Chapter 3

1. Linguistic knowledge. Answers will vary.

a. Structurally ambiguous sentences.

Example: I like sweet apples and oranges.

This sentence is structurally ambiguous because the adjective sweet can modify either the noun apples or the noun phrase apples and oranges. The two structures can be represented in the following ways:

(i) I like [[sweet apples] and oranges]—meaning sweet apples and any kind of oranges.

(ii) I like [sweet [apples and oranges]]—meaning sweet apples and sweet oranges.

b. Sentences with different structures and the same meaning.

Example: (1) Susie seems to be studying algebra. (2) It seems that Susie is studying algebra.

These two sentences have different structures but mean the same thing.

c. Structurally related sentences.

Example: (1) I am going to the movies. (2) I am not going to the movies.

The second sentence can be derived from the first sentence by adding the negative marker not after the auxiliary verb am. Thus, these two sentences have two different (opposite) meanings and are structurally related.

2. Infinitely long sentences.

i. A possible answer would be: I know that he knows that you know that I hate war.

ii. These sentences show that there is no “longest” sentence in English; one can go on indefinitely, constructing longer and longer sentences by appending “He/she/they/John, etc., know(s) that” to the previously constructed sentence.

iii. While it is true that in principle we could construct a sentence of infinite length (a fact about linguistic competence), in actual behavior there are lapses of memory and mistakes, and we would eventually have to stop constructing a longer sentence in order to eat, drink, and sleep. These are facts about linguistic performance.

3. Disambiguation with paraphrases.

a. Dick finally decided on the boat.

i. Dick finally chose the boat.

ii. Dick finally decided (something) when he was on the boat.

b. The professor’s appointment was shocking.

i. It was shocking that the professor was appointed.

ii. The appointment made by the professor was shocking.

c. The design has big squares and circles.

i. The design has big squares and big circles.

ii. The design has squares that are big and circles (of unspecified size).

d. That sheepdog is too hairy to eat.

i. That sheepdog is too hairy to eat anything (because e.g. its hair gets in its mouth).

ii. That sheepdog is too hairy to be eaten (by someone).

e. Could this be the invisible man’s hair tonic?

i. Could this be the hair tonic belonging to the invisible man?

ii. Could this be invisible hair tonic for men?

f. The governor is a dirty street fighter.

i. The governor fights dirty streets.

ii. The governor fights unfairly in the streets.

iii. The governor is a dirty individual who fights in the streets.

g. I cannot recommend him too highly.

i. He is superb; nothing I can say would exaggerate his abilities.

ii. He is mediocre; I cannot recommend him very highly.

h. Terry loves his wife and so do I.

i. Terry loves his wife and I love Terry’s wife too.

ii. Terry loves his wife and I love my wife.

i. They said she would go yesterday.

i. Yesterday they said, “She will go.”

ii. They said that yesterday was the day she would go.

j. No smoking section available.

i. There is no section for smokers.

ii. A section for nonsmokers is available.

k. We will dry clean your clothes in 24 hours.

i. We will dry clean your clothes and they will be ready within 24 hours.

ii. We will start dry cleaning your clothes 24 hours from now.

l. I bought cologne for my boyfriend containing 25% alcohol.

i. For my boyfriend, I bought cologne that consists of 25% alcohol.

ii. I bought cologne for my boyfriend who (due to drinking too much) consists of 25% alcohol.

m. The new magazine has between one and two billion readers.

i. The new magazine has between one billion and two billion readers.

ii. The new magazine may have only one reader or may have up to two billion readers.

4. *Constituency.* Each of these ads has a structural ambiguity that leads to a potential humorous misinterpretation. In the first ad, the intended reading is that the antique desk has thick legs and large drawers. In addition, it is suitable for a lady. The constituency for that interpretation is represented with square brackets that show that [suitable for lady] and [with thick legs and large drawers] are separate constituents. Given what we know about syntactic structure, [suitable for lady] first combines with [desk] to form a larger constituent, then [with thick legs and large drawers] combines with that constituent, as shown below:

For sale: an antique [[desk [suitable for lady]] [with thick legs and large drawers]]

However, the phrasing could be misread to mean that it is the lady who has thick legs and large drawers. In this interpretation, [lady with thick legs and large drawers] is a constituent, as indicated below with bracketing.

For sale: an antique [desk [suitable for [lady [with thick legs and large drawers]]]]

Similarly, the humor in the ambiguity in the second ad lies in two potential structures. The intended reading is the one in which two activities [oil your sewing machine] and [adjust tension] are taking place [in your home]. This is indicated with the following bracketing, in which the constituent [in your home] modifies the conjoined constituent [[oil your sewing machine] and [adjust tension]].

We will [[[oil your sewing machine] and [adjust tension]] [in your home]] for $10.00.

