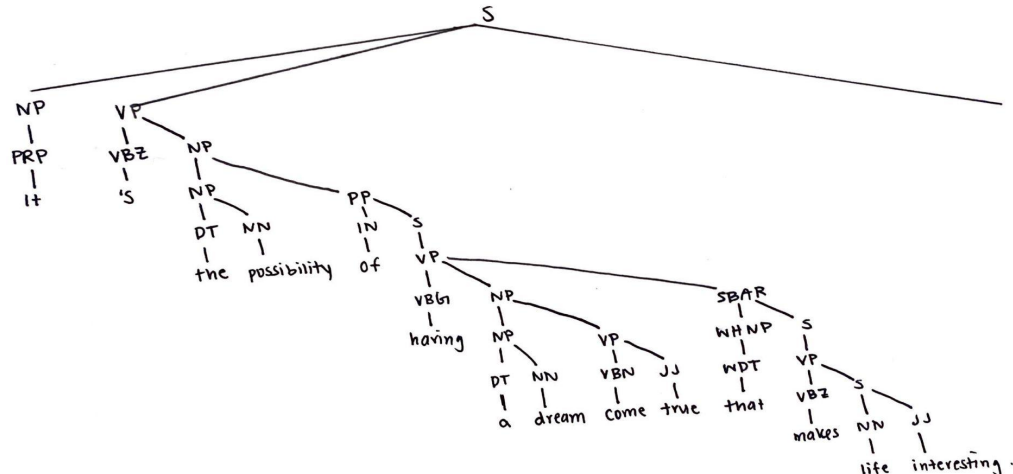


CS 4395.001: HLT - Syntax Parsing Assignment

1. Sentence: It's the possibility of having a dream come true that makes life interesting.  
(Paulo Coelho, "The Little Prince")
2. PSG (phase structure grammar) tree of the sentence:



Clause Level:

S: simple declarative clause

SBAR: clause introduced by a possibly empty subordinating conjunction

Phrase Level:

NP: noun phrase

PP: prepositional phrase

VP: verb phrase

WHNP: Wh-noun phrase. Introduces a clause with a NP gap.

Word Level:

DT: determiner

IN: preposition or subordinating conjunction

JJ: adjective

NN: noun, singular or mass

PRP: personal pronoun

VB: verb, base form

VBG: verb, gerund or present participle

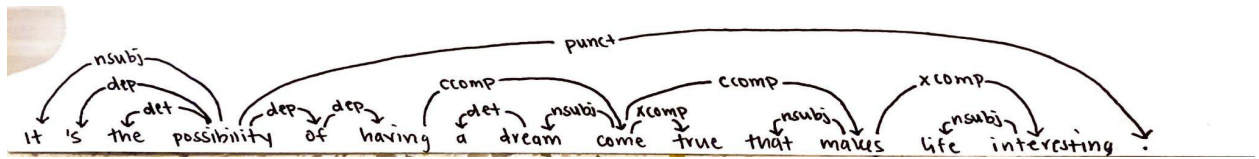
VBN: verb, past participle

VBZ: verb, 3rd person singular present

WDT: Wh-determiner

WP: Wh-pronoun

3. Dependency parse of the sentence:



ccomp: clausal complement with internal subject

dep: dependent

det: determiner

nsubj: nominal subject

punct: punctuation

xcomp: clausal complement with external subject

4. SRL parse of the sentence:

a. Predicate: is ('s)

i. Arg1: the possibility of having a dream come true that makes life interesting

1. This is the passive actor, since it is what is being described by "it's".

b. Predicate: having

i. Arg1: a dream a come true

1. This is the passive actor, since it is the thing being "had".

c. Predicate: come

i. Arg1: a dream

1. This is the passive actor, since it is the thing "becoming" true

ii. Arg2: true

1. This provides more description to the "dream", Arg1.

d. Predicate: makes

i. Arg0: the possibility of having a dream come true

1. This is the agent of the sentence, since it performs the action of "making" life interesting.

ii. Arg1: life interesting

1. This is the passive actor, since it is what is being "made".

5. Pros and cons of each parse type

- a. Constituency parsing is based heavily on the syntax of a language, and it also seems to be the most straightforward and intuitive approach to parsing a sentence. However, natural language does not always follow strict grammar rules, so constituency parsing may fail when the language is more nuanced. Dependency parsing is a little more flexible than constituency parsing, since it defines relationships within the sentence rather than using strict grammar rules. However, dependency parsing is not as intuitive as constituency parsing. SRL parsing is also

better at considering the semantic relationships between words within a sentence. However, it does not find every relation between all words in a sentence, since it focuses on predicates.