Ling 810: Psycholinguistics of Chinese languages
Wednesday 1:30-4:30, RCB 7402

Contact information

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Course description

This course gives an introduction to the study of psycholinguistics by exploring language processing in Chinese languages. While still understudied, the psycholinguistics of Mandarin and Cantonese present a number of striking differences with parallel facts in Indo-European languages. The empirical goal of the course is to document these differences in specific domains, including the representation of the syllable, tone processing, processing of phonetic cues, morphological processing, and sentence parsing. These findings will then support the theoretical goals of the course, namely, to evaluate and develop more general theories of production and perception that address these fundamental cross-linguistic differences.

Course goals

- Establish foundations in psycholinguistics, mainly language production and perception
- Understand how the structure of Chinese languages informs psycholinguistics
- Learn to critically analyze contemporary psycholinguistic research

Course format

This course is a seminar, and students are encouraged to participate in discussion. Each week will consist of 3-4 readings, and everyone is expected to attend class having done the readings, and be ready to contribute, even though participation is not explicitly graded.

Each week, the course instructors will begin with an overview of the major themes for that week. Next, the class facilitator(s) will guide us through the material and previously submitted discussion questions (~60-80 minutes). Finally, the class will conclude will a reflection on how the weekly topic can be applied to one's own research / academic interests. On the first day of class, students will be assigned the readings for which they will act as facilitators.

Course Weighting

- Article reviews (3): 25% (due dates given below)
- Presentations: 20%
- Final long report: 55% (due Dec. 4)

Assignments

- **Article reviews**: to facilitate the final long report, students will write three 3-4 page reviews of research articles. The first review should be one of the articles on the reading list (see below), but the second and third will be chosen by the student so that it aligns with the focus of their research article. See John's Teaching page for a guideline and some model reviews (http://www.sfu.ca/~alderete/hands/sfuMemo_writingReviews.pdf)

- **Presentations**: An introduction to the topic for that week will be given by the instructors, but we ask the students to give presentations about the readings, essentially summarizing the main arguments and results in a short presentation and then leading a few discussion questions. Undergraduate students can team up, but graduate students will do this by themselves. All students meet with the instructors ahead of time to check on progress.

- **Final research article**: a standard paper approx. 15-20 pages (double-spaced) that engages with the material of the class, hopefully one that ties together some of the research threads of your reviews.

More details on class discussion-leading:

- *For non-facilitators* For each article, submit on Canvas three comments or questions that you feel are important—you may not fully understand the answers to your questions (deadline: Monday PM before Wednesday seminar). Guidelines for comments or questions will be given on the first day of class.

- *For facilitators (70-90 mins).* You will then lead the class in discussion after the background provided by the instructors. You can generate a list of brief discussion ideas in conjunction with your classmates' discussion questions (available on Canvas) into some order that you think will generate thoughtful conversation. During class, you will also be in charge of guiding the conversation from one question to the next, and keeping the conversation on track. Prepare by:

    1. **In the week(s) before:** Read all of the week's articles, and plan how you will teach this material (perhaps also in conjunction with your partner).
    2. **Right after the class preceding your week:** See instructors to arrange a meeting time to workshop your ideas.
    3. **On the Thursday or Friday before your class discussion:** Meet with an instructor for one-hour to hone and refine your facilitation plans.
    4. **Monday or Tuesday before your class discussion:** Read through your classmates' questions after they are submitted on the course discussion board and figure out how to organize the points that are made within them. There is no "right" way to organize these points, but you should put the points / questions in an order that facilitates a logical and thoughtful conversation. When you've done so, create a document that contains 1-2 sentence summaries of your classmates' points in the order you wish, and make copies for everyone. Note: You do not need to include all points submitted, but you should have at least one discussion point from each classmate.

