1 Modification principles

1.1 Impossible constituents

Don’t create impossible phrases that you know perfectly well are impossible. For example the ball to Mary is not an NP in any sentence, even though the PP to Mary can occur next to the NP the ball in (1):

(1) a. He threw the ball to Mary.

    b. * The ball to Mary is red.

As (1b) illustrates, the ball to Mary cannot be the subject of a sentence. The following tree is an example of a tree that is bad because it contains an impossible NP. The tree below makes the ball to Mary an NP. Notice that there is an NP node that exhaustively dominates the string the ball to Mary:
Inspect your trees for impossible constituents, especially impossible NPs, which are the easiest to find and fix. When you find them it’s because you’ve got one of the modification relations wrong. Attaching a PP in the wrong place is a very common mistake that creates such impossible constituents. The misattached PP here is to Mary. It does not modify the noun ball, but this is what the tree says. Look for a word to the left that the misattached constituent does modify. For a preposition that word will almost always be a noun or a verb. Here the most likely candidate is throw. You can check how plausible it is to have to Mary modifying throw by omitting the other words:

(2) He threw to Mary.

Not bad. So now we **redraw** the tree with the correct modification relations:
1.2 Impossible modification relations

Don’t miss obvious phrases that are there by depicting impossible modification relations, for example by drawing trees like the following:

This has the Adverb *too* modifying the Noun *professor*. But

As always the bad tree can be fixed by discovering what the misattached modifier really does modify. Adverbs can modify adjectives on their right *(very unhappy)* or verbs either on their left or their right *(quietly slept or slept quietly)*. Here the obvious candidate is the adjective *cocky*. Notice some confirming evidence:

(3) a. *She disliked the too professor.*

b. She disliked the professor.

When *cocky* goes away, the presence of *too* makes the sentence bad. So the presence of *too* depends on the presence of *cocky*. So we redraw the tree with *too* modifying *cocky.*
Here’s another example:

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S

NP  VP

N  V  NP

She disliked

Det  Adjp  N

the  Advp  professor

Adv  Adj  cocky

too
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The word *quite* cannot occur in this kind of sentence unless it is followed by an adverb like *thoroughly*:

(4) a. *He cleaned the room quite*

   b. He cleaned the room thoroughly

The fact that *thoroughly* can occur without *quite* but *quite* cannot occur without *thoroughly* again tells us that *quite* is dependent on *thoroughly*, and that suggests that it is *thoroughly* that *quite* modifies, and the right tree is:
2 Part of speech

- Don’t propose silly verbs. If it’s a verb, it has a past tense, an -ing form, a past participle, and a 3rd singular present tense form (with -s). So despite the existence of bona fide verbs like *rate, berate, inflate* and *deflate, accurate* can’t possibly be a verb because there are no sentences like the following:

(5) a. * It accurates.
    b. * It accurated.
    c. * It has accurated.
    d. * It is accurating.

- Don’t propose silly adverbs. If it can modify a noun, it’s not an adverb:

(6) a. a lovely porch (*lovely* not an adverb)
    b. * a very porch (*very* is an adverb, or Deg word)
    c. A tough steak (*tough* not an adverb)

- If it modifies a verb, there are several possibilities, NP, PP, Advp. For the most part, adjectives are excluded, and we assume part of speech ambiguities for words that can modify both nouns and verbs:
(7) a. He talks tough, but he is pretty nice.
   b. He is a tough man.
   c. He came on strong.
   d. He is a strong candidate.

- For prepositions, use a list. This one is not bad (it includes prepositions usually missing from such lists, like athwart): [Wikipedia preposition list](https://en.wikipedia.org/wiki/List_of_prepositions).

- For determiners, use a list. Do not mistake a determiner for a preposition. Test: If it can co-occur with a at the beginning of an NP, it's not a determiner: for example, given under a cloud, we know under is a preposition, not a determiner.

3 Exercises

Draw chapter 3 trees for the following sentences. Then draw the chapter 6 trees.

(8) a. He dressed much too carefully.
   b. I must ask you to leave.
   c. The ball rolled right under the table.
   d. He negotiated a friendly favorable settlement.
   e. The takeover battle convinced industry observers that the former university president could not continue as C. E. O.
   f. Georgia-Pacific’s management company signed on to the deal.