Topics in Psycholinguistics: Language and Thought

LING449T
Spring 2020

Course description

Does language shape cognition? Do the details of our native language(s) determine how we perceive the world? Can learning language give us access to new concepts? In this course, we'll explore these questions through case studies, including color categorization, spatial frames of reference, navigation, theory of mind, event representations, and number. Along the way, we'll discuss the nature of concepts as well as ways that linguists can leverage the relationship between language and thought to study natural language meaning.

Course objectives

After taking this course, students should be able to:

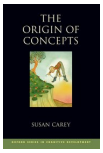
- Understand and critically evaluate claims of linguistic relativity (which are ubiquitous both in Cognitive Science and the popular press)
- Clearly articulate research findings and broader implications in writing
- Demonstrate knowledge of the basic principles of experimental design and behavioral research methods in Cognitive Science

Resources

You do not need to buy any books for this class. PDFs of all readings will be posted on the course website (on **elms.umd.edu**). Most of our readings will come from journal articles, but we will read chapters from the books listed below. ISBN numbers are included, if you'd prefer to have physical copies.

Concepts: Where Cognitive Science Went Wrong
Jerry Fodor
1998
ISBN #9780198236368

Language in Mind: Advances in the Study of Language and Thought
Dedre Gentner & Susan Goldin-Meadow (editors)
2003
ISBN #9780262072434



The Origin of Concepts
Susan Carey
2009
ISBN #9780199838806

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Class Meets
MW
10:00am – 11:15am
MMH 1304

Office Hours
MMH 1413H
M 1:00-2:00pm
and by appointment

Prerequisites
LING311 Syntax I
LING321 Phonology I

Communication
All time-sensitive course information will be posted as announcements on ELMS (it's a good idea to enable email notifications). You can contact me through ELMS or my UMD email at any time to discuss questions, absences, and/or accommodations.

Responsibilities & expectations

Readings and reading responses
At least one reading – a journal article or a book chapter – will be assigned before each class. As mentioned above, all readings will be made available electronically. Readings should be done before the day indicated on the class schedule and you should come to class prepared to discuss what you read. Some of the readings are long and/or difficult. These should not be put off until the last minute.

Students will electronically submit reading responses for each reading by 6am on the day we discuss that reading in class (e.g., the reading response for a paper to be discussed on Monday will be handed in by 6:00am on Monday; this is so I have time to look them over before class). Late reading responses will not be accepted in order to ensure that everyone has given sufficient thought to the day's reading to be able to contribute to high-quality discussion. For each reading, you will be asked to hand in one type of reading response: a *summary*, a *write-up*, or a *diagram*.

For a *summary*, you'll submit a short (~1 paragraph) summary of the reading. This summary should include answers to the following questions:

1) What is the local problem/question this paper is addressing?
2) What is the main finding or contribution?
3) How does this change our view of the broader course question?
4) Are there any confusions you had, or central concepts that you think need special attention in class?

Summaries will account for 15% of the course grade. The lowest score will be dropped.

For a *write-up*, you'll be asked to provide answers to more specific questions about the relevant reading(s) in a longer format (~1 page). For example, you may be asked to propose a follow-up experiment or to offer alternative interpretations of the author's findings. *Write-ups* will account for 15% of the course grade.

For more theoretical papers you'll sometimes be asked to make a *diagram*. This means visually displaying the logic of the reading (e.g., What distinctions is the author drawing and why? What empirical support do these distinctions have? How do these distinctions relate to other things discussed in the course?). To help set expectations, an example diagram of the first reading is available on the course website (under 'files'). *Diagrams* will account for 20% of the course grade.

Students are encouraged to work together! **The other students you worked with must be identified on the assignment** (otherwise, it could be considered plagiarism). For *summaries* and *write-ups*, you must submit your own words (i.e., feel free to talk about the readings and the assignment, but write your response by yourself). For *diagrams*, groups can work together to make a single diagram, in which case each member should upload the same PDF to the course website.

