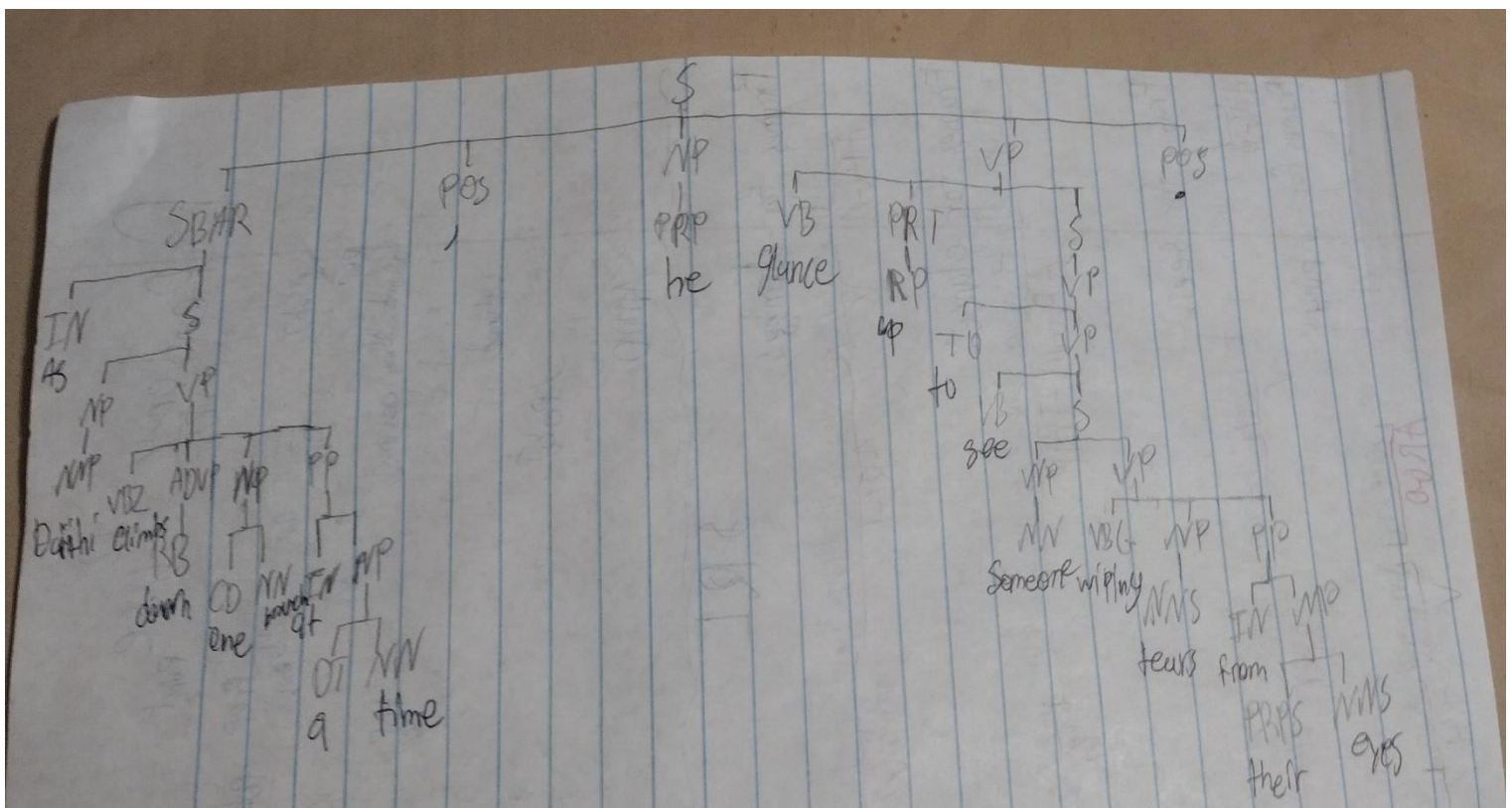


In my complex sentence, "As Daithí climbs down one branch at a time, he glance up to see someone wiping tears from their eyes." there was several verbs and nouns of different branches. The POS labels include the following:

