

February 10, 2004

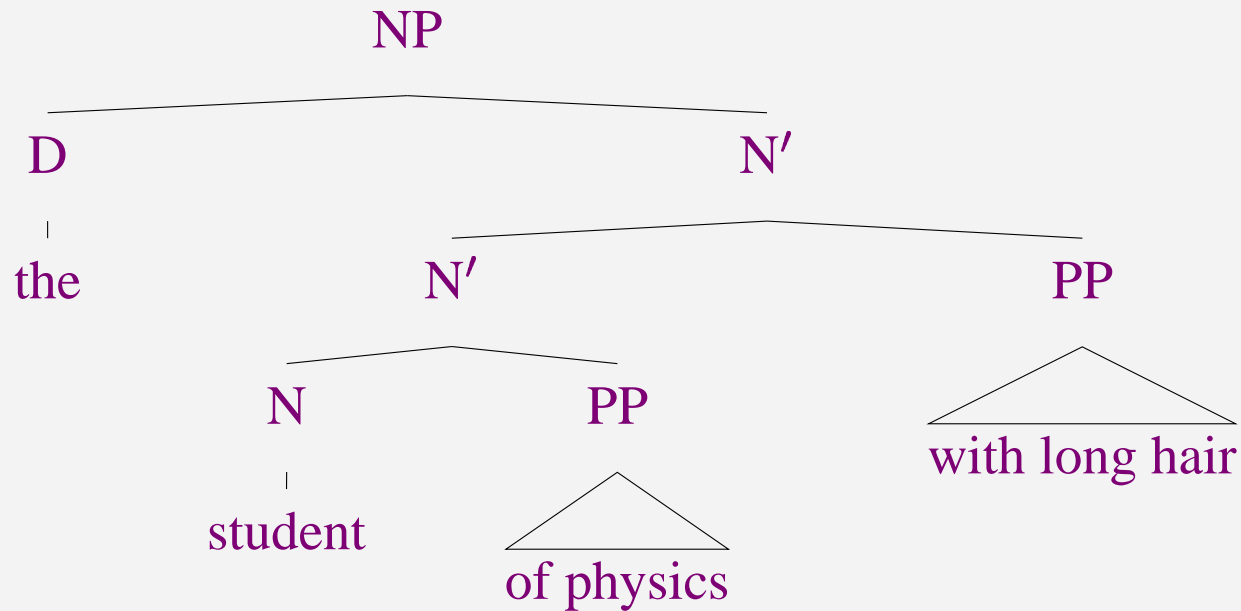
Chapter 4.1–4.4

NP structures

Overview

- Preview: The structure we'll motivate
- Argue for [D [N PP]]
- Discuss category of [N PP]
- Complements v. adjuncts

Preview: Where we're headed



- *of physics*: complement
- *with long hair*: adjunct
- *the*: determiner/specifier

Constituent structure in complex NPs (1/4)

- [The King of England]
- The Kings [of England] and [of Spain] met over tea.
- He is the King, and she is the Queen, [of England].
- The King [thereof] was bald.
- Was he the king of France? No, [of England].
- [Of England] he was King for 40 years.
- \Rightarrow : [the king [of England]]

Constituent structure in complex NPs (2/4)

- Three possibilities:
 - [D [N PP]]
 - [[D N] PP]
 - [D N PP]
- Which is best? Why?