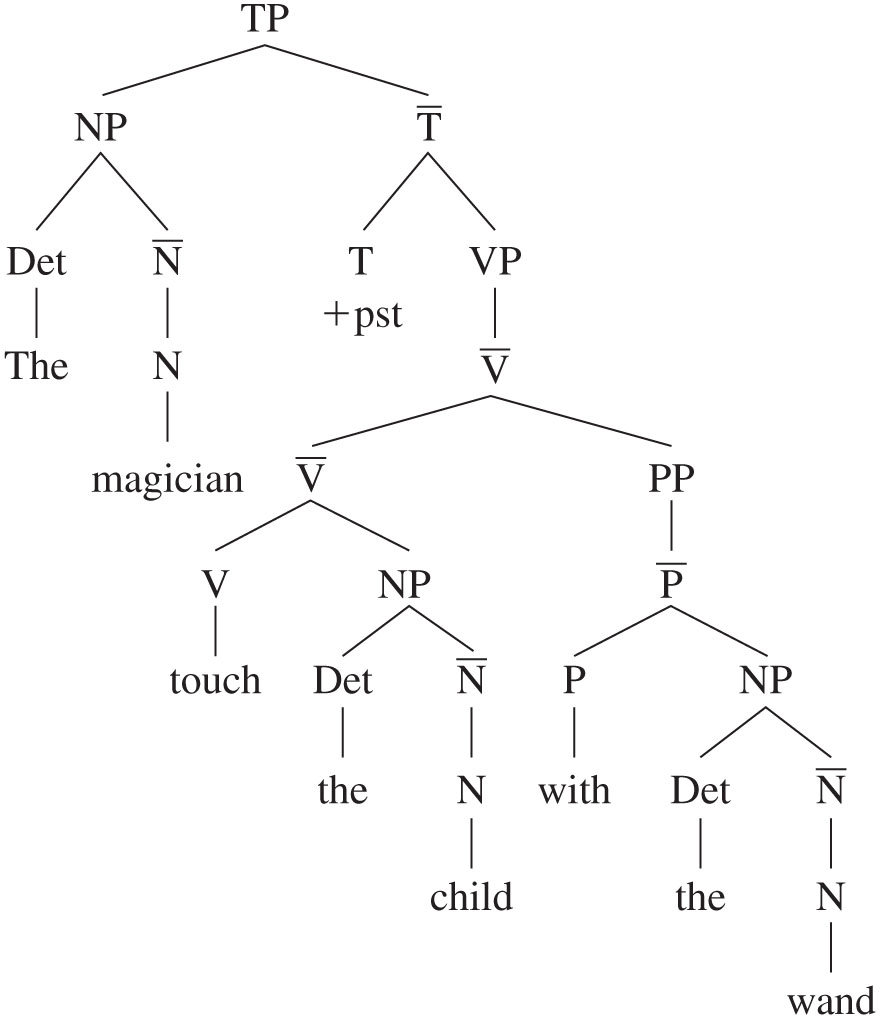
However, the constituent [in your home] may be interpreted as modifying [tension], in which case the ad would be offering services to [oil your sewing machine] and [adjust tension in your home], whatever that might be! The structure of this interpretation is indicated below:

We will [[oil your sewing machine] and [adjust [tension [in your home]]]] for $10.00.

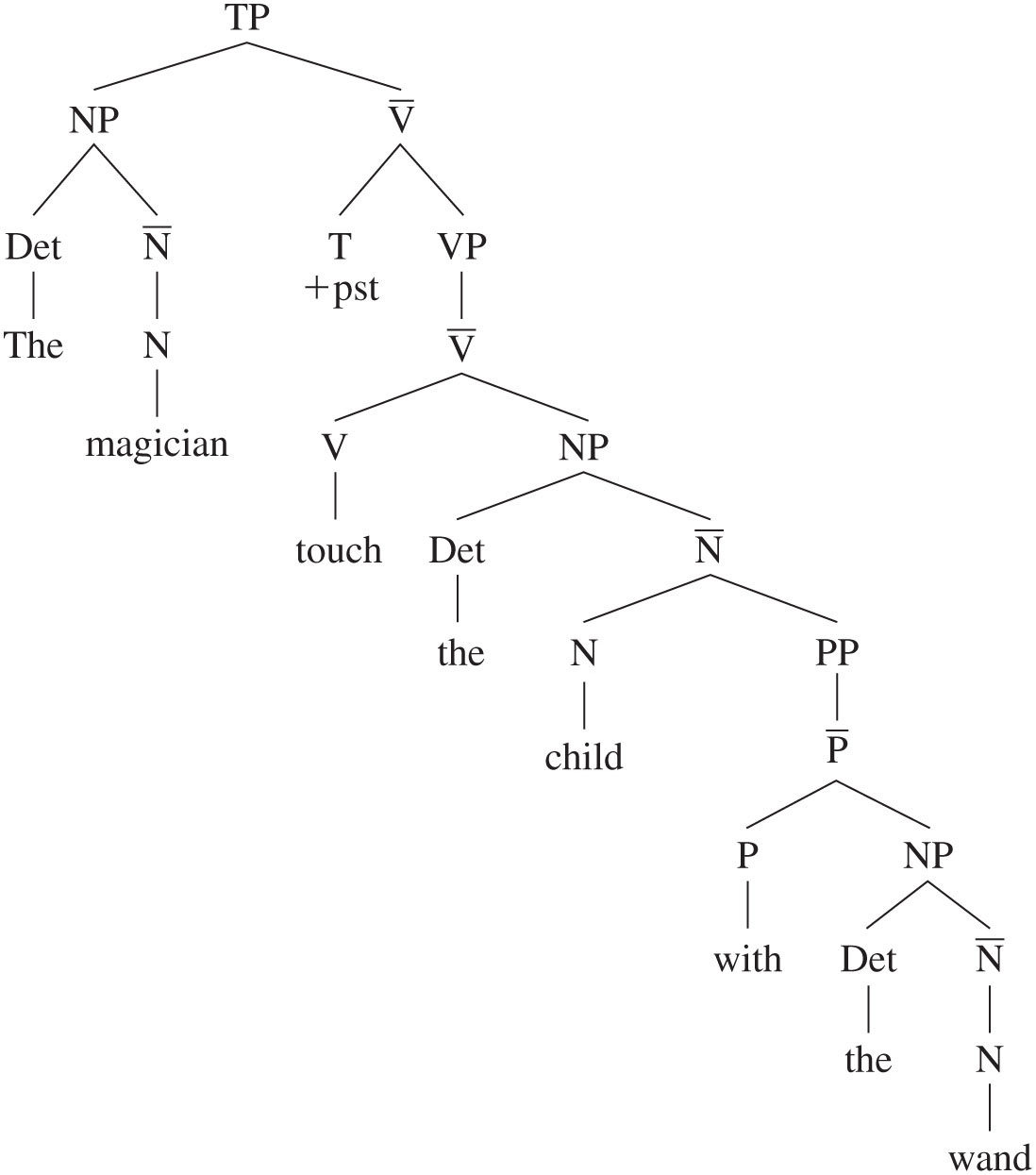
5. Representing structural ambiguity.