Week 1 9/6	**Course Organization** *Introductions & Overview* Li, Charles N & Sandra A Thompson. 1990. Chinese. The world's major languages, ed. by B. Comrie, 811-33. New York: Oxford University Press.
Week 2 9/13	**Chinese Tone I: Acquisition** *How adults produce tone when speaking to infants; how infants learn tone* • Xu Rattanasone, N, D Burnham & R. G Reilly. 2013. Tone and vowel enhancement in Cantonese infant-directed speech at 3, 6, 9, and 12 months of age. Journal of Phonetics 41.332–43. • Yeung, H. H, K. H Chen & J. F Werker. 2013. When does native language input affect phonetic perception? The precocious case of lexical tone. Journal of Memory and Language 68.123–39. • Liu, L., & Kager, R. (2014). Perception of tones by infants learning a non-tone language. *Cognition*, *133*(2), 385–394.
Week 3 9/20	**Chinese Tone II: Production** *How are speech errors different in Chinese languages, and what does this tell us about tone processing?* • Chen, Jenn-Yeu. 1999. The representation and processing of tone in Mandarin Chinese: Evidence from slips of the tongue. Applied Psycholinguistics 20.289-301. • Moser, David. 1991. Slips of the tongue and pen in Chinese (Sino-Platonic Papers, No. 22). Philadelpha: University of Pennsylvania. • Wan, I-Ping & Jeri J Jaeger. 1998. Speech errors and the representation of tone in Mandarin Chinese. Phonology 15. **Article review 1 Due**
Week 4 9/27	**Chinese Tone III: Perception** *How tones compare with consonants and vowels in lexical access* • Cutler, Anne & Hsuan-Chih Chen. 1997. Lexical tone in Cantonese spoken-word processing. Perception and Psychophysics 59.165-79. • Ye, Y., & Connine, C. M. (1999). Processing spoken Chinese: The role of tone information. *Language and Cognitive Processes*, (December), 609–630. • Wiener, S., & Turnbull, R. (2016). Constraints of tones, vowels and consonants on lexical selection in Mandarin Chinese. *Language and Speech*, *59*(1), 59–82. http://doi.org/10.1177/0023830915578000

Week 5 10/14	**Speech Planning in Chinese I** *Understand how the syllable in the Chinese lexicon relates to the facts of speech errors in Chinese languages* • Chen, Jenn-Yeu. 2000. Syllable errors from naturalistic slips of the tongue in Mandarin Chinese. Psychologia 43.15-26. • Shen, Jiaxuan. 1993. Slips of the tongue and the syllable structure of Mandarin Chinese. Essays on the Chinese language by contemporary Chinese scholars, ed. by S.-C. Yau, 139-61. Paris: Centre de Recherche Linguistiques sure L'Asie Orientale. Ecole des Hautes Etudes en Sciences Sociales. • Wan, I-Ping. 1997. The status of prenuclear glides in Mandarin Chinese: Evidence from speech errors. Chicago Linguistics Society 33.417-28.
Week 6 10/11	**Speech Planning in Chinese II** *How is the syllable referenced in preparation for word production?* • Chen, Jenn-Yeu, Train-Min Chen & Gary S. Dell. 2002. Word-form encoding in Mandarin Chinese as assessed by an implicit priming task. Journal of Memory and Language 46.751-81. • Chen, Jenn-Yeu, Wei-Chun Lin & Ludovic Ferrand. 2003. Masked priming of the syllable in Mandarin Chinese speech production. Chinese Journal of Psychology 45.107-20. • Chen, Train-Min, Gary S Dell & Jenn-Yeu Chen. 2004. A cross-linguistic study of phonological units: Syllables emerge from the statistics of Mandarin Chinese, but not from the statistics of English. Cognitive Science Society 26.216-20. • O'Seaghdha, Padraig G, Jenn-Yeu Chen & Train-Min Chen. 2010. Proximate units in word production: Phonological encoding begins with syllables in Mandarin Chinese but with segments in English. Cognition 115.282-302. **Article review 2 due**
Week 7 10/18	**Processing of Tone Sandhi** • Chien, Y., Sereno, J. A., & Zhang, J. (2016). Priming the representation of Mandarin tone 3 sandhi words. *Language, Cognition and Neuroscience*, *31*(2), 179–189. http://doi.org/10.1080/23273798.2015.1064976 • Speer, S. R., Shih, C., & Slowiaczek, M. L. (1989). Prosodic structure in language understanding: Evidence from tone sandhi in Mandarin. *Language and Speech*, *32*(4), 337–354. http://doi.org/10.1177/002383098903200403 • Zhang, J., & Lai, Y. (2010). Testing the role of phonetic knowledge in Mandarin tone sandhi. *Phonology*, 27(1), 153–201.

