

PSYCH521: The Structure of Human Thought: Concepts, Language, and Culture
Department of Psychology
University of Wisconsin-Madison
Fall 2021

Instructor:	Prof. Gary Lupyan (lupyan@wisc.edu) – please contact me through Slack instead of email																							
Office Hours:	Thurs 12:30 pm – 1:30 pm. Brogden 419 (preferable) or Zoom (sign up on Canvas)																							
Lecture Meetings:	Tues, Thurs: 11:00am – 12:15pm Brogden 107																							
Sections (Mandatory)	<table> <tr> <td>301: (Duan)</td> <td>M 3:30pm – 4:20pm</td> <td>Brogden 130</td> </tr> <tr> <td>302: (Duan)</td> <td>M 4:35pm – 5:25pm</td> <td>Brogden 130</td> </tr> <tr> <td>303: (Duan)</td> <td>M 5:40pm – 6:30pm</td> <td>Brogden 130</td> </tr> <tr> <td>304: (Liu)</td> <td>F 8:50am – 9:40am</td> <td>Brogden 130</td> </tr> <tr> <td>305: (Liu)</td> <td>F 9:55am – 10:45am</td> <td>Brogden 130</td> </tr> <tr> <td>306: (Liu)</td> <td>F 11:00am – 11:50am</td> <td>Brogden 130</td> </tr> <tr> <td>307: (Lupyan)</td> <td>W 10:00am – 11:00am</td> <td>Brogden 634</td> </tr> </table>			301: (Duan)	M 3:30pm – 4:20pm	Brogden 130	302: (Duan)	M 4:35pm – 5:25pm	Brogden 130	303: (Duan)	M 5:40pm – 6:30pm	Brogden 130	304: (Liu)	F 8:50am – 9:40am	Brogden 130	305: (Liu)	F 9:55am – 10:45am	Brogden 130	306: (Liu)	F 11:00am – 11:50am	Brogden 130	307: (Lupyan)	W 10:00am – 11:00am	Brogden 634
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Teaching Assistants:	Aria Duan (yduan38@wisc.edu) Office Hours: Tuesdays 4pm-5pm Brogden 630 Ella Liu (qliu295@wisc.edu) Office Hours: Fridays 12pm-1pm Brogden 638																							
Class Readings:	Google Drive goo.gl/YiMUA6 Sign in to Google Drive with your @wisc.edu email address . Links to readings also available on Canvas.																							
Section Posts (QRs):	Canvas site																							
Misc. Questions	Please use class Slack group instead of email. Check your @wisc.edu inbox for an invite. I recommend downloading and using the desktop Slack app, but using it in-browser also works.																							

SHORT COURSE DESCRIPTION

Topics include the relationship of language to other cognitive and perceptual functions; language evolution; the connection of language and culture, sources of linguistic diversity; linguistic engineering; the role of information technologies in the spread of ideas and its impact on language change. Course will draw heavily on empirical research in cognitive and developmental psychology, and to a lesser extent on cognitive neuroscience, animal cognition, anthropology, and linguistics.

LONGER COURSE DESCRIPTION

This class will take you on an intellectual tour of how humans conceptualize the world, focusing on the role of language. We will begin by discussing the evolution of language and how it relates to other communication systems used by humans and nonhuman animals. We will then discuss the relationship between language, culture, and cognition in varied domains from mathematics to visual perception and memory. In the process, we will tackle questions such as: What is the role of language in making us human? Do languages adapt to the environments in which they are used? Can we create new languages to improve human thought? We will also address such issues as metaphors in political discourse and propaganda, and the role of information technologies in the spread of ideas. This class will draw heavily on empirical research in cognitive and developmental psychology, and cognitive neuroscience.

COURSE DESIGNATIONS AND ATTRIBUTES

Credits: 4; counts as Liberal Arts and Science credit in L&S

Breadth: Social Science

Level: Intermediate

Format: Lecture/Discussion

Requisites: PSYCH 406, 413, 414, or 460

CREDIT HOURS

This 4-credit class meets for two 75-minute class periods and one 50-minute section each week. Out-of-class course learning activities (reading articles, writing article responses, studying, etc.) are expected to take 8-9 hours per week. Some weeks will be busier than others, so plan accordingly.