The magician touched the child with the wand.

Meaning 1: With the wand, the magician touched the child.



Meaning 2: The magician touched the child who has the wand.



6. *Grammatical categories.*

a. *The*–Det, *girls*–N, *love*–V, *sushi*-N.

b. *That*–Det, *boy*–N, *has*–T, *won*–V, *many*–Det, *races*–N.

c. *Mary*–NP, *will*–T, *finish*–V, *her*–Det, *homework*–N, *in*–P, *the*–Det, *library*–N.

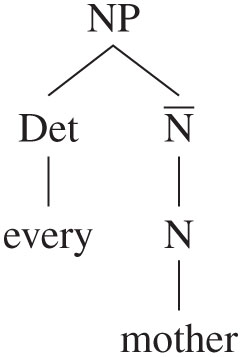
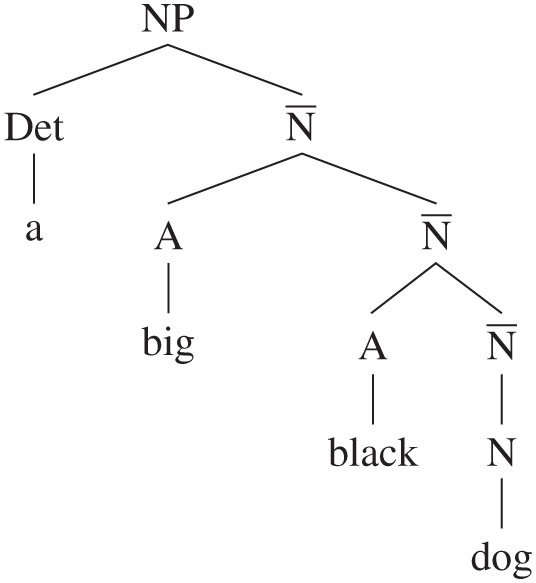
d. *A*–Det, *strong*–A, *wind*–N, *uprooted*–V, *the*–Det, *tall*–A, *trees*–N.

e. *My*–Det, *dog*–N, *is*–V, *exceptionally*–Adv, *smart*–A.

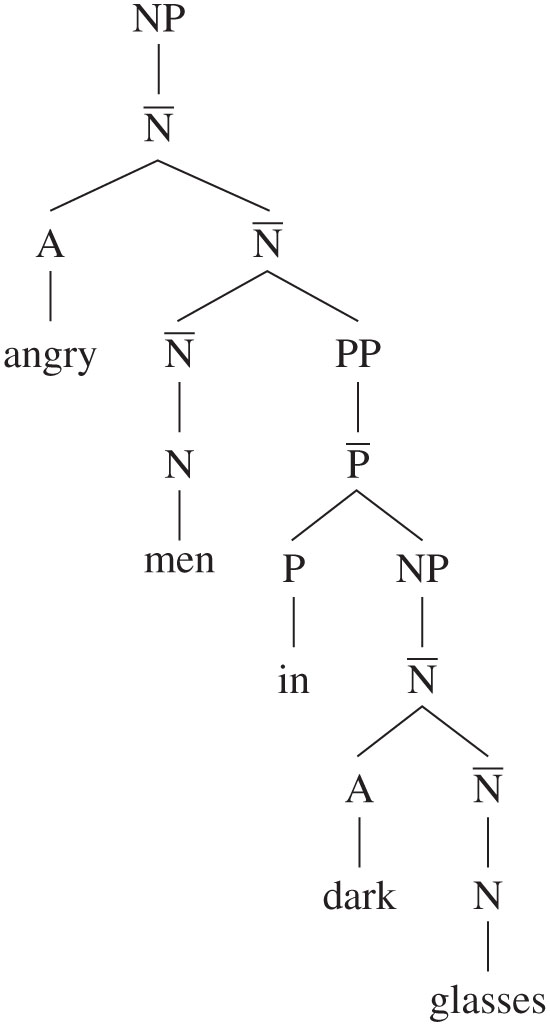
7. *NP phrase structure rule.* The phrase structure rule NP → (Det) allows determiners to be optional before s, which accounts for the grammaticality of *The dog barks* as well as *Dogs bark* and even *The dogs bark*. However, if we consider *who*, *he*, and *Mary* to be Ns, this rule cannot account for their distribution, because it is not possible to use a determiner with these: *\*The who sang*? \**The he has arrived*. Proper names can be used with a determiner, but they seem to lose their proper name reference, suggesting that maybe something else is going on: *Mary sang* and ***That*** *Mary sang* are not synonymous. One solution would be to propose that *who*, *he*, and proper nouns are not Ns, but rather NPs.

