

Language, Thought, Action: Language as a Cognitive System

LIN2704-15678

Class Periods: MWF - 4 (10:40 AM - 11:30 AM)

Location: AND 19

Academic Term: Fall 2019

Instructor and grader:

Edith Kaan; Kaan@ufl.edu; 352 294 7453

Office: TUR 4127

Office Hours: M 11:45am-12:35pm, and by appointment

TA: Yucheng Liu; liuyucheng@ufl.edu

Office Hours by appointment

Course Pre-Requisites / Co-Requisites: None

Course Description and Objectives

What you know about language and how to use it when listening and speaking resides in your mind. Language is therefore part of human cognition. One important part of understanding language and human linguistic behavior is to understand how language interacts with other aspects of cognition: thought, perception, emotion and action. In this course will discuss recent insights in language and the mind. In this course will discuss recent insights in language and the mind from various disciplines including linguistics, cognitive psychology, neuroscience and computer science. This course counts toward the Social and Behavioral Sciences requirement by exploring this relationship between mind and language, in other words covering the cognitive aspects of language.

In this course, you will be introduced to key themes and terminology in cognitive science and linguistics through the reading and discussion of current scientific papers covering research on a number of central topics.

By the end of this course, you should have a good understanding of current scientific thought on many facets of the interaction between language and cognition and how these relate to language use and thought in everyday life. This understanding will allow you to:

- Critically evaluate articles on language and the mind appearing in the popular press
- State the implications of language research for fundamental issues in cognitive science and linguistics

Course Structure

This course consists of three units:

(1) What is language, anyway?

Language has traditionally been identified as the distinguishing mark of the human species. But what is language anyway? In what respects does it differ (or not) from other animal communication? We will examine cognition and communication abilities of animals both in the wild and in captivity and compare that to human abilities.

(2) Thinking, doing and speaking

This unit is concerned with the interaction of language with thinking about the world and interacting directly with it. We will examine how language does and does not influence the ways in which we

perceive and conceptualize the world and to what extent language may be grounded in our everyday interactions with the physical world.

(3) Getting language

Finally, we will consider how we came to have language, both as a species (evolution of the language) and as individuals (child language development). This unit will focus on the interaction of cognitive and language development across the species and within individual humans.

Course Assignments

- **Exams (3)** At the end of each unit there will be a 50-minute exam. The exams will cover material from class lectures, assigned readings (including websites), any videos designated as test material in class.
- **Homework assignments (6):** During each unit, two homework assignments will be due. More information about these assignments will be given in class.
- **Active participation:** You are expected to have read the assigned readings and participate actively in classroom discussions and other activities

Your grade in this course will be calculated based on the following breakdown:

3 Unit exams 14% each (42% total)

6 Homeworks, 8% each (48% total)

Class participation 10% total

Optional Research Bonus Assignment

Students who wish to may increase their total grade points by 2 (out of 100) by participating in 2 hours of participation in psycholinguistic experiments through the LIN-SLHS participant pool. A list of experiments can be found at: <http://slhs.php.ufl.edu/student-info/participant-pool-2>. This site will be updated throughout the semester. Please retain the IRB form with the original signature from the experimenter (no photocopies) as proof that you participated. Experiments that you have previously participated in, experiments that you count towards other classes, or experiments you were paid to participate in *cannot* count toward this. If you choose not to participate or do not qualify for any of the studies, you can receive the same amount of course credit by means of an alternative assignment. This involves writing a synopsis of a short research article, video, or a podcast. Details will be made available on the course website.

Course Schedule and Readings

See last pages of this syllabus. Readings can be obtained through e-reserves (linked from the course website on Canvas), or from the UF library website (e-journals). Where indicated, the reading is available through the course website. In some cases, a hardcopy will be made available for you to xerox. All readings are required.

It is *very important* that you do the readings. While most of the readings are from sources meant for a wide audience, you may find that some readings are more difficult than others. Because of this, you should read them *before* the class they are associated with so that we can discuss questions about them in class. In general, you should plan to spend 2-3 hours of outside time and effort per hour spent in class.

Attendance Policy, Class Expectations, and Make-Up Policy

- Students are required to hand in all assignments and tests before the class period they are due. Please contact the instructor in advance if you need to skip a class, or cannot make a deadline. Please also

make sure you have at least one external backup of the assignments you make for this class. Computer problems will not be considered a valid excuse for missing deadlines.

- There will be no make-up exams or assignments without a documented excuse.
- If miss more than 10 minutes of more than five class periods without an valid excuse, ten points will be deducted from your final score, plus 1 additional point for each additional time you are absent, leave early, or come late without an excuse. Excused absences must be consistent with university policies in: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Grading Policy

Percent	Grade	Grade Points	81.0 – 83.9	B	3.00	66.0 - 68.9	D+	1.33
			78.0 - 80.9	B-	2.67	63.0 - 65.9	D	1.00
90.0 - 100.0	A	4.00	75.0 - 79.9	C+	2.33	60.0 - 62.9	D-	0.67
87.0 - 89.9	A-	3.67	72.0 – 74.9	C	2.00	0 - 59.9	E	0.00
84.0 - 86.9	B+	3.33	69.0 - 71.9	C-	1.67			

More information on UF grading policy may be found at:

<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades>

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Sensitive topics

Some of the topics discussed in this class may be sensitive. However the inclusion of these topics is not meant to disrespect anyone's personal views. If you are uncomfortable with a certain topic, please come talk to the instructor.

Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://www.dso.ufl.edu/drc>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluer.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors

that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html>

Campus Resources:

Health and Wellness

U Matter, We Care:

If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or <http://www.police.ufl.edu/>.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. <https://www.crc.ufl.edu/>.

Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <https://teachingcenter.ufl.edu/>.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <https://writing.ufl.edu/writing-studio/>.

Student Complaints Campus: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf.

On-Line Students Complaints: <http://www.distance.ufl.edu/student-complaint-process>.

Overview of the course

This is approximate and subject to change!!! Check schedule on-line for updates!

Week	Date	Topic	Readings and Assignments
(1)	Aug 21 Aug 23	Introduction: guest instructor!	Syllabus, "Getting to know you"
UNIT 1 WHAT IS LANGUAGE ANYWAY?			
(2)	Aug 26 Aug 28 Aug 30	Introduction The mind-body problem What is language?	(1) Andersson (pdf e-reserves) (2) McLeod (link) (3, 4, 5) excerpts from Crystal (pdf e-reserves)
(3)	No class M Sept 4 Sept 6	What is language? :	(6) Anderson (pdf e-reserves) (7) Crystal (pdf e-reserves)
(4)	Sept 9 Sept 11 Sept 13	Gestures Sign language: guest lecture! Signs, continued	(8) Iverson & Goldin-Meadow (link) (9) Emmorey (pdf e-reserves) (10) Hickok (link) Homework 1 due
(5)	Sept 16 Sept 18 Sept 20	Animal communication in the wild : :	(11) Rogers & Kaplan (pdf e-reserves) (12) Mackenzie Reynolds (link)
(6)	Sept 23 Sept 25 Sept 27	Animals learning human language : Q&A	(13) Savage-Rumbaugh (pdf e-reserves) Homework 2 due
UNIT 2 THINKING, DOING, SPEAKING			
(7)	Sept 30 Oct 2 No class F	Unit 1 Exam Language and thought: introduction	(14) Pullum (pdf e-reserves)
(8)	Oct 7 Oct 9 Oct 11	Noun classes Color and cognition Spatial relationships	(15) Boroditsky (link); (16) Boroditsky & Schmidt (link) (17) Majid et al. (link)
(9)	Oct 14 Oct 16 Oct 18	One, two, many Language and smell Embodied language	(18) Frank et al. (link) (19) Yong (link) (20) Borghi et al. (link) Homework 3 due
(10)	Oct 21 Oct 23 Oct 25	What's in a name? The gendered pronoun debate Sound symbolism :	(21, 22) Saguy & Williams; Hanna et al. (link) (23) Robson (link)
(11)	Oct 28 Oct 30 Nov 1	Bilingualism Do you think differently in another language? Q&A	(24) Cowles (pdf e-reserves) (25) Caldwell-Harris (link) Homework 4 due
UNIT 3 GETTING LANGUAGE			
(12)	Nov 4 Nov 6	Unit 2 Exam Language evolution: guest lecture!	(26) Pinker (pdf e-reserves)

	Nov 8	What humans need for language	(27) Gibbons (link)
(13)	No class M Nov 13 Nov 15	Vocal tracts Gesture, brain and language	(28) TBA (29) Corballis (link or pdf)
(14)	Nov 18 Nov 20 Nov 22	Nature vs. nurture : How we can learn words	(30) Kennison (pdf e-reserves) (31) Pettito (link) Homework 5 due
(15)	Nov 25 No class W+F	Cognition and language acquisition	(32) TBA
(16)	Dec 2 Dec 4	Q&A Unit 3 Exam	Homework 6 due