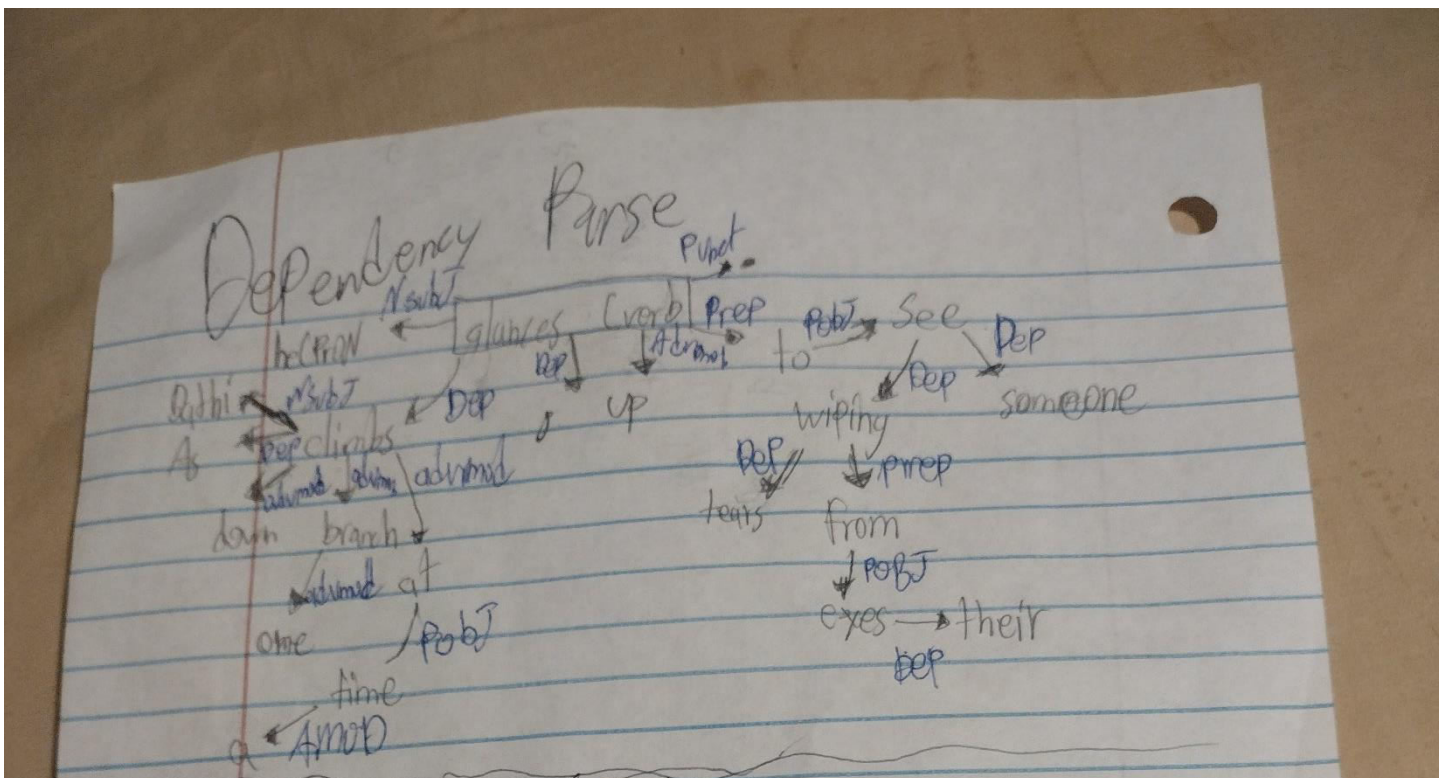
1. ADVP = These are adverb phrases are a specified element of adverbial
2. PP = Prepositional phrases cannot stand alone in a sentence structure and typically add descriptions or modify a conjoning noun and verb.
3. PRP = Personal pronouns are nouns that represent the noun subject in a feminine, masculine, or neutral state.
4. PRPS = The possessive pronoun are in the same umbrella as personal pronouns in some way, but
5. PRT = This is also a particle category. While it does belong to RP, PRT is apart of the phrasing level of Penn Treebank
6. RP = Better known as particle, this POS label help identifies phrasal verbs and is the glue for a verb and itself.
7. S = The simple declaration of a clause that is not introduced by a subordinating conjunction or a 'wh' word and that is not an exhibit subject-verb inversion.
8. SBAR = A Clause introduced by a subordinating conjunction.
9. NP = Noun phrases are the most common element of a sentence and is essential for sentences longer than five words. Noun phrases are the first production rule when parsing a sentence and can be further decomposed to a noun determiner, adjectives, and a regular noun.
10. VP = Verb phrases are your typical actions words and short phrases. A verb phrases can be decomposed into a singular verb and a verb conjunction with a prepositional phrase.



