

***Tentative* Syllabus for LING 581: Dependency Resolution in Sentence Processing**

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Office Hours: by appointment

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Class Hours: t.b.a.; t.b.a.

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Course Description

The aim of this course is to introduce you to some fundamental questions as well as current research on the mechanisms that underlie the on-line resolution of various types of grammatical dependencies, such as those between (i) subjects and verbs, (ii) pronouns and their antecedents, (iii) reflexives and their antecedents, and (iv) negative polarity items and their licensors. We will look at dependency resolution through the lens of working-memory-based models and discuss the properties of memory operations involved in establishing dependencies between potentially distant parts of a sentence.

Course Structure and Grading

- **Attendance and participation.** Attendance and participation will account for 10% of your course grade. Please actively participate in class.
- **Readings.** Please read the assigned papers for each week (those marked as '*required*') and answer three questions about them. The answers to the questions will account for 20% of the grade. (To be submitted on moodle, by Sunday at 10 pm at the latest.)
- **Assignments.** Another 30% of the grade will be based on five relatively short assignments (due on Tuesday of weeks 3, 5, 7, 9, and 11).
- **Term paper.** The final 20% of the grade will be based on a term paper (5 to 10 pages) on a topic of your choosing.

Course Policy

- Please switch off your phones, or set them silent mode.
- Don't cheat and try to learn stuff.

Tentative Schedule

Week 1, 06.02 - 10.02: Sentence Processing: Key Questions

required reading: Traxler (2012)

optional reading: Pickering & van Gompel (2006)

Week 2, 13.02 - 17.02: Locality and Anti-locality: Does dependency length matter?

required reading: Vasishth (2011)

optional reading: Safavi et al. (2016); Husain et al. (2014)

Week 3, 20.02 - 24.02: Parsing and Memory: Why dependency length matters.

required reading: Lewis & Vasishth (2005); Lewis et al. (2006)

Week 4, 27.02 - 03.03: What causes interference?

required reading: van Dyke & Johns (2012)

optional reading: Hofmeister & Vasishth (2014); van Dyke (2007)

Week 5, 06.03 - 10.03: The search for antecedents of pronouns

required reading: Sturt (2013)

Week 6, 13.03 - 17.03: Are reflexives like pronouns?

required reading: Dillon (2014)

optional reading: Dillon et al. (2013, 2014)

Week 7, 20.03 - 24.03: Are reflexives really that different?

required reading: Jäger et al. (2015)

optional: Kush & Phillips (2014)

Week 8, 27.03 - 31.03: How does cue-based retrieval from memory work, anyway?

required reading: Foraker & McElree (2011)

optional reading: Van Dyke & McElree (2011)

Week 9, 03.04 - 07.04: Illusory NPI-Licensing

required reading: Parker & Phillips (2016)

Week 10, 10.04 - 14.04: Wh-movement

required reading: Omaki et al. (2015)

Week 11, 17.04 - 21.04: – *spring break* –

Week 12, 24.04 - 28.04: A critical look at the ACT-R based model of retrieval

required reading: Parker et al. (2016)

optional reading: Jäger et al. (2017)

Week 13, 01.05 - 05.05: t.b.a.

Week 14, 08.05 - 12.05: t.b.a.