Final paper
The final paper is a chance to apply what you've learned during the semester to a specific problem that you find particularly interesting. It should be 5-8 pages (single-spaced) and can take one of several forms, including:

- A critical review of the literature in a particular content area not discussed during the semester (I will provide some suggestions, but you're also free to propose your own topic)
- An experimental proposal, either relating to a case study that we discussed in class or a novel content area (you would not be expected to fully design the stimuli or collect any data)
- A discussion of a cross-linguistic phenomenon that would lend itself to interesting claims about the relationship between language and thought
- A deeper dive into something that we only briefly touched on in class (e.g., a review of attempts to find evidence for concepts having decompositional structure)

During the semester, you will be asked to submit a proposal and meet with me to discuss it (due date noted on the tentative schedule provided below). Then, you will separately submit an annotated bibliography and outline, for further feedback, before submitting your final draft. Together, the three components of this paper will account for 30% of the course grade.

Participation
This class will be almost entirely discussion-based. For this reason, students are expected to actively participate. Spend time thinking about the readings and come to class prepared to share your thoughts. This not only increases your own understanding of the material and the likelihood that you'll retain it, it benefits your classmates too. It might be that they had the same question as you but didn't want to ask or that they hadn't thought of the reading from your perspective. Your participation also benefits me in being able to tailor the course material. And, participation will account for 20% of the course grade (see grading scale below).

Don't hesitate to speak up when you find something unclear, when you see a connection between a particular topic and other material we've discussed in this course, and when you are unconvinced by the logic of an argument or have a different argument that you would like to propose. All discussion is of course expected to be respectful of the different identities, backgrounds, and perspectives of your fellow students.

Participation grading scale (out of 20 points)

Consistently engaged and insightful	20
Consistently engaged and occasionally insightful	18
Occasionally engaged	16
Silent but obviously paying attention	10
Often not paying attention	5
Rude or dismissive behavior	0

Grades

All assessment scores will be posted on the course ELMS page. If you have questions about how something was scored, don't hesitate to ask me about it. The breakdown is as follows:

Assignment	Weight
Participation	**20%**
Reading responses	**50%**
• *Summaries* (15 x 1% each)	15%
• *Write-ups* (5 x 3% each)	15%
• *Diagrams* (5 x 4% each)	20%
Final paper	**30%**
• Proposal	10%
• Bibliography & outline	10%
• Final draft	10%
Total	**100%**

Final letter grades will be assigned based on the scale below. Numerical grades will be rounded to the nearest integer before being converted into letters (e.g., 89.5% ⇒ 90% ⇒ A-; 89.49% ⇒ 89% ⇒ B+). Final grades will not be curved. Given the transition to online classes due to COVID-19, UMD has adopted an optional pass/fail grading policy. Students may decide to (i) receive a 'P' for earning a D- or above or (ii) take the course for a normal grade. More details on this policy can be found here: https://ugst.umd.edu/keeplearning/grades.html.

Final Grade Cutoffs									
A+	98.00%	B+	87.00%	C+	77.00%	D+	67.00%		
A	93.00%	B	83.00%	C	73.00%	D	63.00%	F	<60.0%
A-	90.00%	B-	80.00%	C-	70.00%	D-	60.00%		

Course policies

Campus-wide policies

Please visit www.ugst.umd.edu/courserelatedpolicies.html for the Office of Undergraduate Studies' full list of campus-wide policies (concerning e.g., academic integrity, accessibility and accommodations, grades and appeals) and feel free to follow up with me if you have questions.

Attendance

You are expected to attend every class. If you plan to miss class for any reason, please let me know in advance. I am happy to accommodate your needs – religious, medical, family, or any other situation that may prevent you from attending – but be sure to contact me about it as soon as possible.

Late work

In general, late reading responses (those submitted after 6am) will not be accepted, as I want to ensure that everyone is well-prepared for the in-class discussion. I am willing to make exceptions in certain cases, if you contact me ahead of time.

Group work
See the above section for policies relating to reading responses. For your final paper: feel free to discuss your ideas with your classmates, but anything you hand in must be your own writing.

Electronic devices
You may use your laptop or a tablet to take notes during class (I strongly recommend taking notes on important points, but don't try to transcribe the discussion) and/or to refer back to the reading(s). Please refrain from checking your email or social media during class, as this is distracting to you and your classmates. Likewise, please refrain from using your cellphone during class, except in the case of a potential emergency.

Experiments
There is no experimental requirement or extra credit option for this class. But the Linguistics department is almost always recruiting paid participants (pay for behavioral experiments is usually $10-12/hour). If you're interested, visit http://umlinguistics.sona-systems.com to browse the current selection of studies being offered.