LEARNING GOALS

Students will develop an understanding of the linkage between language and other cognitive processes through reading primary literature spanning cognitive and developmental psychology, cognitive neuroscience, and a sprinkling of semiotics and philosophy. At the end of the term, students will:

- Understand the difference between human language and other communication systems
- Learn about the evolution of language
- Understand what is meant by claims that language does or does not affect 'thought' and the kinds of empirical data that support or fail to support these claims
- Intelligently discuss the relationship between language and memory, perception, reasoning, mathematical cognition, and spatial cognition
- Understand what is meant by language helps or hurts our "thinking?"
- Learn about the role of metaphor in human communication and thought
- Understand the the impact of new communication technologies on language
- Understand how to evaluate opposing theoretical positions and empirical results

EXPECTATIONS

Lecture

Prior to each lecture, you are expected to have read / listened to / watched the assigned materials, and to be prepared to actively engage with the topic. Classes will begin with an overview of the central issues. Interspersed through the lectures will be interactive activities and/or polls using an interactive response system (in Fall, 2021 we're using Mentimeter).

Discussion

Prior to each section, you will need to post a Question, Response, or Comment (QRC). To get full credit, QRCs need to be posted on Canvas by Saturday at 7pm if you're in one of the Monday sections, by Monday at 7pm if you're in the Wednesday section, or by Wednesday at 7pm if you're in one of the Friday sections. Your post should cover the readings from the previous Thursday and the upcoming Tuesday lecture. The posts will be graded as 1, 2, or 3, which you can think of as √-, √, and √+ Most students will receive a √ (2 points), most of the time.

The purpose of these posts is to help the teaching assistant identify topics for discussion and to address points of confusion, so it's in your interest to make these posts good! The posts

also ensure that everyone stays caught up on the readings which is essential to getting the most out of this course. Try to be as substantive as possible in your post. Try not to ask questions about things you can easily look up (e.g., “what is anomia?”). Just look those things up. A good post might do one or more of the following: ask a conceptual question, identify a potential confound in an experiment, suggest a follow-up study, ask about certain implications of the results, or follow up on a post of another student in a substantive way. **You don’t need to write much.** A short paragraph or two will typically suffice.

GRADING

I would rather not have to grade you (for some arguments against grades, see *Zen and the Art of Motorcycle Maintenance*). But since I do have to grade you:

Lecture, Exams:	75%
Participation*:	10%
Quiz:	2.5%
Exam 1:	15.0%
Exam 2:	18.0%
Exam 3:	17.5%
Research assignment:	12.0%

*We will use Mentimeter for conduct in-class polls and mini-experiments. To get full participation credit, you need to participate in at least one poll/question per class.

The **exams** are a mix of multiple choice and short-answer questions focused on critical-thinking and conceptual understanding, **not** memorization. In Fall, 2021, they will be open-book, but are timed and must be completed during the class period. I will present you sample questions ahead of time so you know what to expect. The **research assignment** will be group-based and involve exploring “hidden differences in human experience”—differences between people’s perception and behavior of which they are largely unaware, but which can be discovered through the use of language to “compare notes”. It’ll be fun!

Discussion Section:	25%
QRCs:	15%
Attendance:	5%
Participation*:	5%

The expectation for the QRCs is that you earn 2 points per post (28 for the semester). Any extra points will count as extra credit. You can earn a lot of extra credit this way! See the canvas site for examples of QRCs that have earned various grades.

***Guidelines for the Section Participation Grade:**

Outstanding Contributor (5 points): Contributions in class reflect exceptional preparation. Ideas offered are always substantive, provide one or more major insights as well as direction for the class. Challenges are well substantiated and persuasively presented. If this person were not a member of the class, the quality of discussion would be diminished markedly. (5 points)

Good Contributor: (3 points): Contributions in class reflect thorough preparation. Ideas offered are usually substantive, provide good insights and sometimes direction for the class. Challenges are well substantiated and often persuasive. If this person were not a member of the class, the quality of discussion would be diminished.

Adequate Contributor (2 points): Contributions in class reflect satisfactory preparation. Ideas offered are sometimes substantive, provide generally useful insights but seldom offer a new direction for the discussion. Challenges are sometimes presented and are often well substantiated. If this person were not a member of the class, the quality of discussion would be diminished somewhat

Unsatisfactory Contributor or Non-Participant (0 points): Ideas offered are seldom substantive, provide few if any insights and never a constructive direction for the class. OR This person says little or nothing in class. If this person were not a member of the class, the quality of discussion would not be changed.

