sentence parsing
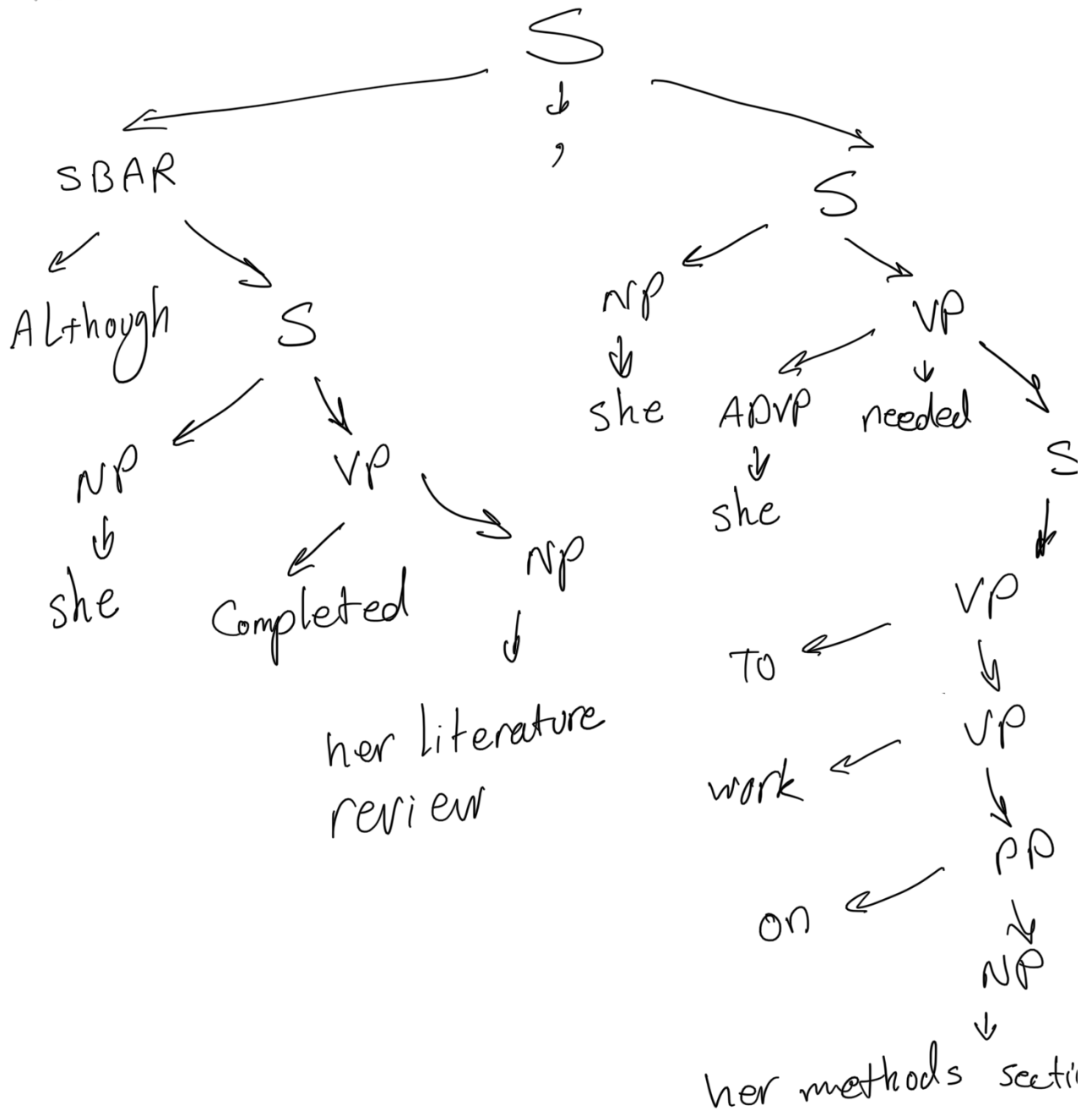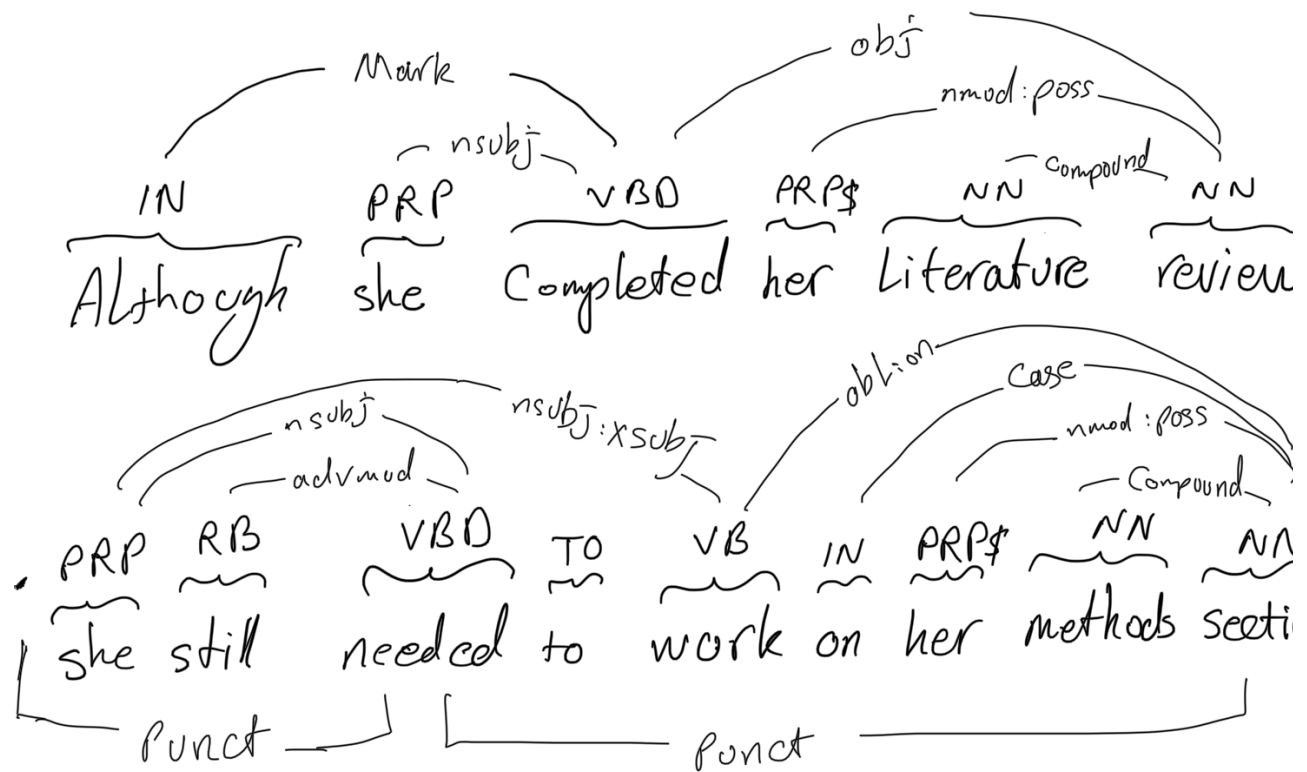
Sentence:
Although she completed her literature review, she still needed to work on her methods section.