Course Schedule

Reading Response Assignments: S = *summary;* W = *write-up;* D = *diagram* (see above for details)

Date	Topic	Reading	Assignments
M 1/27	Course overview: Can language shape / change / create thought?		
W 1/29	Concepts: What do we mean by *thought*?	Margolis & Laurence (2019) SEP entry on concepts (sections 1-4)	S
M 2/3	Concepts: Are they prototypes?	Armstrong, Gleitman, & Gleitman (1983) *What some concepts might not be*	D
W 2/5	Concepts: Are they definitions?	Fodor (1998) *The demise of definitions, part 1: The linguist's tale* [Concepts, ch3]	S
M 2/10	Learning phonetic categories & auditory perception	Werker (1995) *Exploring developmental changes in cross-language speech perception*	D
W 2/12	Color words & color perception	Winawer, Witthoft, Frank, Wu, Wade, & Boroditsky (2007) *Russian blues reveal effects of language on color discrimination*	W
M 2/17	Spatial relations: Frames of reference	Levinson (1996) *Frames of Reference and Molyneux's question: cross-linguistic evidence*	S
W 2/19	Spatial relations: Frames of reference	Li, Abarbanell, Gleitman, & Papafragou (2011) *Spatial reasoning in Tenejapan Mayans*	W

M 2/24	Spatial relations: Containment	Bowerman & Choi (2003) *Space under construction: Language-specific spatial categorization in first language acquisition* [Language in Mind, ch13]	S
W 2/26	Spatial relations: Containment	Hespos & Spelke (2007) *Precursors to spatial language: The case of containment*	S
M 3/2	Spatial reasoning: Navigation	Hermer-Vazquez, Spelke, & Katsnelson (1999) *Sources of flexibility in human cognition: Dual-task studies of space and language*	W
W 3/4	Spatial reasoning: Navigation	Ratliff & Newcombe (2008) *Is language necessary for human spatial reorientation? Reconsidering evidence from dual task paradigms*	S
M 3/9	Theory of Mind	de Villiers & de Villiers (2003) *Language for Thought: Coming to Understand False Beliefs* [Language in Mind, ch12]	S
W 3/11	Theory of Mind (Guest lecture from Yu'an Yang)	Onishi & Baillargeon (2005) *Do 15-month-old infants understand false beliefs?* Lewis, Hacquard, & Lidz (2016) *"Think" Pragmatically: Children's Interpretation of Belief Reports*	W
M 3/16 **W 3/18**	Spring Break!		
M 3/23 **W 3/25**	All classes this week cancelled due to COVID-19		
M 3/30	Number: Background psychology	Feigenson, Dehaene, & Spelke (2004) *Core systems of number*	S
W 4/1	Number: Bootstrapping natural number	Carey (2009) *Beyond core cognition: Natural number* [The Origin of Concepts, ch8]	D
M 4/6	Manner of motion	Slobin (1996) *From "thought and language" to "thinking for speaking"*	W Paper proposal
W 4/8	Manner of motion	Papafragou, Massey, & Gleitman (2002) *Shake, rattle, 'n' roll: The representation of motion in language and cognition*	S

M 4/13	Objects & Substances	Soja, Carey, & Spelke (1991) *Ontological categories guide young children's inductions of word meaning: Object terms and substance terms*	S
W 4/15	Objects & Substances	Imai & Gentner (1997) *A cross-linguistic study of early word meaning: universal ontology and linguistic influence*	S
M 4/20	Objects & Substances	Li, Dunham, & Carey (2009) *Of substance: The nature of language effects on entity construal*	S
W 4/22	Evidentiality	Ünal & Papafragou (2018) *Relations between language and cognition: Evidentiality and sources of knowledge*	S
M 4/27	Quantification: Interface transparency	Lidz, Pietroski, Halberda, & Hunter (2011) *Interface transparency and the psychosemantics of most*	D
W 4/29	Quantification: *More* on *most*	Knowlton et al. (under review) *Meaning invariance for English quantifiers*	S
M 5/4	Quantification: Quantifying over count/mass nouns	Odic et al. (2018) *Individuals and non-individuals in cognition and semantics: The mass/count distinction and quantity representation*	S Bibliography and outline
W 5/6	Quantification: Two flavors	Knowlton, Pietroski, Halberda, & Lidz (under review) *The mental representation of universal quantifiers*	S
M 5/11	Wrap up day	Language-thought relationship chart	D
M 5/18	Finals week		Final draft of paper