Week 8 10/25	**Morphological encoding in Chinese** *What is the evidence for morphological encoding in Chinese, and how does it differ from Indo-European languages?* • Chen, Train-Min & Jenn-Yeu Chen. 2006. Morphological encoding in the production of compound words in Mandarin Chinese. Journal of Memory and Language 54.491-514. • Zhou, Xiaolin & William Marslen-Wilson. 1994. Words, morphemes and syllables in the Chinese mental lexicon. Language and Cognitive Processes 9.393-422. • Zhou, Xiaolin, William Marslen-Wilson, Marcus Taft & Hua Shu. 1999. Morphology, orthography, and phonology reading Chinese compound words. Language and Cognitive Processes 14.525-65.
Week 9 11/1	**Syntax I: Processing in Chinese** *How Chinese sentence processing differs from English (an in-situ versus wh-q language), and from other languages (languages w/ little versus lots of morphology)* • Li, P., Bates, E., & MacWhinney, B. (1993). Processing a language without inflections: A reaction time study of sentence interpretation in Chinese. *Journal of Memory and Language*, *32*(2), 169–192. http://doi.org/10.1006/jmla.1993.1010 • Xiang, M., Wang, S., & Cui, Y. (2015). Constructing covert dependencies—The case of Mandarin wh-in-situ dependency. *Journal of Memory and Language*, *84*, 139–166. http://doi.org/10.1016/j.jml.2015.05.006 • Wang, S., Mo, D., Xiang, M., Xu, R., & Chen, H.-C. (2013). The time course of semantic and syntactic processing in reading Chinese: Evidence from ERPs. *Language and Cognitive Processes*, *28*(4), 577–596. **Article review 3 due**
Week 10 11/8	**Syntax II: Structural Priming** *How does priming of abstract structure differ in Chinese, and what does it tell us about the processor?* • Cai, Zhengguang G, Martin J Pickering & Holly P Branigan (2012). Mapping concepts to syntax: Evidence from structural priming in Mandarin Chinese. *Journal of Memory and Language,* 66, 833-49. • Cai, Zhengguang G, Martin J Pickering & Patrick Sturt (2013). Processing verb-phrase ellipsis in Mandarin Chinese: Evidence against the syntactic account. *Language and Cognitive Processes,* 28, 810-28. • Cai, Zhengguang G, Martin J Pickering, Hao Yan & Holly P Branigan (2011). Lexical and syntactic representations in closely related languages: Evidence from Cantonese-Mandarin bilinguals. *Journal of Memory and Language*, 65, 431-45.

Week 11 11/18	**Semantics I: Acquisition of Nouns and Verbs** *Prominence of verbs versus nouns structures in Chinese versus English: Why do children learn verbs better in Chinese?* • Tardif, T. (1996). Nouns are not always learned before verbs: Evidence from Mandarin speakers' early vocabularies. *Developmental Psychology*, *32*(3), 492–504. http://doi.org/10.1037/0012-1649.32.3.492 • Tardif, T., Gelman, S. A., & Xu, F. (1999). Putting the " Noun Bias " in Context : A Comparison of English and Mandarin Author. *Child Development*, *70*(3), 620–635. • Imai, M., Li, L., Haryu, E., Okada, H., Hirsh-Pasek, K., Golinkoff, R. M., & Shigematsu, J. (2008). Novel noun and verb learning in Chinese-, English-, and Japanese-speaking children. *Child Development*, *79*(4), 979–1000.
Week 12 11/22	**Semantics II: Language and Thought** *Does the bareness of morphological marking in Chinese affect the way speakers interpret nouns?* • Saalbach, H., & Imai, M. (2007). Scope of linguistic influence: Does a classifier system alter object concepts? *Journal of Experimental Psychology: General*, *136*(3), 485–501. http://doi.org/10.1037/0096-3445.136.3.485 • Barner, D., Inagaki, S., & Li, P. (2009). Language, thought, and real nouns. *Cognition*, *111*(3), 329–44. http://doi.org/10.1016/j.cognition.2009.02.008 • Tardif, T., Gelman, S. a, Fu, X., & Zhu, L. (2012). Acquisition of generic noun phrases in Chinese: learning about lions without an "-s". *Journal of Child Language*, *39*(1), 130–61. http://doi.org/10.1017/S0305000910000735
Week 13 11/29	**Non-Linguistic Differences** *When doing cross-linguistic comparisons, what NON-linguistic factors must one look out for? Explores the role of cultural factors / population genetics.* • Chua, H. F., Boland, J. E., & Nisbett, R. E. (2005). Cultural variation in eye movements during scene perception. *Proceedings of the National Academy of Sciences of the United States of America*, *102*(35), 12629–12633. http://doi.org/10.1073/pnas.0506162102 • Dediu, D., & Ladd, D. R. (2007). Linguistic tone is related to the population frequency of the adaptive haplogroups of two brain size genes, ASPM and Microcephalin. *Proceedings of the National Academy of Sciences*, *104*(26), 10944–10949. http://doi.org/10.1073/pnas.0610848104 • Kail, R. V, McBride-Chang, C., Ferrer, E., Cho, J.-R., & Shu, H. (2013). Cultural differences in the development of processing speed. *Developmental Science*, *16*(3), 476–83. http://doi.org/10.1111/desc.12039

Final long report due: Dec. 4, can send by email.