Final grade assignment:

A	> 92%
AB	88.0-92%
B	84.0-87.9%
BC	79.0-83.9%
C	70.0-78.9%
D	60.0-69.9%
F	< 60%

SCHEDULE

	Date	Topic	Readings
1	R Sep 9	What is a mind and how do we study it? Why care about language? What would a world without language be like?	Look over syllabus; Subscribe to class Slack; read Canvas modules about class tech and how to get help.
2	T Sep 14	Animal communication. What makes language special?	Short youtube video , Burling (1993; just the main article).
3	R Sep 16	Teaching language to other animals.	Tomasello (2017); Pepperberg (2017); Kaminski, Call, & Fisher (2004).
4	T Sep 21	Evolution of language: the big questions	Deacon (1997); Cuskley (2020)
5	R Sep 23	[Quiz] Evolution of language: empirical approaches	Tamariz (2017); QALMRI tutorial (how to read empirical papers); Kirby et al. (2008)
6	T Sep 28	The Whorfian Hypothesis	Boroditsky (Chapter 1, to appear); Whorf (1956- 2 readings).
7	R Sep 30	What's in a name? Concepts, Nameability, and Essences	Boroditsky (Chapter 2, to appear); Pullum (1989); Lupyan et al (2007); Optional: Rhodes et al. (2012).
8	T Oct 5	Analogies, metaphors, and frames. [larger reading load]	Gentner & Christie (2010); Lakoff & Johnson (1980); Subtitle Podcast Metaphor for our Time; Thibodeau & Boroditsky (2011)
9	R Oct 7	Translation	Eco, 1994; Radiolab: Translation (Segments 1 and 2); Hofstadter (2018)
10	T Oct 12	Learning from language; putting the pieces together	See assignment on Canvas + Review for exam
11	R Oct 14	Exam 1	Review lectures 2-10
12	T Oct 19	Language and space	Radiolab Lost & Found podcast (Segments 1-2); Majid et al (2004); Haun et al., 2011.
13	R Oct 21	Language and time	Cooperrider & Nuñez (2013); Bylund & Athanasopoulos (2017);
14	T Oct 26	Language and memory	Loftus & Palmer (1974); Marian & Neisser (2000); Fausey & Boroditsky (2011).
15	R Oct 28	Language and number	Radiolab: Innate Numbers? Anumeric People (The Conversation); Gordon (2004); Casasanto (2005);
16	T Nov 2	Can language change what we see?	Winawer et al. (2013); Lupyan & Ward (2013); Lupyan et al. (2020). Recommended: Lupyan et al (2020).
17	R Nov 4	The construction of reality continued: Olfaction and Emotion	Majid (2020); Doyle & Linduist (2017); Wu & Dunning (2018).
18	T Nov 9	Addressing the skeptics	Watch Boroditsky TED Talk, Bloom & Keil (2001); McWhorter (2016)
19	R Nov 11	Exam 2	Review lectures 11-18
20	T Nov16	Linguistic deprivation and language impairments	Chapter from Sacks (2000); Radiolab Words (Segments 1 & 3); Lupyan & Mirman (2012).
21	R Nov 18	Iconicity and sound symbolism	Dingemanse et al. (2015); Perlman, Dale, & Lupyan (2015)

22	T Nov 23	The invention of writing	Lexicon Valley podcast: Talking Leaves; Seidenberg, 2016;
23	T Nov 30	Consequences of literacy	Morin et al. (2018); Cunningham & Stanovich (2001); Sedivy (2018);
24	R Dec 2	Language diversity: why are there different languages and why are some so complicated?	Lupyan & Dale (2016); Sedivy (2016)
25	T Dec 7	Sociolinguistics: why do we judge people for how they speak?	Selections from <i>Very short introduction to sociolinguistics</i> ; Lexicon Valley Podcasts (two episodes); Optional but fun: Tour of American accents
26	R Dec 9	Linguistic engineering	Foer (<i>New Yorker</i> Article); Radiolab segment on Bliss-symbolics; Okrent, 2015
27	T Dec 14	Project presentations	See assignment on Canvas.

