

LING/C SC 581:

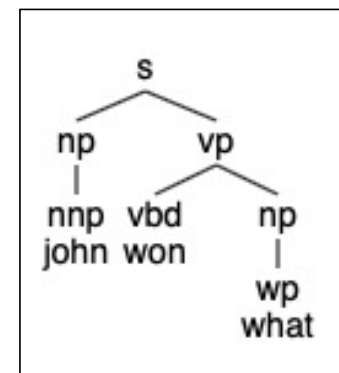
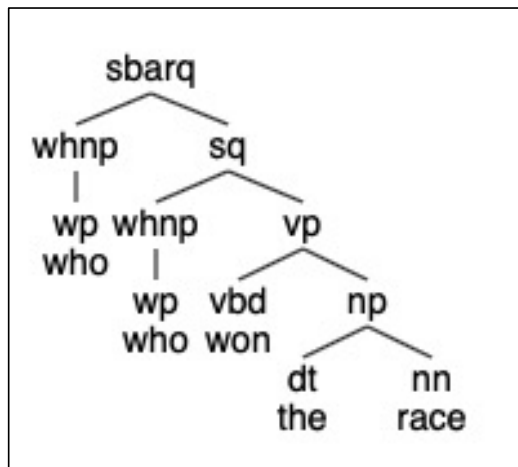
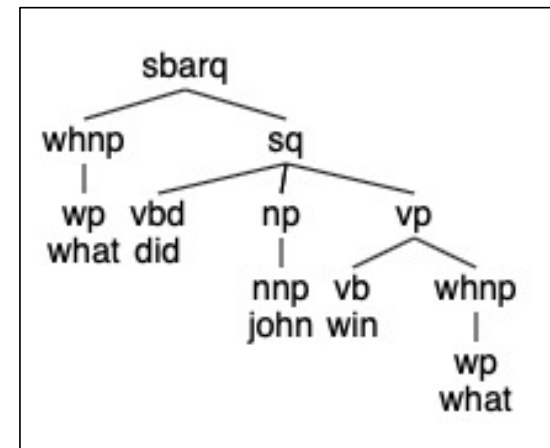
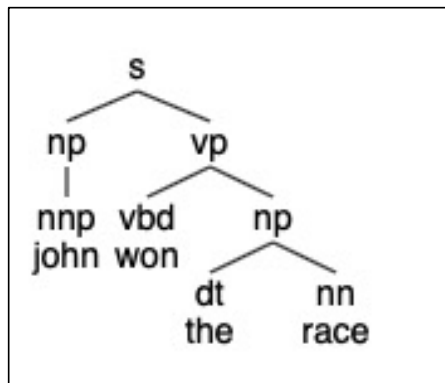
Advanced Computational Linguistics

Lecture 28

Today's Topic

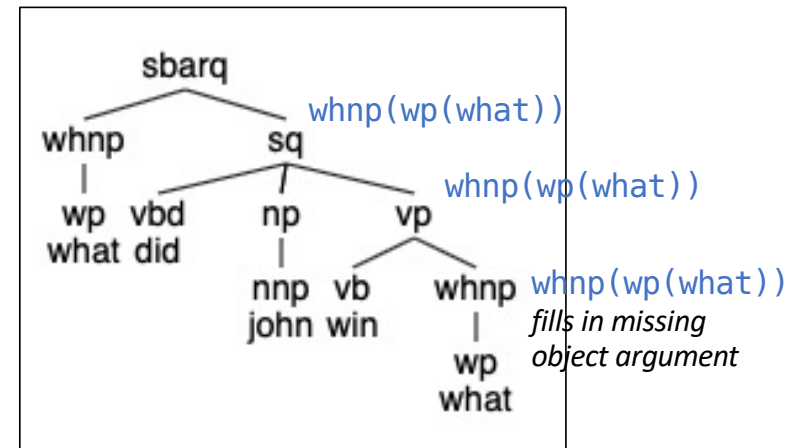
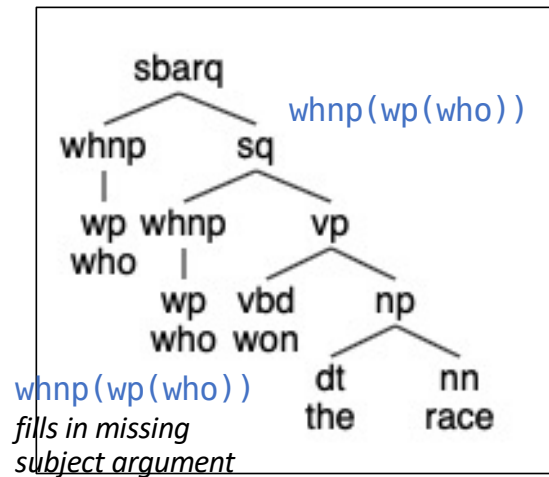
- Homework 11 Review
 - live programming and explanation

