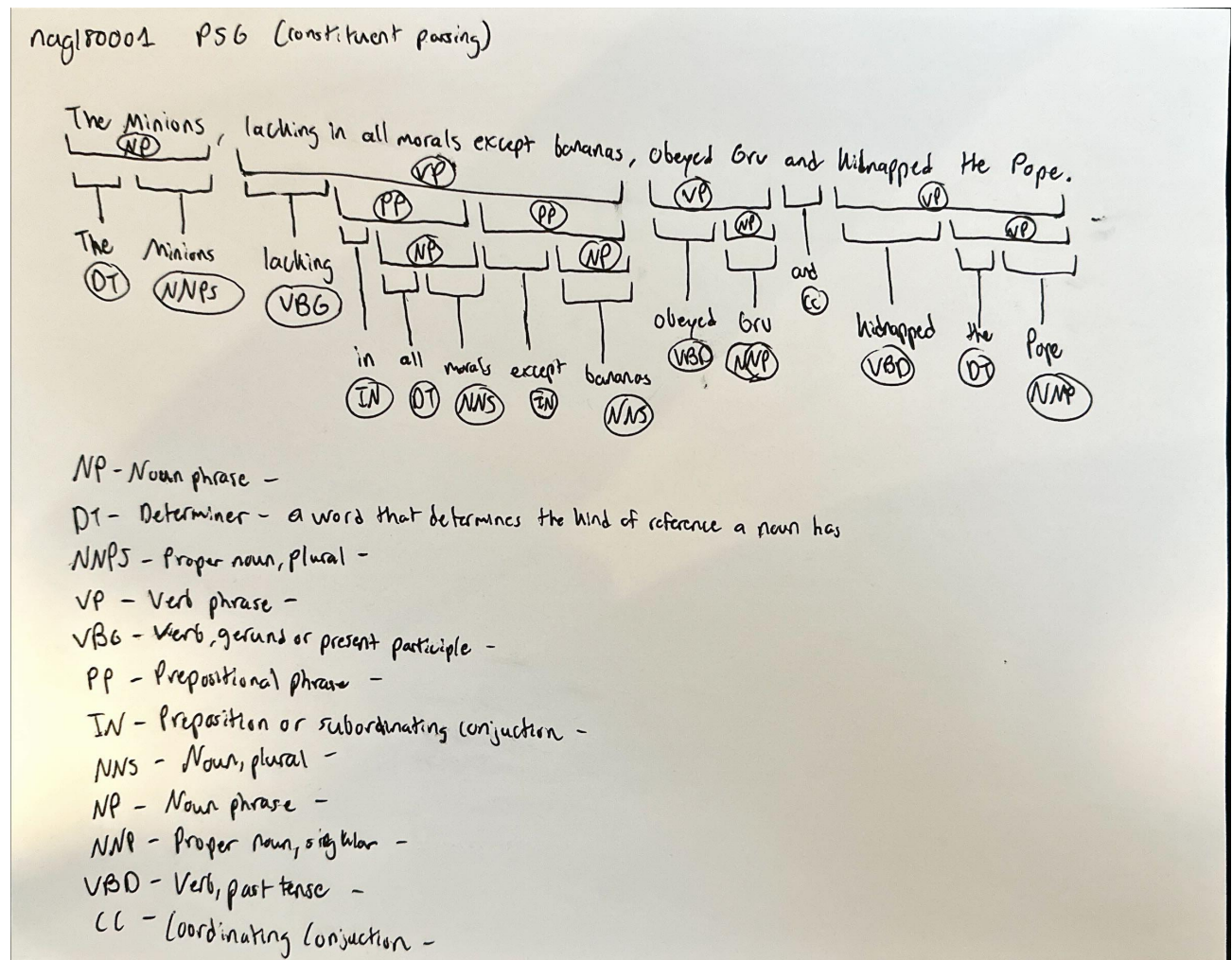


Sentence Parsing

CS4395 - nag180001

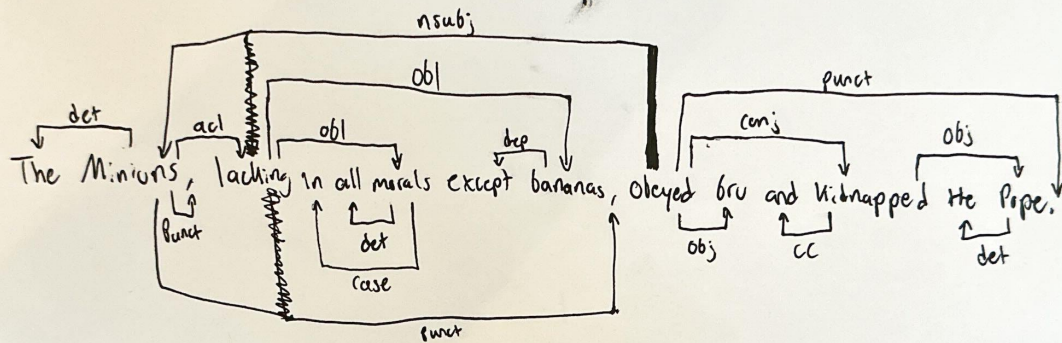
Constituent Parse



Constituent parsing is a good way to represent the parts of speech of a piece of text, including the composition of phrases within other phrases. However, the relationships between these phrases or parts of speech is hard to distinguish since only parenthood is shown between phrases and parts of speech - relationships between different phrases can't be shown.

Dependency Parse

naql80001 Dependency Parse



- case - case marking - element which is treated as a separate syntactic word
- obj - object - the object of a verb is the second most core argument & a verb after the subject (not in standard)
- obl - oblique nominal - relation used for a nominal functioning as a non-core (oblique) argument or adjunct. (not in standard)
- dep - dependent
- conj - conjunct -
- cc - coordination -
- nsbj - nominal subject - a noun phrase which is the syntactic subject of a clause
- acl - adverb clause modifier - a clause modifying the verb
- punct - punctuation
- det - determiner - a word that determines what kind of reference a noun has

Dependency parsing makes up for what constituent parsing lacks in: it shows the relationship between different parts of the sentence. It also shows parenthood through dependencies, although not in the same way that constituent parsing would in that dependency parsing shows relationship from the main predicate.

Semantic Role Label Parse

Nag180001 SRL

Lacking:

The Minions, lacking in all morals except bananas, obeyed Gru and kidnapped the Pope.

arg0 predicate arg1

arg0: The Minions are the agent of the sentence, the one(s) doing the action
 arg1: The passive actor, how the minions are lacking

Obeys:

The Minions, lacking in all morals except bananas, obeyed Gru and kidnapped the Pope.

arg0 argm-adv predicate arg1

arg0: The Minions are the agent of the sentence, the one(s) doing the action
 arg1: The passive actor, the Minions are obeying Gru
 argm-adv: Modifier-adverbial - lacking in morals modifies the action of obeying

kidnapped:

The Minions, lacking in all morals except bananas, obeyed Gru and kidnapped the Pope.

arg0 argm-prd predicate arg1

arg0: The minions are the agent of the sentence, the one(s) doing the action
 arg1: The Pope is the passive actor, the Minions are kidnapping the Pope
 argm-prd: Modifier-Secondary Predication, describes how the main predicate is done

Lastly, semantic role label parse is a simplified aggregation of the other two. The classification is built on identifying by the different roles present in the sentence in relation to predicates, so relationships are easily shown. Being shallow, semantic role label parse does not identify smaller classifications than roles.