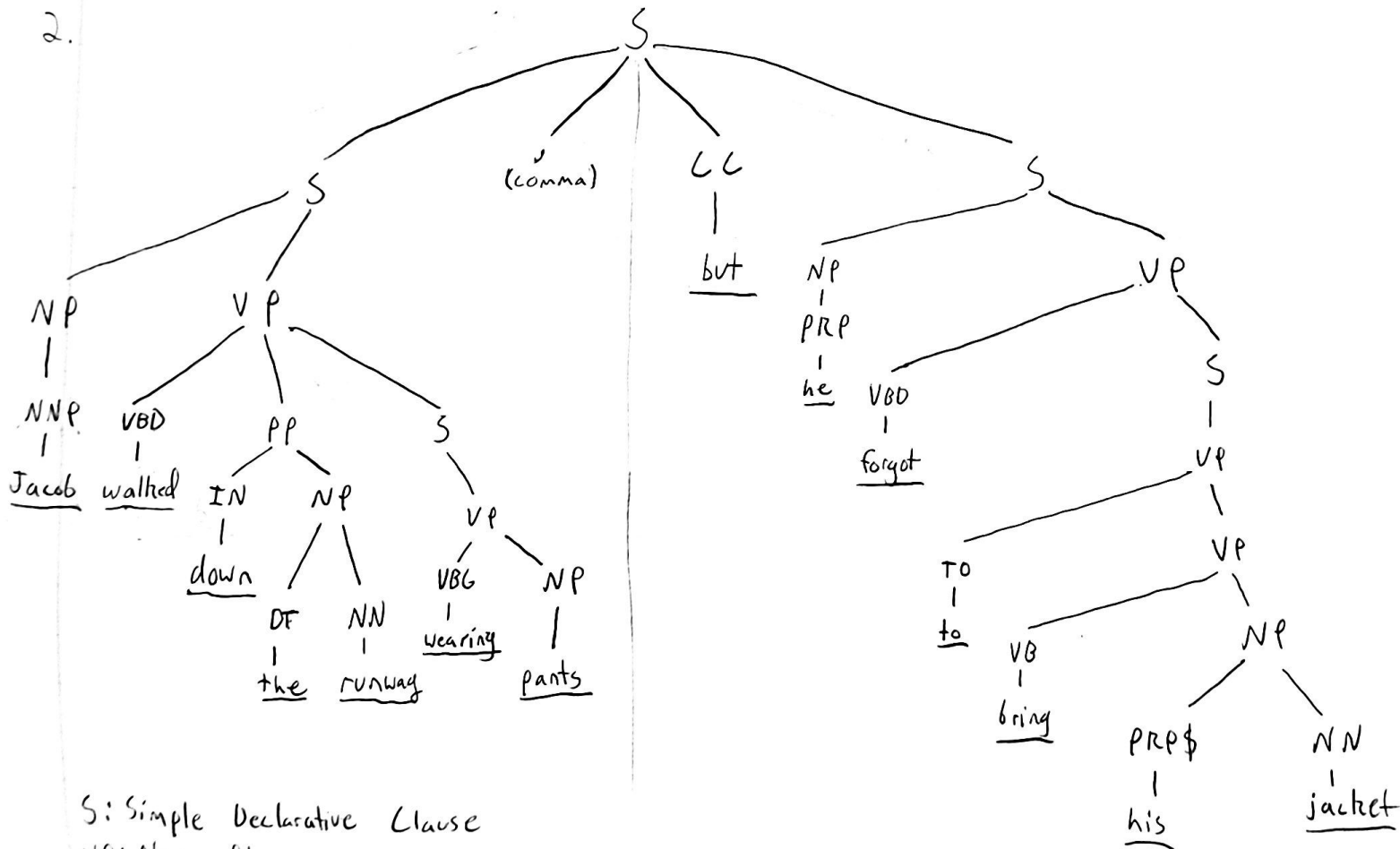


Portfolio Assignment: Sentence Parsing

1. Jacob walked down the runway wearing pants, but he forgot to bring his jacket.

2.