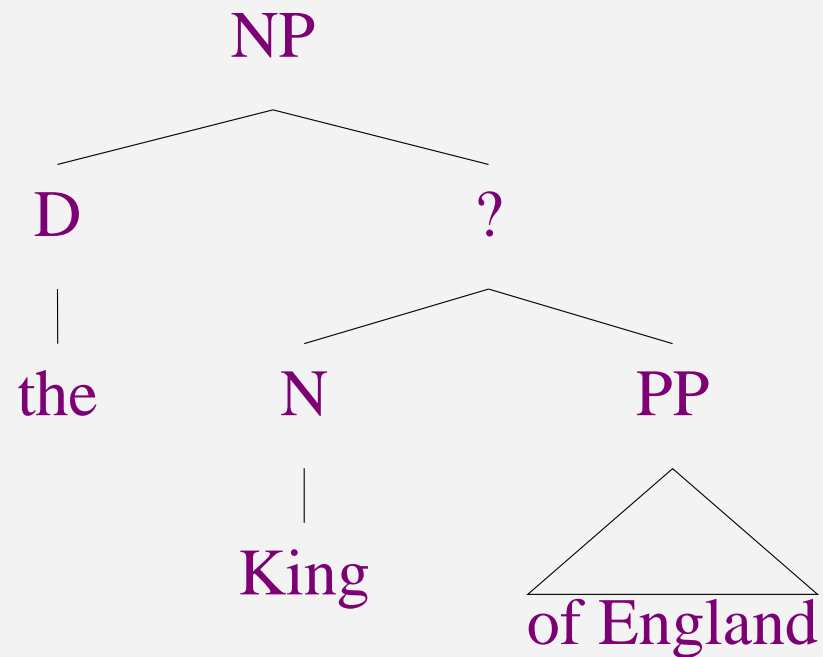
Constituent structure in complex NPs (3/4)

- He became [King of England].
- Who would have dared defy the [King of England] and [ruler of the Empire]?
- He was the last, and some would say the best, [King of England].
- The present [King of England] is more popular than the last [one].
- Did you meet the King of Spain? *No, [King of England].
- *[King of England], he was the last best.
- [King of England], he became.

Constituent structure in complex NPs (4/4)

- Three possibilities:
 - [D [N PP]]
 - [[D N] PP]
 - [D N PP]
- Do the preceding data argue for one in particular?
- Against the others?

Structure so far...



- But what is the category of ‘?’?

The category of ?

- Option 1: NP
 - Implied rule: $\text{NP} \rightarrow \text{D NP}$
 - What does this predict about determiners?
- Option 2: N
 - Implied rule: $\text{N} \rightarrow \text{N PP}$
 - What does this predict about pronominalization?
 - What does this predict about PPs inside NPs?
- Option 3: A new category, call it N'
 - Implied rule: $\text{N}' \rightarrow \text{N PP}$
 - What does this predict about proforms/PPs inside NPs?

Complements v. adjuncts: Rules

- $NP \rightarrow D N'$
- $N' \rightarrow N PP$ (complement rule)
- $N' \rightarrow N' PP$ (adjunct rule)
- N' can contain infinitely many PPs.
- One is distinguished structurally from all the rest.

Complements v. adjuncts: What's the difference?

- Kim saw a student [of physics] [with long hair].
- Any intuitive differences between the function/semantic role of *of physics* and *with long hair*?

Complements v. adjuncts: Definitions (1/2)

- **Head:** The key or central word in a phrase.
- **Complement:** A dependent of the head which is selected by the head, usually to fill a role with respect to it semantically.
- **Adjunct (aka modifier):** A dependent of the head which is not selected by the head, but rather optionally provides further information about it. Semantically, the head plays a role with respect to the modifier.

Complements v. adjuncts: Definitions (2/2)

- Examples:
 - *a student of physics*: physics is what the student studies.
 - *a student with long hair*: the student is who has the long hair.
- Exercise: Come up with three more examples of each.

