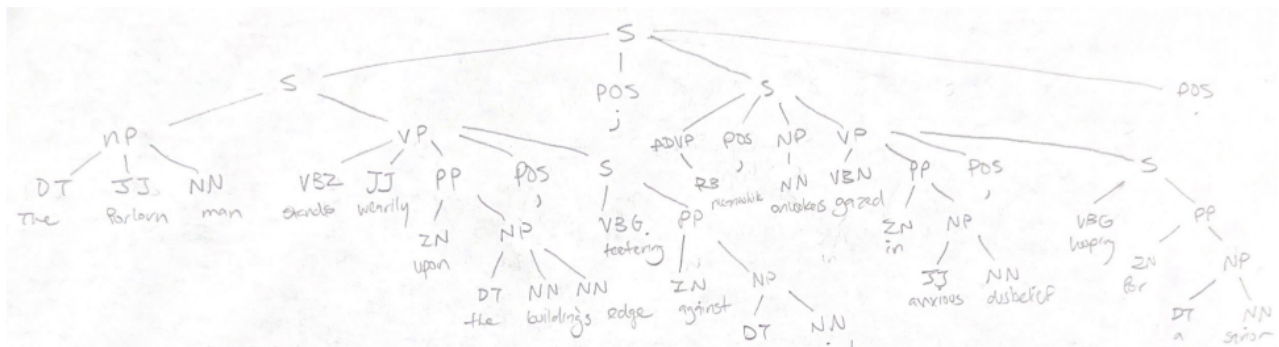Kevin Roa

CS4395.001

<p style="text-align:center">Sentence Parsing</p>

1. The forlorn man stands wearily upon the building's edge, teetering against the wind; meanwhile, onlookers gaze in anxious disbelief, hoping for a savior.

2.

- S: Simple declarative clause
- NP: Noun Phrase
- DT: Determiner
- JJ: Adjective
- NN: Noun
- VBZ: Present tense verb, 3rd person singular
- PP: Prepositional phrase
- IN: Preposition
- VBG: Gerund/present participle verb
- ADVP: Adverb Phrase
- RB: Adverb
- VBN: Past participle verb

3.
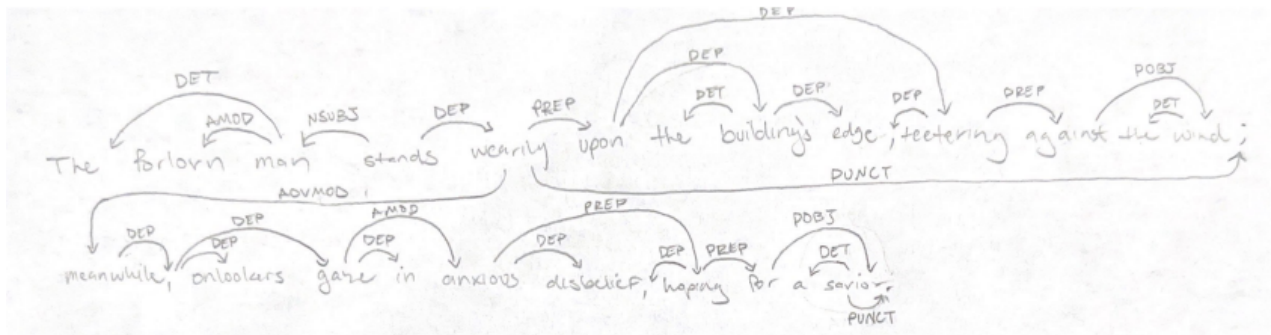
- DET: Determiner
- AMOD: Adjectival modifier
- NSUBJ: Nominal subject
- DEP: Dependent
- PREP: Prepositional modifier
- POBJ: Object of preposition
- ADVMOD: Adverb modifier
- PUNCT: punctuation

4.
- "Stands"
    - ARG1
        - The forlorn man
    - ARG2
        - Upon the building's edge
    - ARGM-MNR
        - wearily
    - ARGM-PRD
        - Teetering against the wind
- "Teetering"
    - ARG0
        - Against the wind
    - ARG1
        - The forlorn man
- "Gaze"
    - ARG0
        - onlookers
    - ARGM-TMP
        - meanwhile
    - ARGM-MNR
        - In anxious disbelief
    - ARGM-ADV

- Hoping for a savior
- "Hoping"
  - ARG0
    - onlookers
  - ARG1
    - For a savior

- ARG0: Proto-agent (giver)
- ARG1: Proto-patient (thing given to)
- ARG2: Benefactive/instrument/attribute/end state (entity given to)

- ARGM-MNR: Manner (how action was performed)
- ARGM-PRD: Secondary Predication (predicate itself carries some predicate structure)
- ARGM-TMP: Temporal (when action took place)
- ARGM-ADV: Adverbial (modify event structure of verb)

5. Each of the 3 parse types aims to achieve a different goal, as such, there are pros and cons to each. The PSG parse aims to organize the sentence into a hierarchy (tree) of phrases, with each node having its own part of speech. The downside to PSG is that it only provides information about the POS structure of the sentence and doesn't mention dependencies/modifiers/semantics. The dependency parse, on the other hand, mentions what words are dependent on the other as well as their POS. It uses an acyclic graph structure to convey the dependencies which may be hard to read at times. The downside is that it also doesn't mention the specific semantics of the sentence. The SRL parse aims to determine the semantic roles of each label within a sentence relative to a predicate. It labels the types of actors/modifiers within a sentence but mostly ignores POS tagging.

In my opinion, PSG appears somewhat useless considering the dependency parse already covers POS tagging. Dependency parse and SRL parse appear to be the most useful for extracting more information from the sentence.