8. Noun phrase subtrees

a. *every mother* b. *a big black dog*

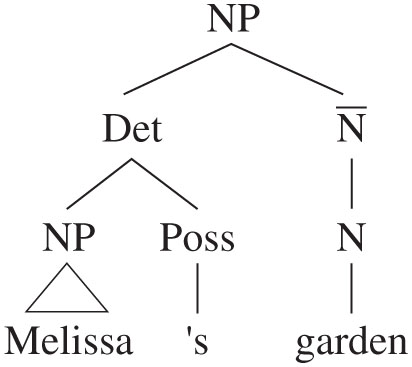
 

c. *angry men in dark glasses*



d. Challenge exercise. although possessed noun phrases are not addressed directly in the text, note that possessives, like *Melissa’s*, have the same distribution of a determiner: you can say *the garden* but not *\*the Melissa’s garden* or \**Melissa’s the garden.* Here is a possible tree that students might come up with. Other similar trees should be given consideration.

*Melissa’s garden*



9. Embedded sentences.

a. Yesterday I noticed my accountant repairing the toilet.

b. Becky said that Jake would play the piano.

c. I deplore the fact that bats have wings.

d. That Guinevere loves Lorian is known to all my friends.

e. Who promised the teacher that Maxine wouldn’t be absent?

f. It’s ridiculous that he washes his own Rolls-Royce.

g. The woman likes for the waiter to bring water when she sits down.

h. The person who answers this question will win $100.

i. The idea of Romeo marrying a 13-year-old is upsetting.

j. I gave my hat to the nurse who helped me cut my hair.

k. For your children to spend all your royalty payments on recreational drugs is a shame.

l. Give this fork to the person I’m getting the pie for.

m. khâw chyâ waâ khruu maa. (Thai)

he believe that teacher come

He believes the teacher is coming.

n. Je me demande quand il partira. (French)

I me ask when he will leave

I wonder when he’ll leave.

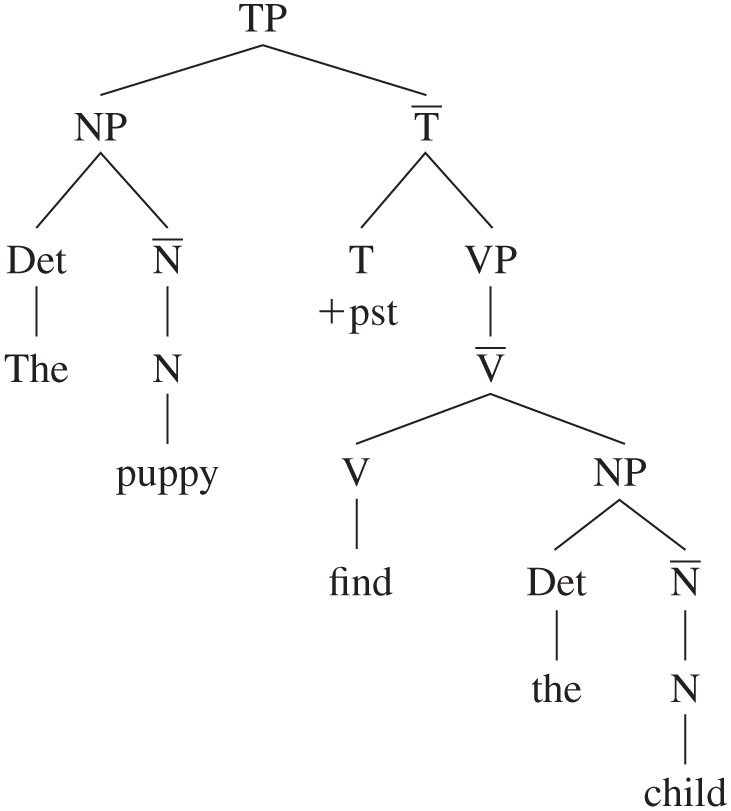
o. Jan zei dat Piet dit boek niet heeft gelezen. (Dutch)

Jan said that Piet this book not has read

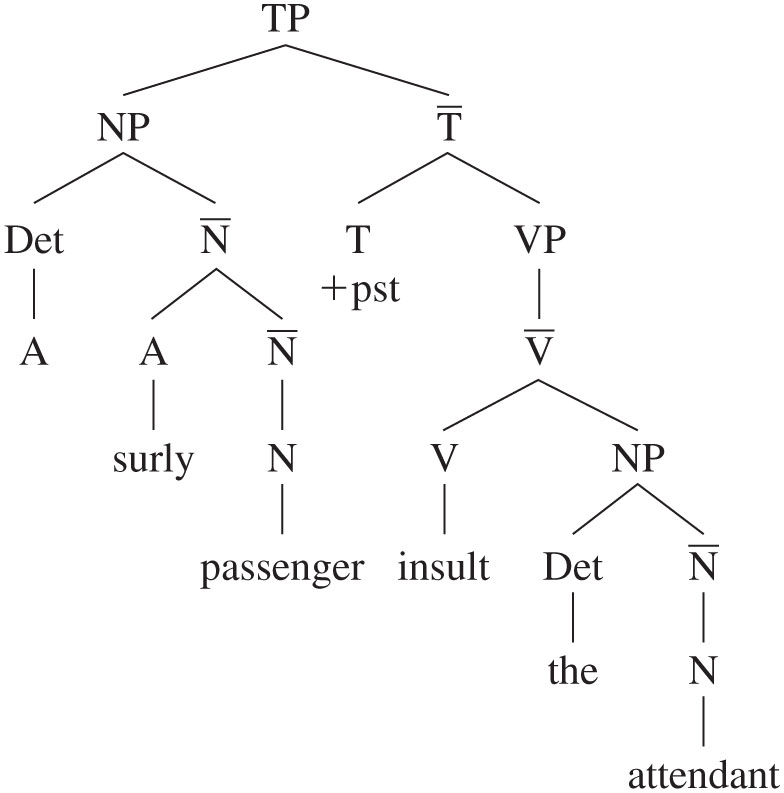
Jan said that Piet has not read this book.