References

- Dillon, B. (2014). Syntactic memory in the comprehension of reflexive dependencies: An overview. *Linguistics and Language Compass*, 8(5), 171–187. doi: 10.1111/lnc3.12075
- Dillon, B., Chow, W.-Y., Wagers, M., Guo, T., Liu, F., & Phillips, C. (2014). The structure-sensitivity of memory access: evidence from Mandarin Chinese. *Frontiers in psychology*, 5(September), 1025. doi: 10.3389/fpsyg.2014.01025
- Dillon, B., Mishler, A., Sloggett, S., & Phillips, C. (2013). Contrasting intrusion profiles for agreement and anaphora: Experimental and modeling evidence. *Journal of Memory and Language*, 69(2), 85–103. doi: 10.1016/j.jml.2013.04.003
- Foraker, S., & McElree, B. (2011). Comprehension of linguistic dependencies: Speed-accuracy tradeoff evidence for direct-access retrieval from memory. *Linguistics and Language Compass*, 5(11), 764–783. doi: 10.1111/j.1749-818X.2011.00313.x
- Hofmeister, P., & Vasishth, S. (2014). Distinctiveness and encoding effects in online sentence comprehension. *Frontiers in Psychology*, 5, 1–13. doi: 10.3389/fpsyg.2014.01237
- Husain, S., Vasishth, S., & Srinivasan, N. (2014). Strong expectations cancel locality effects: Evidence from Hindi. *PLoS ONE*, 9(7). doi: 10.1371/journal.pone.0100986
- Jäger, L. A., Benz, L., Roeser, J., Dillon, B. W., & Vasishth, S. (2015). Teasing apart retrieval and encoding interference in the processing of anaphors. *Frontiers in Psychology*, 6(APR). doi: 10.3389/fpsyg.2015.00506
- Jäger, L. A., Engelmann, F., & Vasishth, S. (2017). Similarity-based interference in sentence comprehension: Literature review and Bayesian meta-analysis. *Journal of Memory and Language*.

- Kush, D., & Phillips, C. (2014). Local anaphor licensing in an SOV language: Implications for retrieval strategies. *Frontiers in Psychology*, 5(NOV), 1–12. doi: 10.3389/fpsyg.2014.01252
- Lewis, R. L., & Vasishth, S. (2005). An activation-based model of sentence processing as skilled memory retrieval. *Cognitive Science*, 29(3), 375–419. doi: 10.1207/s15516709cog0000_25
- Lewis, R. L., Vasishth, S., & Van Dyke, J. A. (2006). Computational principles of working memory in sentence comprehension. *Trends in Cognitive Sciences*, 10(10), 447–454.
- Omaki, A., Lau, E., White, I. D., Dakan, M. L., Apple, A., & Phillips, C. (2015). Hyper-active gap filling. *Frontiers in Psychology*, 6(MAR), 1–18. doi: 10.3389/fpsyg.2015.00384
- Parker, D., & Phillips, C. (2016). Negative polarity illusions and the format of hierarchical encodings in memory. *Cognition*, 157, 1–59. doi: 10.1016/j.cognition.2016.08.016
- Parker, D., Shvartsman, M., & Van Dyke, J. A. (2016). The cue-based retrieval theory of sentence comprehension: New findings and new challenges. In *Proceedings of the experimental psycholinguistics conference*.
- Pickering, M. J., & van Gompel, R. P. (2006). Syntactic Parsing. In M. J. Traxler & M. A. Gernsbacher (Eds.), *The oxford handbook of psycholinguistics* (2nd ed., chap. 12). London: Academic Press.
- Safavi, M. S., Husain, S., & Vasishth, S. (2016). Dependency Resolution Difficulty Increases with Distance in Persian Separable Complex Predicates: Evidence for Expectation and Memory-Based Accounts. *Frontiers in Psychology*, 7, 403. doi: 10.3389/fpsyg.2016.00403
- Sturt, P. (2013). Syntactic constraints on referential processing. In *Sentence processing* (pp. 136–159). doi: 10.4324/9780203488454
- Traxler, M. (2012). Sentence Processing. In *Introduction to psycholinguistics* (pp. 141–186).
- Van Dyke, J. A., & McElree, B. (2011). Cue-dependent interference in comprehension. *Journal of Memory and Language*, 65(3), 247–263. doi: 10.1016/j.jml.2011.05.002
- van Dyke, J. A. (2007). Interference effects from grammatically unavailable constituents during sentence processing. *JEP: LMC*, 33(2), 407.
- van Dyke, J. A., & Johns, C. L. (2012). Memory Interference as a Determinant of Language Comprehension. *Linguistics and Language Compass*, 6(4), 193–211. doi: 10.1002/lnc3.330
- Vasishth, S. (2011). Integration and prediction in head-final structures. In H. Yamashita, Y. Hirose, & J. Packard (Eds.), *Processing and producing head-final structures* (pp. 349–367). Springer Netherlands. doi: 10.1007/978-90-481-9213-7