When it comes to the dependency parsing of my sentence, I was able to branch out in various ways from the verb word 'glances'. The first level of dependencies from the root verb 'glances' are: noun subject 'he', the depended verb 'climbs', an adverb modifier 'up', a preposition phrase, and two punctuations the comma being a dependent and the period an actual punctuation. Starting with the noun subject, the word 'he' a leaf of its own as it's a standalone pronoun.

The Dependent verb 'climbs' is a parent parse with four different children: the depend CONJ 'As', a Adverb modifier word 'down', an parent parse a Adverb modifier word 'branch', and the one final Adverb modifier word 'at'. The second-generation parent parse 'branch' has one Adverb modifier in the firm of 'one'. As for the word 'at' its child is connected through POBJ of 'time' and this child is also a parent to the add modifier 'a'.

My deepest dependency parsing branch begins with the preposition word 'to' which leads down to its POBJ verb word 'see'. 'see' Adverb modifier word has two child parse, a lead dependent noun 'tears'; and a parent preposition ADP 'from'. The parent preposition 'from' has a single child parse 'eyes', a POBJ



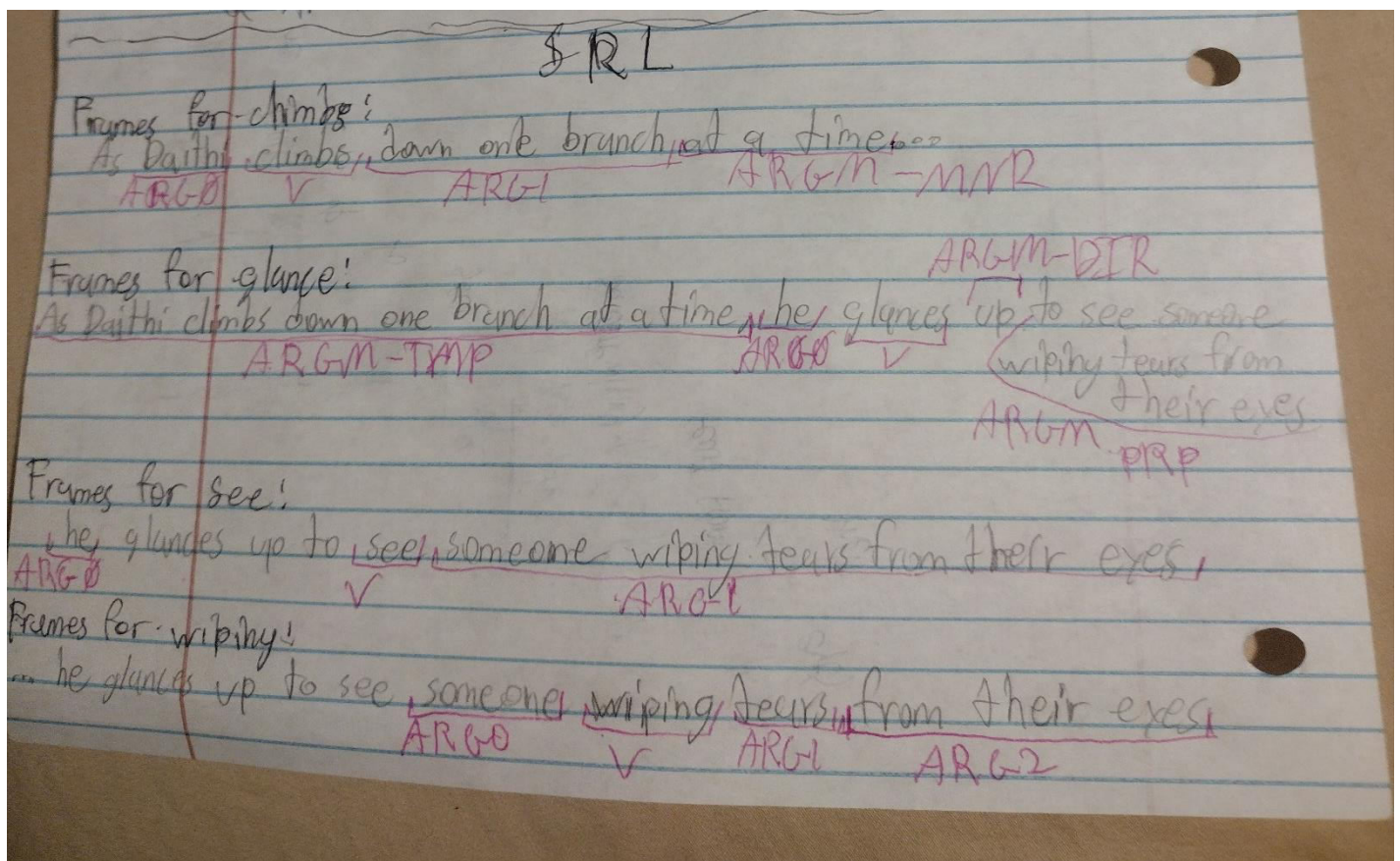
noun. The depth end with the parent parse 'eyes' dependent determined clause child 'their'.