10. Phrase structure trees.

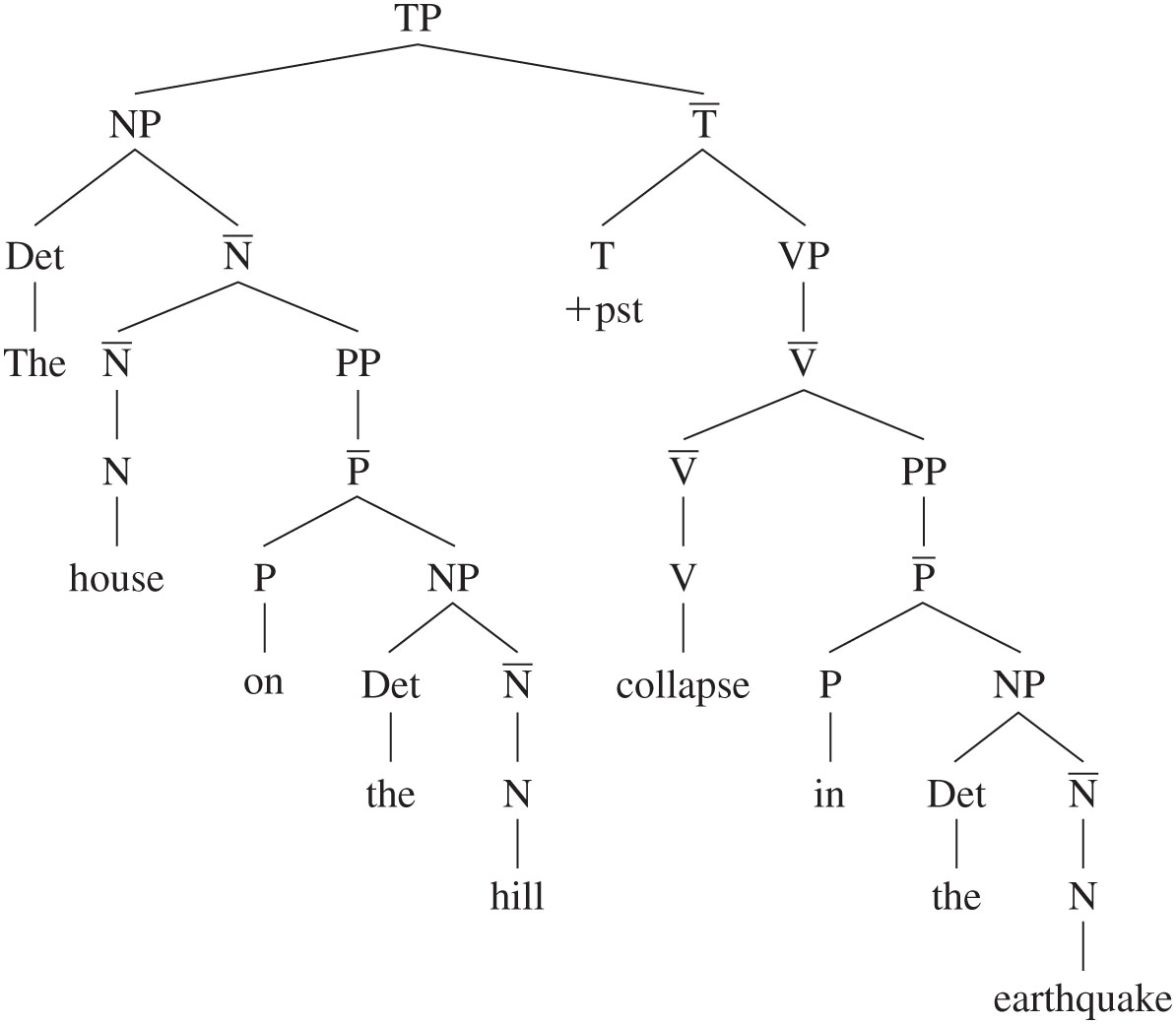
a. The puppy found the child.



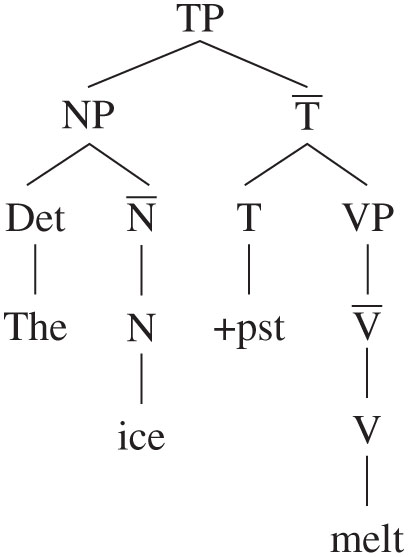
b. A surly passenger insulted the attendant.