Homework 11: Question 1



Homework 11: Question 1

- Extra argument can be used to transmit information around the tree



Homework 11: Question 1

Examples

1. John won the race.
2. Who won the race.
3. What did John win?
4. John won what?

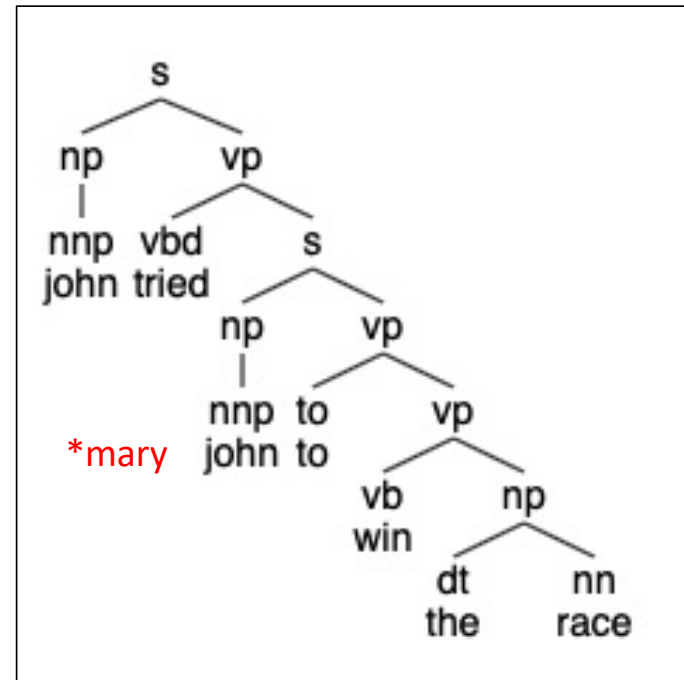
5. *Who John won the race.
6. *what did John win the race.

Homework 11: Question 2 Review

- Examples:

1. John tried to win the race.
(*subject control*)
2. *John tried Mary to win the race.
3. Who tried to win the race?
4. What did John try to win?
5. *Who John tried to win the race?
6. *Who did John try to win the race?

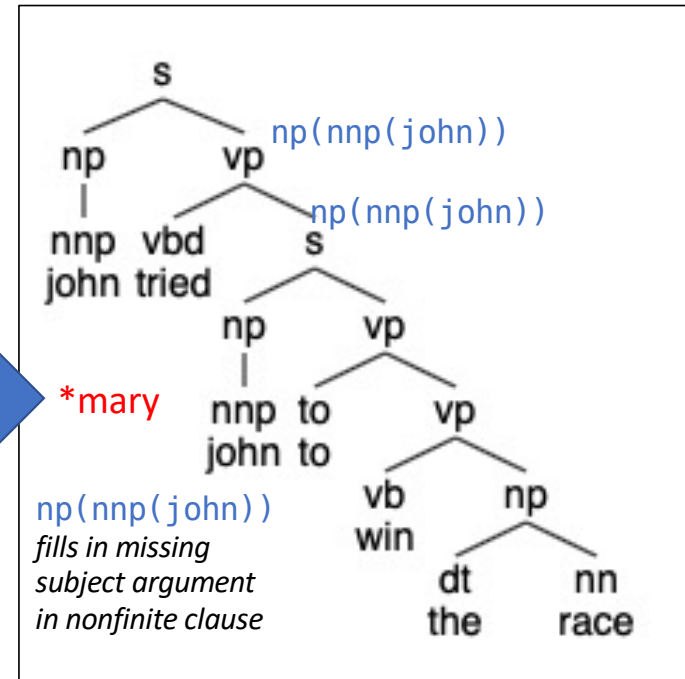
- Example:



