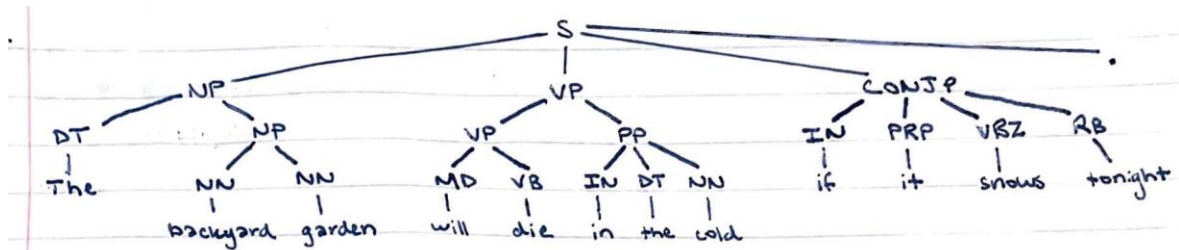


1. The backyard garden will die in the cold if it snows tomorrow.
- 2.



S → simple declarative clause

NP → noun phrase

VP → verb phrase

CONJP → conjunction phrase

DT → determiner

PP → prepositional phrase

IN → preposition or subordinating conjunction

PRP → personal pronoun

VBZ → verb, 3<sup>rd</sup> person singular present

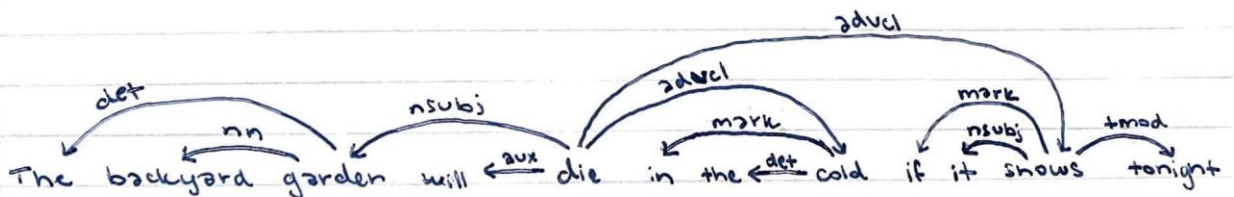
RB → adverb

NN → noun, singular or mass

MD → modal

VB → verb, base form

- 3.



det → the relation between the head of a noun phrase and its determiner

nn → noun that serves to modify the head noun

nsubj → noun phrase which is the syntactic subject of a clause

aux → non-main verb of the clause

advcl → clause modifying the verb

mark → word introducing adverbial clause complement

tmod → constituent that serves to modify the meaning of the VP/ADJP by specifying a time

4. Verbs: will die, snows

- a. will die

Arguments:

Arg0: the backyard garden – Arg0 is the agent doing the action. Here, it is the backyard garden which will die.

Modifiers:

LOC: in the cold – where Arg0 will die

CAU: if it snows tonight – why Arg0 will die

b. snows

Arguments:

Arg0: it – Arg0 is the agent doing the action. Here, 'it' is a general reference to clouds, the sky, weather, etc.

Modifiers:

TMP: tonight – when it snows

5. PSG parsing provides a tree with a deep understanding of the grammar of a sentence. Unfortunately, the semantics of many natural sentences cannot be adequately modeled by a tree, and some context is required. Dependency parsing, on the other hand, models sentences using a directed acyclic graph, where nodes are words and edges define how they modify each other. This more effectively models semantics, at expense of modeling pure grammar somewhat less effectively. Semantic role label parse continues this trend of sacrificing grammatical modeling for semantic modeling. This method provides the most in depth semantic modeling of the three but does little to model the grammatical structure of the text.