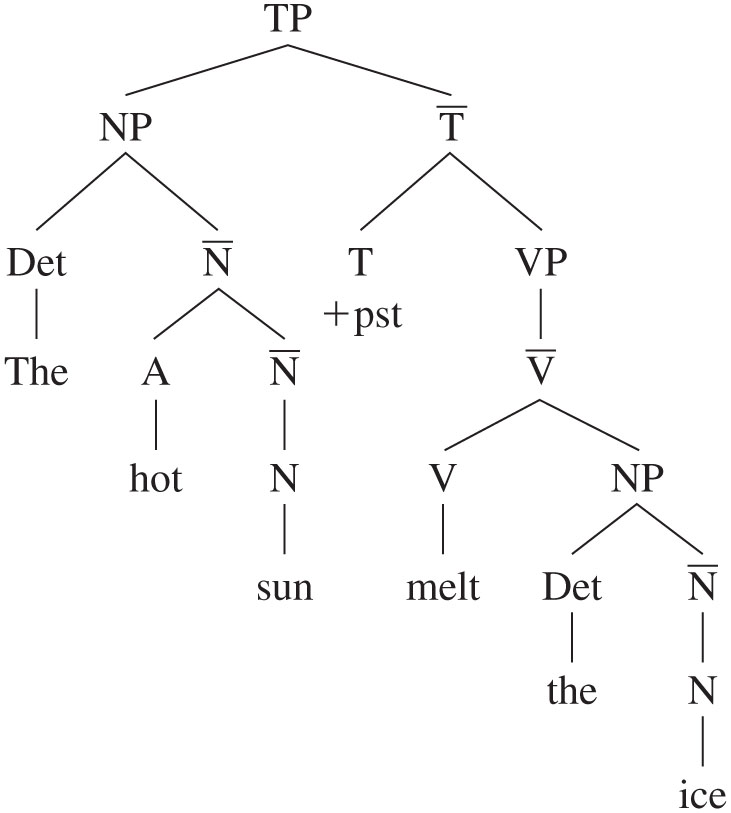
c. The house on the hill collapsed in the earthquake.



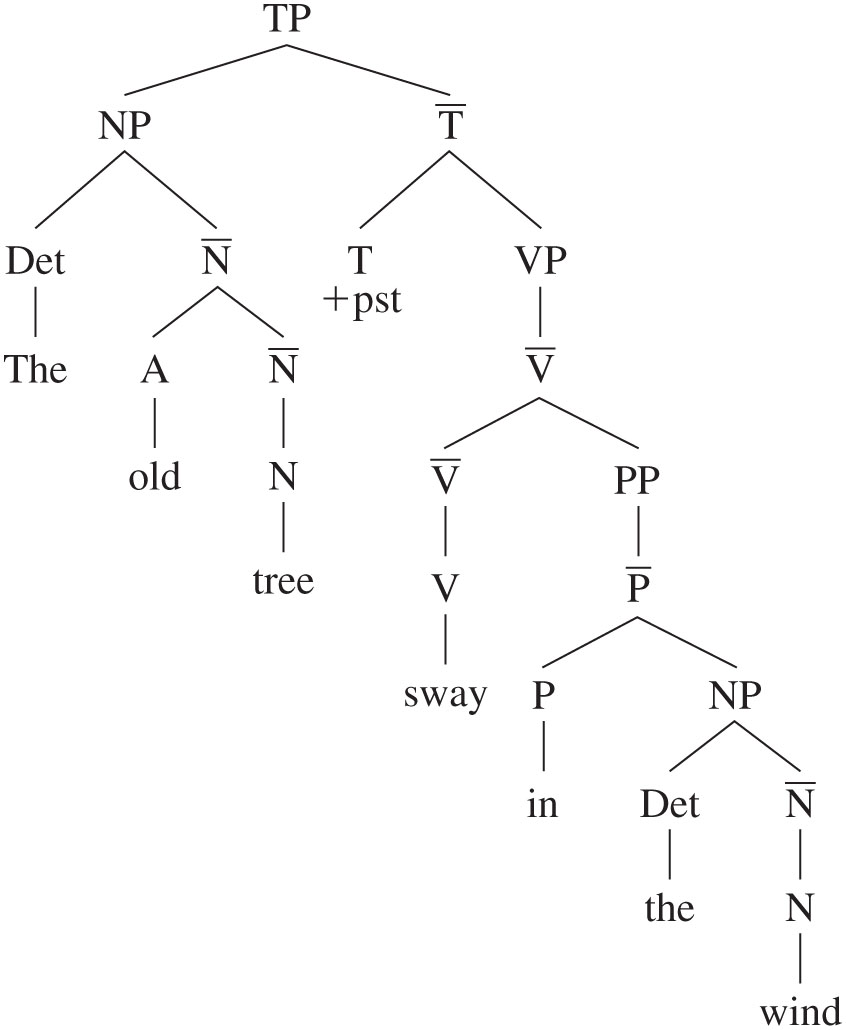
d. The ice melted.



