

Reading Assignment 2

COMP 550, Fall 2021

Due date: Nov 4, 2021 9:00pm

Read the following paper and write a critical summary of it:

Klein, Dan, and Christopher D. Manning. "Accurate unlexicalized parsing." *Proceedings of the 41st annual meeting of the association for computational linguistics*. 2003.
<https://www.aclweb.org/anthology/P03-1054.pdf>

Your summary should include a description of the paper's contents, its strengths and limitations, and any points that you did not understand. I expect that there will be concepts that you do not understand! Do not worry, and document this in your write-up.

Also, discuss the following issues in your write-up:

1. What is the difference between a lexicalized and an unlexicalized parser? Explain with a simple example.
2. Can the CYK algorithm be applied to parse using the techniques described in this paper, such as horizontal and vertical Markovization? How is the algorithm affected, if at all?
3. This paper is a classic paper which predates the current neural age of NLP. Give some examples of parts of the proposed method that you think could be usefully adapted or automated by being implemented by a neural network. What are the potential costs and benefits?

Your summary should be **at most 1 page**. It will be graded on the basis of its coverage, linguistic quality, and clarity of argumentation.

Resources

- Jason Eisner's guide to reading papers: <https://www.cs.jhu.edu/~jason/advice/how-to-read-a-paper.html>