# 1 Representing Trees as Decision Sequences (Part 1)

### 1.1 Question (time: 7:23, slide: 9)

Say we have the sentence "the dog is curious" with the chunking

[NP the/DT dog/NN] is [ADJP curious/JJ]

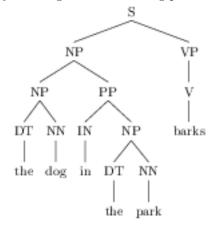
The sentence has four words, so the chunker makes four decisions. What are the correct chunking decisions for this sentence?

(Write in upper case separated by a space, e.g.  $\operatorname{START}(S)$  OTHER  $\operatorname{START}(\operatorname{NP})$  OTHER.)

# 2 Representing Trees as Decision Sequences (Part 2)

#### 2.1 Question (time: 3:04, slide: 11)

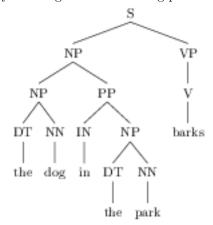
Say we are given the following parse tree



What is the correct first decision in the second layer of this parse? (Write in upper case, e.g. START(S).)

## 2.2 Question (time: 8:52, slide: 25)

Say we are given the following parse tree



We have just made a JOIN(NP) decision, giving [START(NP) [NP the dog] ] [JOIN(NP) [PP in the park ] ] [Vi barks] What is the next decision?

- (a) CHECK=NO
- (b) CHECK=YES

### A Answers

• START(NP) JOIN(NP) OTHER START(ADJP)

The answer is START(NP) JOIN(NP) OTHER START(ADJP). We begin the chunk with "the", then join on the word "dog", then place "is" outside the chunk, and end by starting a new chunk with "curious".

• START(NP)

The answer is START(NP). The first layer adds the part-of-speech tags, and the second layer begins by starting the NP over "the dog".

• (b)

Choosing CHECK=YES will merge [START(NP) [NP the dog] ] and [JOIN(NP) [PP in the park ] ] to create the NP spanning "the dog in the park" as in the correct tree.