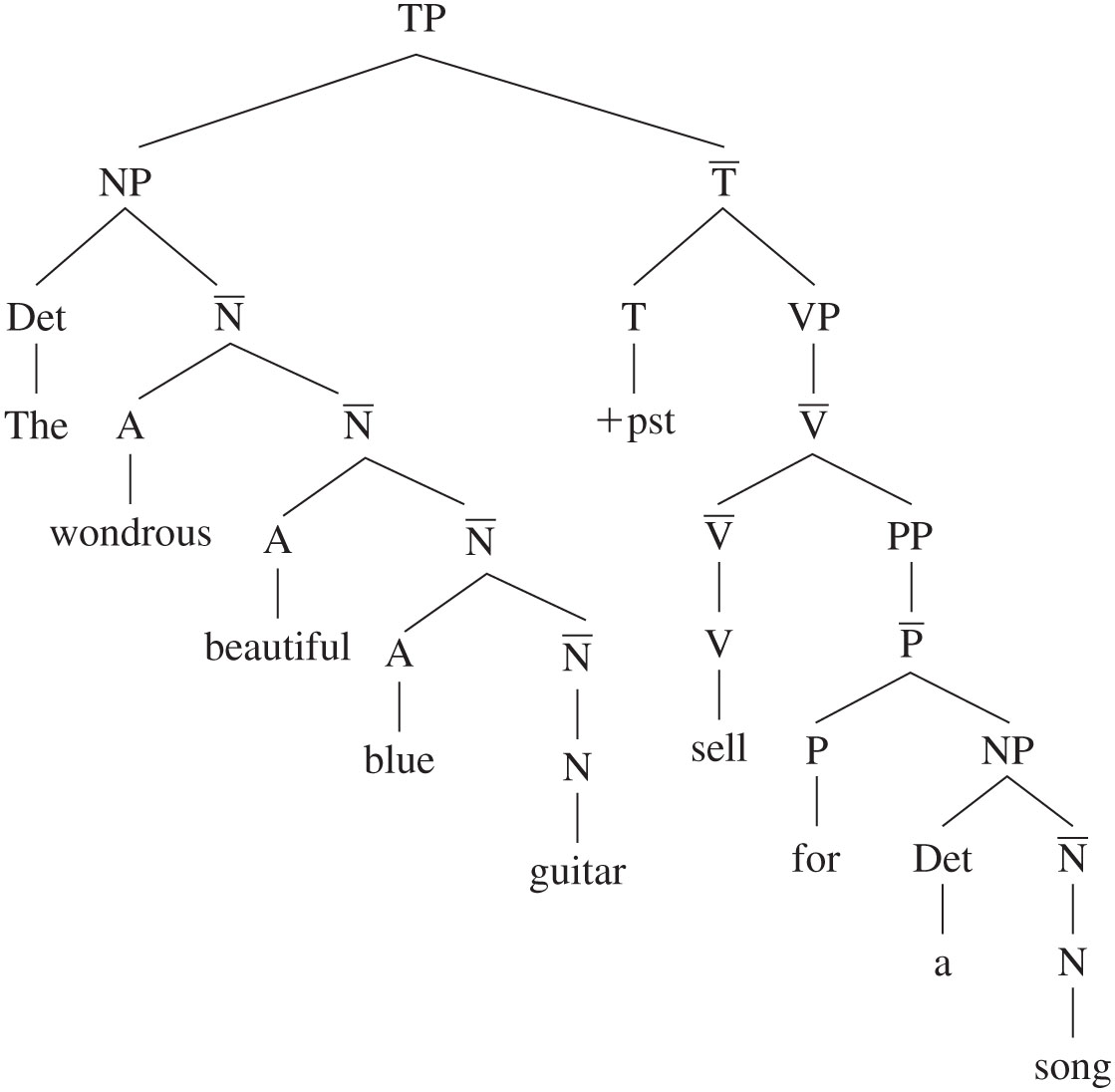
e. The hot sun melted the ice.



f. The old tree swayed in the wind.

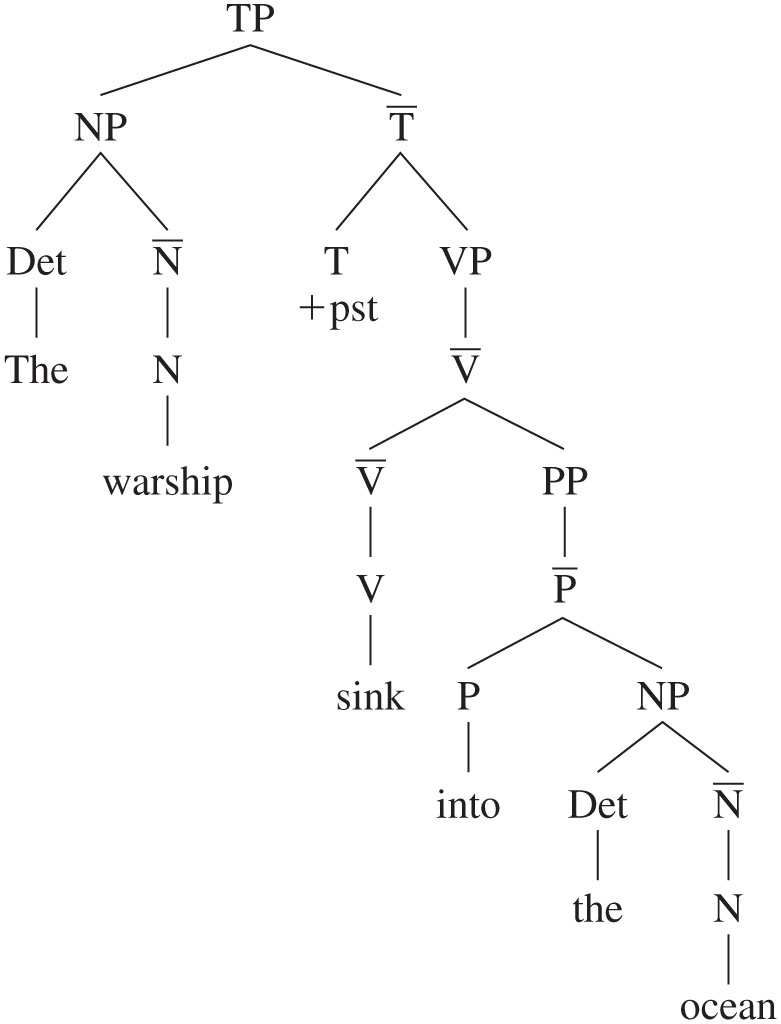


g. The wondrous, beautiful, blue guitar sold for a song.