- (1) Andersson, Lars-Gunnar. (1998). Some languages are harder to learn than others. In Laurie Bauer & Peter Trudgill (eds.), *Language Myths* (pp. 50-57). London: Penguin Books.
- (2) McLeod, S. A. (2018, Feb 05). *Mind body debate*. Retrieved from <https://www.simplypsychology.org/mindbodydebate.html>
- (3, 4, 5) Excerpts from Crystal, D. (2010) *The Cambridge encyclopedia of language*. Cambridge, Cambridge UP.
- (6) Anderson, Stephen R. (2004). Language and communication. In *Doctor Doolittle's Delusion* (pp. 15-37). New Haven, CT: Yale University Press.
- (7) Crystal, D. (2010) Language and other communication systems, *The Cambridge encyclopedia of language*. Cambridge, Cambridge UP.
- (8) Iverson, J., & Goldin-Meadow, S. (1998) Why people gesture when they speak. *Nature*. 396, 228. <http://dx.doi.org.lp.hscl.ufl.edu/10.1038/24300>
- (9) Emmorey, K. (2002) Introduction. *Language, Cognition and the Brain: Insights from sign language research*. (pp. 1- 11) Lawrence Erlbaum.
- (10) Hickok, G., Bellugi, U. & Klima, E. (2001) Sign language in the brain. *Scientific American*. June, 58-65. <http://dx.doi.org.lp.hscl.ufl.edu/10.1038/scientificamerican0601-58>
- (11) Rogers, Leslie, and Kaplan, Gisela. (2000). Learning to communicate. In *Songs, Roars, and Rituals* (pp.128-149). Cambridge: Harvard University Press.
- (12) Mackenzie Reynolds, Lauren (2018). Do dogs really, truly understand what we tell them? Massive Science. <https://massivesci.com/articles/do-dogs-understand-our-words/>
- (13) Savage-Rumbaugh, Sue, Shanker, Stuart G., and Taylor, Talbot J. (1998). Excerpts from Chapter 1, *Apes, Language, and the Human Mind*. (pp. 22-36, 65-74) New York, NY: Oxford University Press.
- (14) Pullum, G. (1991) The great Eskimo vocabulary hoax. *The Great Eskimo Vocabulary Hoax and other irreverent essays on the study of language*. (pp. 159-174) University of Chicago Press.
- (15) Boroditsky, L. 2009. How does our language shape the way we think? In Brockman (Ed.) *What's Next? Dispatches on the Future of Science*. Vintage Press. <https://www.edge.org/conversation/how-does-our-language-shape-the-way-we-think>
- (16) Boroditsky, L. & Schmidt, L. (2000). Sex, Syntax, and Semantics. *Proceedings of the 22nd Annual Meeting of the Cognitive Science Society*, 22. <https://escholarship.org/uc/item/0jt9w8zf>
- (17) Majid, A. Bowerman, M. Kita, S. Huan, D. and Levinson, S (2004) Can language restructure cognition? The case for space. *Trends in Cognitive Sciences*. 8(3), 108-114. <http://dx.doi.org.lp.hscl.ufl.edu/10.1016/j.tics.2004.01.003>

- (18) Frank, M. C., Federenko, E., Lai, P., Saxe, R. and Gibson, E. (2012) Verbal interference suppresses exact numerical representation. *Cognitive Psychology*, 64, 74-92.
<http://dx.doi.org.lp.hscl.ufl.edu/10.1016/j.cogpsych.2011.10.004>
- (19) Yong, Ed.(2015) Why do most languages have so few words for smells? *The Atlantic*, Nov 6, 2015
<https://www.theatlantic.com/science/archive/2015/11/the-vocabulary-of-smell/414618/>
- (20) Borghi, A., A. Glenberg, & M. Kaschak (2004) Putting words in perspective, *Memory & Cognition*, 32, 863-873. <http://dx.doi.org.lp.hscl.ufl.edu/10.3758/BF03196865>
- (21) Saguy, A.C. & Williams, J.A. (2019) Why we should all use they/them pronouns. *Scientific American*, April 11, 2019 <https://blogs.scientificamerican.com/voices/why-we-should-all-use-they-them-pronouns/>
- (22) Hanna, A. & Stevens, N.L. (2019) Actually, we should *not* all use they/them pronouns, *Scientific American*, May 3, 2019 <https://blogs.scientificamerican.com/voices/actually-we-should-not-all-use-they-them-pronouns/>
- (23) Robson, D. (2011) Kiki or bouba? In search of language's missing link.
<https://www.newscientist.com/article/mg21128211-600-kiki-or-bouba-in-search-of-languages-missing-link/>
- (24) Cowles, H.W. (2010) (Multiple) Language Representations and the Brain, In *Psycholinguistics 101*, NY: Springer, pp 93-103;103-116
- (25) Caldwell-Harris, C.L. (2014) In a Foreign Language, "Killing 1 to Save 5" May Be More Permissible. Language shapes our moral judgments. *Scientific American*, May 20, 2014
<https://www.scientificamerican.com/article/in-a-foreign-language-killing-1-to-save-5-may-be-more-permissible/>
- (26) Pinker, S. (1995) The Big Bang. In *The Language Instinct*, (pp. 340-381). New York, NY: Harper Perennial.
- (27) Gibbons, A. (2007) Food for Thought. *Science*, 316, 1558-1560.
<http://dx.doi.org.lp.hscl.ufl.edu/10.1126/science.316.5831.1558>
- (29) Corballis, M.C. (1999). The gestural origins of language. *American Scientist* 87 (2).
<https://www.jstor.org/stable/27857812>
- (30) Kennison, S. (2013) The first twenty-four months. In *Introduction to Language Development*. Los Angeles: Sage. Pp 57-86.
- (31) Pettito et al. (2001) Language rhythms in baby hand movements. *Nature*, 413, 35.
<http://dx.doi.org.lp.hscl.ufl.edu/10.1038/35092613>