Homework 11: Question 2 Review

- Extra argument can be used to transmit subject from higher clause to lower clause

impossible to have
an overt NP as
subject of nonfinite
clause



Homework 11: Question 2 Review

- **Tough case** (*double transmission*):

- *What did John try to win?*

```
stanford-parser-2021-05-05$ ./lexparser.sh data/hw11q2.txt
```

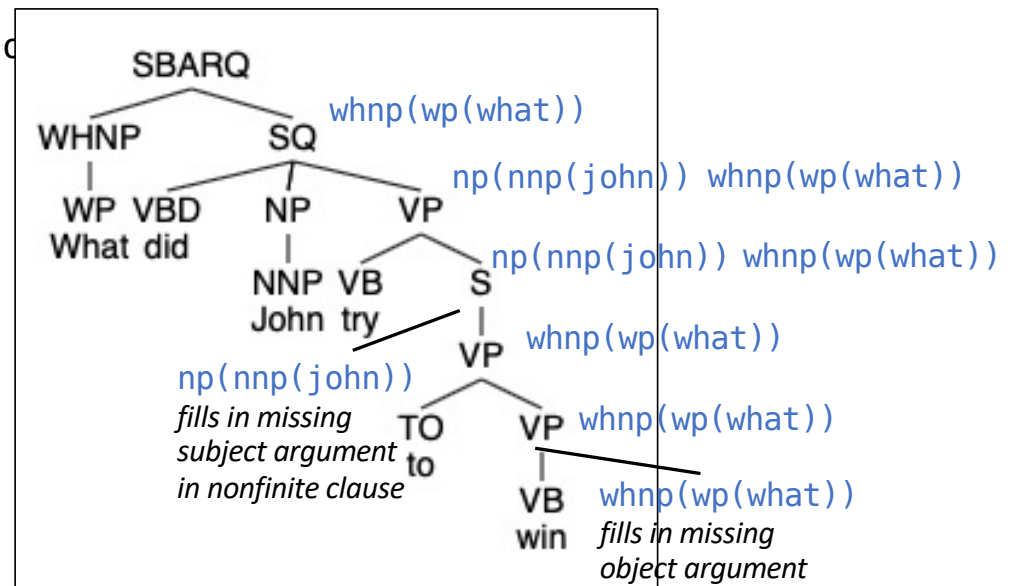
```
[main] INFO edu.stanford.nlp.parser.lexparser.LexicalizedParser - Loading parser
from serialized file edu/stanford/nlp/models/lexparser/englishPCFG.ser.gz ...
done [0.5 sec].
```

```
Parsing file: data/hw11q2.txt
```

```
Parsing [sent. 1 len. 7]: What did John
```

```
(ROOT
```

```
  (SBARQ
    (WHNP (WP What))
    (SQ (VBD did)
      (NP (NNP John))
      (VP (VB try)
        (S
          (VP (TO to)
            (VP (VB win))))))
    (. ?)))
```



Homework 11: Question 2 Review

Let's explore a concept:

- In similar fashion to passing the list of words from nonterminal to nonterminal,
- we can pass a list of constructed (NP) phrases from nonterminal to nonterminal,
- and they can stand in for missing NPs