Exam 3
Review Lectures 19-26

Missing Class / Discussion Sections / Tests:

Class attendance is mandatory. Please let me or the TAs know if you're going to miss class. The lectures will be recorded and available for later viewing, but to obtain full participation credit, you must attend the live lecture. The class topics build on themselves and with each class you miss you will be getting a less and less cohesive learning experience (and it will be that much harder for you to do well on the tests because they test your conceptual understanding of the material rather than isolated facts from the readings). If you know you will be unable to make it to a live lecture, please let me or the TAs know ahead of time.

If you have a conflict with one of the test dates, you must let the TA know no later than 2 weeks before the test (the sooner the better). If there's a legitimate reason for the absence, we'll deal with it on a case-by-case basis.

ACADEMIC CALENDAR & RELIGIOUS OBSERVANCES

See: <https://secfac.wisc.edu/academic-calendar/#religious-observances>

STUDENTS' RULES, RIGHTS & RESPONSIBILITIES

Ethics of Being a Student in the Department of Psychology

The members of the faculty of the Department of Psychology at UW-Madison uphold the highest ethical standards of teaching and research. They expect their students to uphold the same standards of ethical conduct. By registering for this course, you are implicitly agreeing to conduct yourself with the utmost integrity throughout the semester.

In the Department of Psychology, acts of academic misconduct are taken very seriously. Such acts diminish the educational experience for all involved – students who commit the acts, classmates who would never consider engaging in such behaviors, and instructors. Academic misconduct includes, but is not limited to, cheating on assignments and exams, stealing exams, sabotaging the work of classmates, submitting fraudulent data, plagiarizing the work of classmates or published and/or online sources, acquiring previously written papers and submitting them (altered or unaltered) for course assignments, collaborating with classmates when such collaboration is not authorized, and assisting fellow students in acts of misconduct. Students who have knowledge that classmates have engaged in academic misconduct should report this to the instructor.

Academic Integrity

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to studentconduct.wiscweb.wisc.edu/academic-integrity/.

Accommodations Policy:

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy

(Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA." <http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php>

UW-Madison students who have experienced sexual misconduct (which can include sexual harassment, sexual assault, dating violence and/or stalking) also have the right to request academic accommodations. This right is afforded them under Federal legislation (Title IX). Information about services and resources (including information about how to request accommodations) is available through Survivor Services, a part of University Health Services: <https://www.uhs.wisc.edu/survivor-services/>

Diversity and Inclusion

Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world." <https://diversity.wisc.edu/>

Complaints

Occasionally, a student may have a complaint about a TA or course instructor. If that happens, you should feel free to discuss the matter directly with the TA or instructor. If the complaint is about the TA and you do not feel comfortable discussing it with him or her, you should discuss it with the course instructor. Complaints about mistakes in grading should be resolved with the TA and/or instructor in the great majority of cases. If the complaint is about the instructor (other than ordinary grading questions) and you do not feel comfortable discussing it with him or her, make an appointment to speak to the Associate Chair for Graduate Studies, Professor Kristin Shutts, kshutts@wisc.edu.

If your complaint concerns sexual harassment, you may also take your complaint to Dr. Linnea Burk, Clinical Associate Professor and Director, Psychology Research and Training Clinic, Room 315 Psychology (262-9079; burk@wisc.edu).

If you have concerns about climate or bias in this class, or if you wish to report an incident of bias or hate that has occurred in class, you may contact the Chair of the Department, Professor Craig Berridge (berridge@wisc.edu) or the Chair of the Psychology Department Climate & Diversity Committee, Professor Catherine Marler (catherine.marler@wisc.edu). You may also use the University's bias incident reporting system, which you can reach at the following link: <https://doso.students.wisc.edu/services/bias-reporting-process/>.

Digital Course Evaluation (AEFIS)

UW-Madison now uses an online course evaluation survey tool ([AEFIS](#)). In most instances, you will receive an official email two weeks prior to the end of the semester when your course evaluation is available. You will receive a link to log into the course evaluation with your NetID where you can complete the evaluation and submit it, anonymously. Your participation is an integral component of this course, and your feedback is important to me. I strongly encourage you to participate in the course evaluation.