S
├─ SBAR
│ ├─ Although
│ └─ S
│   ├─ NP → she
│   └─ VP
│   ├─ completed
│   └─ NP → her literature review
├─ ,
└─ S
   ├─ NP → she
   └─ VP
      ├─ ADVP → she
      ├─ needed
      └─ S
         └─ VP
            ├─ TO → to
            └─ VP
               ├─ work
               └─ PP
                  ├─ on
                  └─ NP → her methods section

Dependency Parse

Mark
nsubj
obj
nmod:poss
Compound

IN   PRP   VBD   PRP$ NN   NN

Although   she   Completed   her   Literature   review

nsubj
advmod
nsubj:xsubj
obl:on
Case
nmod:poss
Compound

PRP   RB   VBD   TO   VB   IN   PRP$ NN   NN

she   still   needed   to   work   on   her   methods   secti

Punct

Punct

SRL Parse

V : COMPLETED

<u>she</u>   <u>completed</u>   <u>her literature review</u>
ARG   V   ARG 1

V: NEEDED

<u>Although she completed her literature review,</u>
ARGM – ADV

<u>she</u>   <u>still</u>   <u>needed</u>   <u>to work on her methods section</u>
ARG0   ARG-TMP   V   ARG 1

V: WORK

Although ... review, <u>she</u>   still needed to   <u>work</u>
                      ARG0   V

<u>on her methods section.</u>
ARG 1

ARG0 : agent, the one doing action
ARG1 : direct object / theme / often the passive act
ARGM - ADV : general purpose
ARGM-TMP : time

PSG breaks a sentence into its constituents or phrases. These phrases are in turn broken into more phrases. Thus, the parse tree is recursive

Dependency Parsing (DP) refers to examining the dependencies between the words of a sentence to analyze its grammatical structure. Based on this, a sentence is broken into several components. The mechanism is based on the concept that there is a direct link between every linguistic unit of a sentence

Semantic role labeling (SRL) is the process that assigns labels to words or phrases in a sentence that indicates their semantic role in the sentence, such as that of an agent, goal, or result. It serves to find the meaning of the sentence