<p>Article 1: Woodward, A. L., Markman, E. M. &amp; Fitzsimmons, C. M. (1994). Rapid Word Learning in 13- and 18-Month-Olds. <i>Developmental Psychology</i>, 30, 553-566.</p> <p>Article 2: Horst, J. S. &amp; Samuelson, L. K. (2008). Fast mapping but Poor Retention by 24-Month-Old Infants. <i>Infancy</i>, 13, 128-157.</p>
2-8-11	<p><b>Object/category knowledge in infancy</b>  General: Spelke, E. S. (1988). The origins of physical knowledge. In L. Weiskrantz (Ed) Thought without language. Oxford Press. p. 168-184.</p> <p>Article 1: Xu, F., Carey, S. &amp; Quint, N. (2004). The emergence of kind-based object individuation in infancy. <i>Cognitive Psychology</i>, 49, 155-190.</p> <p>Article 2: Quinn, P. C., Eimas, P. D., &amp; Rosenkrantz, S. L. (1993). Evidence for representations of perceptually similar natural categories by 3- and 4-month-old infants. <i>Perception</i>, 22, 463-475.</p>
2-15-11	<p><b>Social knowledge</b>  General: pages from Flavell, J. H., Miller, P. H. &amp; Miller, S. A. Cognitive Development</p> <p>Article 1: Brooks, R. &amp; Meltzoff, A. N. (2005). The development of gaze following and its relation to language. <i>Developmental Science</i>, 8, 535-543.</p> <p>Article 2: Onishi, K. H. &amp; Baillargeon, R. (2005). Do 15-Month-Old Infants Understand False Belief? <i>Science</i>, 308, 255-258.</p>
2-22-11	<b>READING WEEK (NO CLASS)</b>
3-1-11	<p><b>General learning mechanisms</b>  General: Colunga, E. &amp; Smith, L.B. (2002). What makes a word? <i>Proceedings of the Annual Conference of the Cognitive Science Society</i>, 24, 214-219.</p> <p>Article 1: Pruden, S. M., Hirsh-Pasek, K., Golinkoff, R. M. &amp; Hennon, E. A. (2006). The Birth of Words: Ten-Month-Olds Learn Words Through Perceptual Salience. <i>Child Development</i>, 77, 266-280.</p> <p>Article 2: Smith, L. &amp; Yu, C. Infants rapidly learn word-referent mappings via cross-situational statistics. <i>Cognition</i>, 106, 1558-1568.</p>
3-8-11	<p><b>Lexical constraints</b>  General: Markman, E. M. (1990). Constraints Children Place on Word Meanings. <i>Cognitive Science</i>, 14, 57-77.</p> <p>Article 1: Halberda, J. (2003). The development of a word-learning strategy. <i>Cognition</i>, 87, B23-B34.</p> <p>Article 2: Markman, E. M., Wasow, J. L. &amp; Hansen, M. B. (2003). Use of the mutual exclusivity assumption by young word learners. <i>Cognitive Psychology</i>, 47, 241-275.</p>
3-15-11	<p><b>Pragmatics (vs. Constraints)</b>  General: Bloom, Chapter 3; selected pages from Clark, E. V. (1987) The principle of contrast: A constraint on language acquisition. In B. MacWhinney (Ed.), <i>Mechanisms of language acquisition</i>. Hillsdale, NJ: Lawrence Erlbaum Associates. p. 1-33.</p>

	<p>Article 1: Markson, L. &amp; Bloom, P. (1997). Evidence against a dedicated system for word learning in children. <i>Nature</i>, 385, 813-816.</p> <p>Article 2: Grassmann, S., Stracke, M. &amp; Tomasello, M. (2009). Two-year-olds exclude novel objects as potential referents of novel words based on pragmatics. <i>Cognition</i>, 112, 488-493.</p>
3-22-11	<p><b>Pragmatics vs. Constraints</b></p> <p>Article 1: Waxman, S. R. &amp; Booth, A. E. (2000). Principles that are invoked in the acquisition of words, but not facts. <i>Cognition</i>, 77, B33-B43.</p> <p>Article 2: Graham, S. A., Nilsen, E. S., Collins, S. &amp; Olineck, K. (2009). The role of gaze direction and mutual exclusivity in guiding 24-month-olds' word mappings. <i>British Journal of Developmental Psychology</i>, 00, 1-18.</p> <p>Article 3: de Marchena, A., Eigsti, I. M., Worek, A., Ono, K.E. , Snedeker, J. (in press). Mutual exclusivity in autism spectrum disorders: Testing the pragmatic hypothesis. <i>Cognition</i>.</p>
3-29-11	<p><b>Linguistic cues, verbs, and adjectives</b></p> <p>General: Bloom, Chapter 8; Golinkoff, R. M. &amp; Hirsh-Pasek, K. (2008). How toddlers begin to learn verbs. <i>Trends in Cognitive Science</i>, 12, 397-403</p> <p>Article 1: Brandone, A. C., Pence, K. L., Golinkoff, R. M. &amp; Hirsh-Pasek, K. (2007). Action Speaks Louder Than Words: Young Children Differentially Weight Perceptual, Social, and Linguistic Cues to Learn Verbs. <i>Child Development</i>, 78, 1322-1342.</p> <p>Article 2: Waxman, S. R. &amp; Booth, A. E. (2001). Seeing Pink Elephants: Fourteen-Month-Olds' Interpretations of Novel Nouns and Adjectives. <i>Cognitive Psychology</i>, 43, 217-242.</p>