The final parsing method, SRL provided four instances of frames for these verbs: climbs, glance, see, and wiping. The *climbs* frame contains two ARGs, a ARGM-MNR, and the verb climbs. The first instance of ARG is our agent of the sentence because Daithí is a name, and the second ARG is the phrase *down one branch* which provides context on what ARG0 is acting on. The phrase *at a time* is an ARGM-MNR which informs the reader the precaution our subject matter is taking.

In the second frame, SRL denotes the statement “As Daithi climbs down one branch at a time” as a ARGM-TMP since the word ‘As’ is understood to be a past tense diction. Our verb root is sandwiched between the first ARG is the word ‘he’ and a ARGM-DIR ‘up’ as this word is a sense of direction or path. The last SRL modifier in the second frame is ARGM PRP.

The third frame only identified two ARG. The first ARG is once again the word ‘he’ and the second ARG is adjacent to our root verb. This is because it is the actions of another noun that this phrase entails.

Our final frame state surprisingly contains three ARGs and all resident near to the verb root. ARG0 identifies the word ‘someone’ as our subject in the phrase and right after the root verb is our ARG1 which identifies the passive actor of our phrase. The last few words *from their eyes* is the noun preposition in this sentence.



The benefits and drawbacks of each parsing method are few and far between. When I was using Semantic role label parse, it had correctly identified the subject matter, the temporal setting, sometimes that topic, and often time the location phrases. While decomposing the sentence down to the important verbs does provide readability, SLR does produce duplicate parsing labels. When it comes to utilizing Dependency parsing, the acyclic graph attribute shows a close relationship of the root verb and its dependencies. The structure of dependency parsing also identified a copular clause where PGS does not. One drawback to dependency parsing is that it can disclose details from the central idea of the sentence. For instance, the word 'up' was connected only once and isolated from the entire sentence. Lastly, Phrase structure grammar provided a readable and information heavy tree structure of any proper sentence. Exploring more on the phrase hierarchy rather than the dependencies of the sentence, PSG is great in identifying all the word levels in the Penn Treebank Tags.