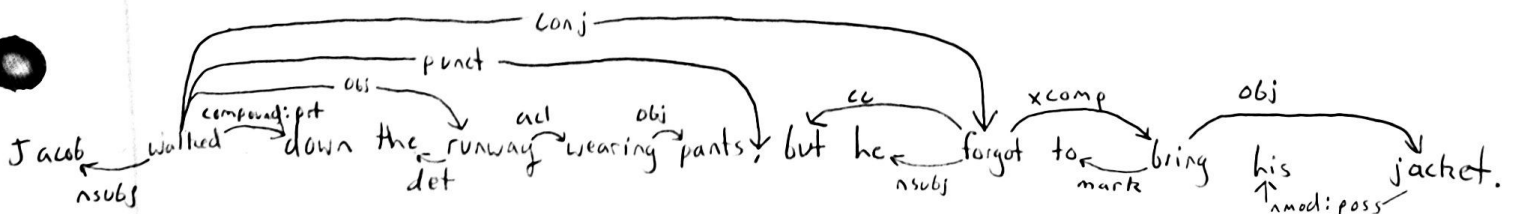
S: Simple Declarative Clause

NP: Noun Phrase

VP: Verb Phrase

PP: Prepositional Phrase

3.



conj (conjunct): Relation between two elements connected by a coordinating conjunction.

punct (punctuation): Used for any piece of punctuation in a clause.

obj (object): Used to define object relations

cc (coordination): Relation between an element of a conjunct and the coordinating conjunction word of the conjunct.

xcomp (open clausal complement): xcomp of a verb or adjective is a predicative or clausal complement without its own subject.

nsubj (nominal subject): Nominal which is the syntactic subject and the proto-agent of a clause.

compound:prt (phrasal verb particle): Identifies a phrasal verb, and holds between the verb and its particle.

det (determiner): Relation between the head of an NP and its determiner.

acl (clausal modifier of noun): finite and non-finite clauses that modify a nominal.

mark (marker): Word introducing a finite clause subordinate to another clause.

nmod:poss (possessive nominal modifier): Used for a nominal modifier which occurs before its head in the specifier position used for 's possessives.

4. Verb: Walked

Jacob walked down the runway wearing pants, ...
ARGO pred ARGM-DIR ARGM-ADV

Arguments:

Arg0: Jacob, the agent that "walked"

Modifiers:

ARGM-DIR: Direction of action

ARGM-ADV: Modifies the event structure of a sentence.

Verb: Wearing

Jacob walked down the runway wearing pants, ...
ARGO pred ARG1

Arguments:

ARGO: Jacob, the agent wearing pants.

ARG1: pants, passive actor which is being worn

Modifiers:

None

Verb: Forget

..., but he forgot to bring his jacket.
ARGO pred ARG1

Arguments:

ARGO: He, the agent that forgot

ARG1: passive actor which has been forgotten

Modifiers:

None

Verb: Bring

..., but he forgot to bring his jacket
ARG0 pred ARG1

Arguments:

ARG0: He, the agent which is bringing his jacket

ARG1: His jacket, which is the passive actor being brought

Modifiers:

None

5. The PSG tree is very useful for breaking down sentences into sentence constituents ranked as a hierarchy of phrases which is easy to understand for humans AND computers, but can suffer from different issues of ambiguity due to its non-determinism. This ambiguity was not found in my sample sentence, so the PSG performed very well.

The dependency tree concisely broke down my sample sentence into their relations, effectively showing how each part of the sentence depends on the others. Some of the dependencies did seem like they could be more accurately expressed, however.

The SRL parse was the easiest parse to understand because it breaks down the text into bigger chunks and defines them using clear arguments and modifiers. Because of this, some information is lost in comparison to a more detailed parse, like the dependency parse.