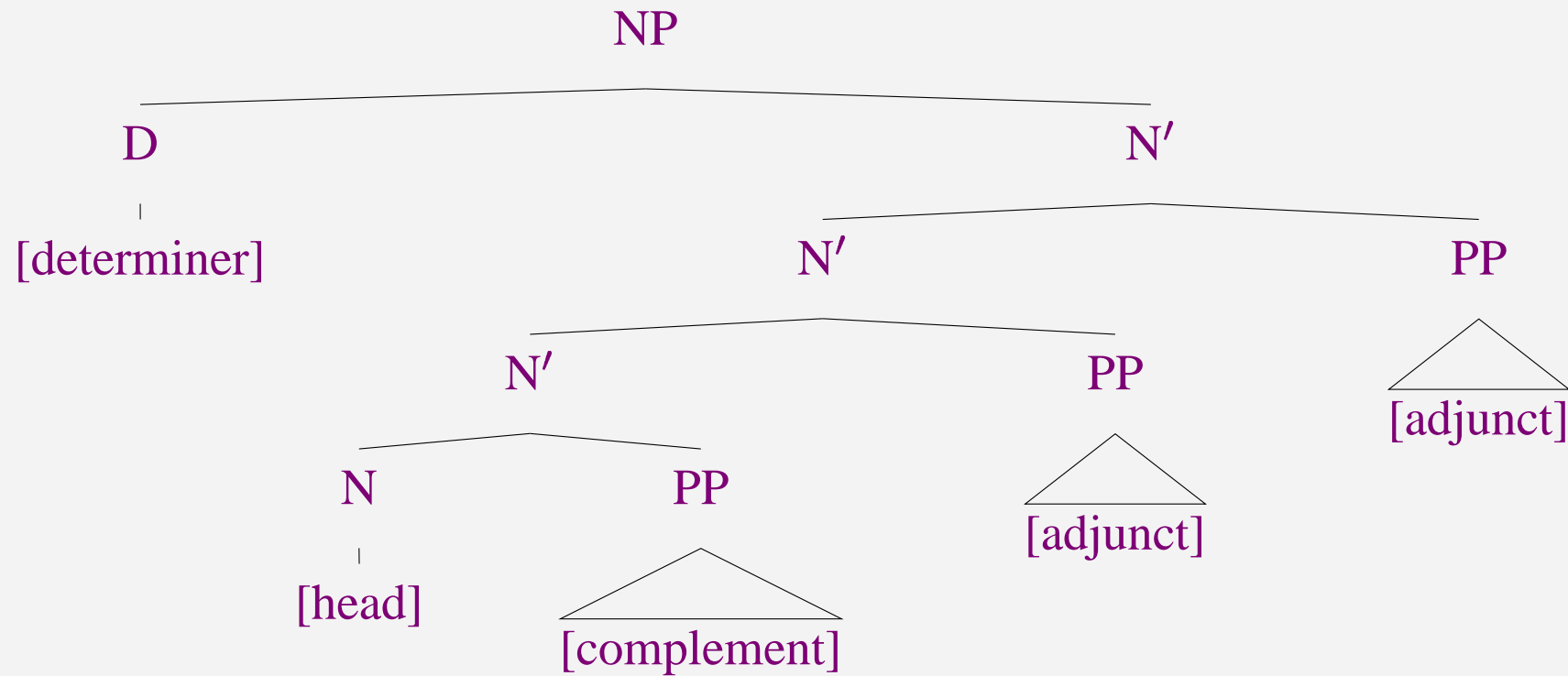
Complements v. adjuncts: Other parts of speech

- Kim put [the book] [on the table] [on Tuesday].
- Kim put the book [right] on [the table].
- Kim is fond [of Star Wars] [with a vengeance].
- Kim is studying [physics].
- Kim is a student [of physics].

Complements v. adjuncts: Ordering

- What do our rules predict about the relative order of complements and adjuncts?
- Is this prediction correct?

Summary: Structure



- Complements are daughters of N' and sisters of N.
- Adjuncts are daughters of N' and sisters of N'.
- Determiners/specifiers are daughters of NP and sisters of N'.

Overview

- Preview: The structure we'll motivate
- Argue for [D [N PP]]
- Discuss category of [N PP]
- Complements v. adjuncts
- Next time: More differences between complements & adjuncts, and how they might be captured in the model.