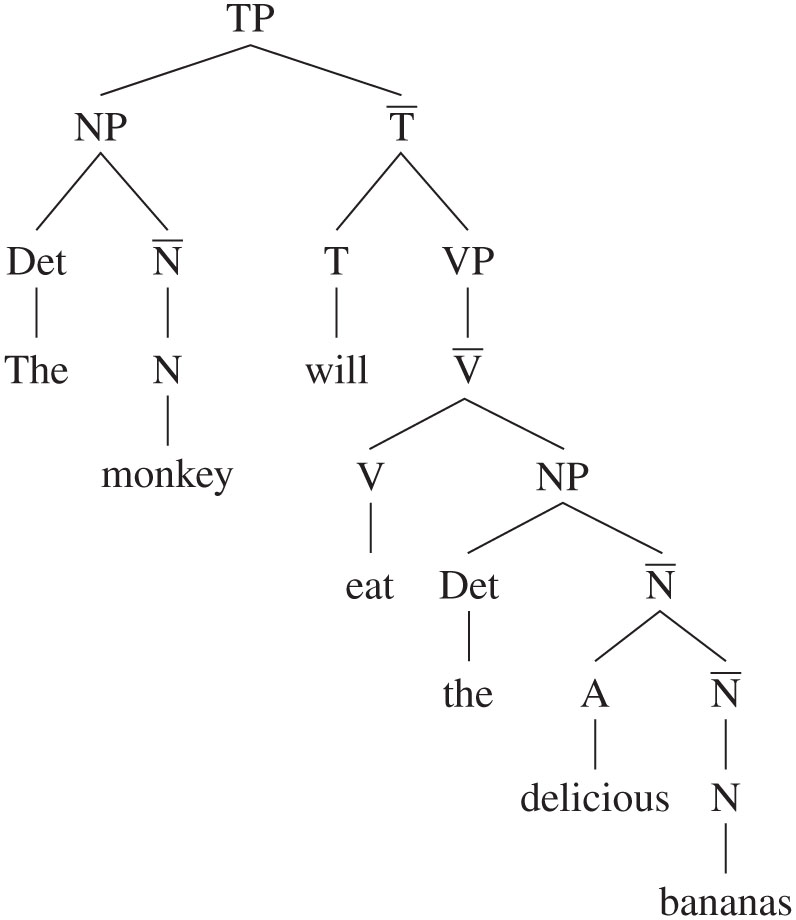


11. Trees for sentences 6 to 10 words long. Here are some examples:   
(Note: We’ve abbreviated some of the structures illustrated elsewhere with triangles.)

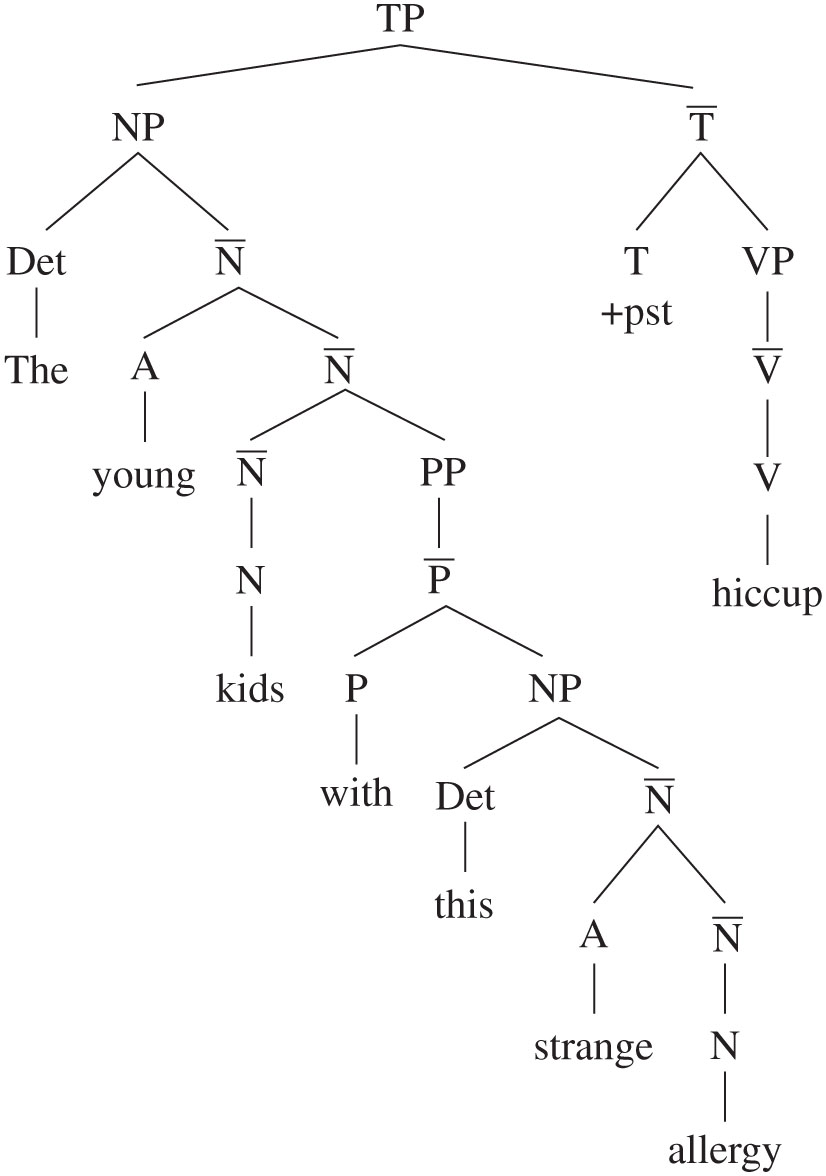
a. The warship sank into the ocean. (6 words)



b. The monkey will eat the delicious bananas. (7 words)

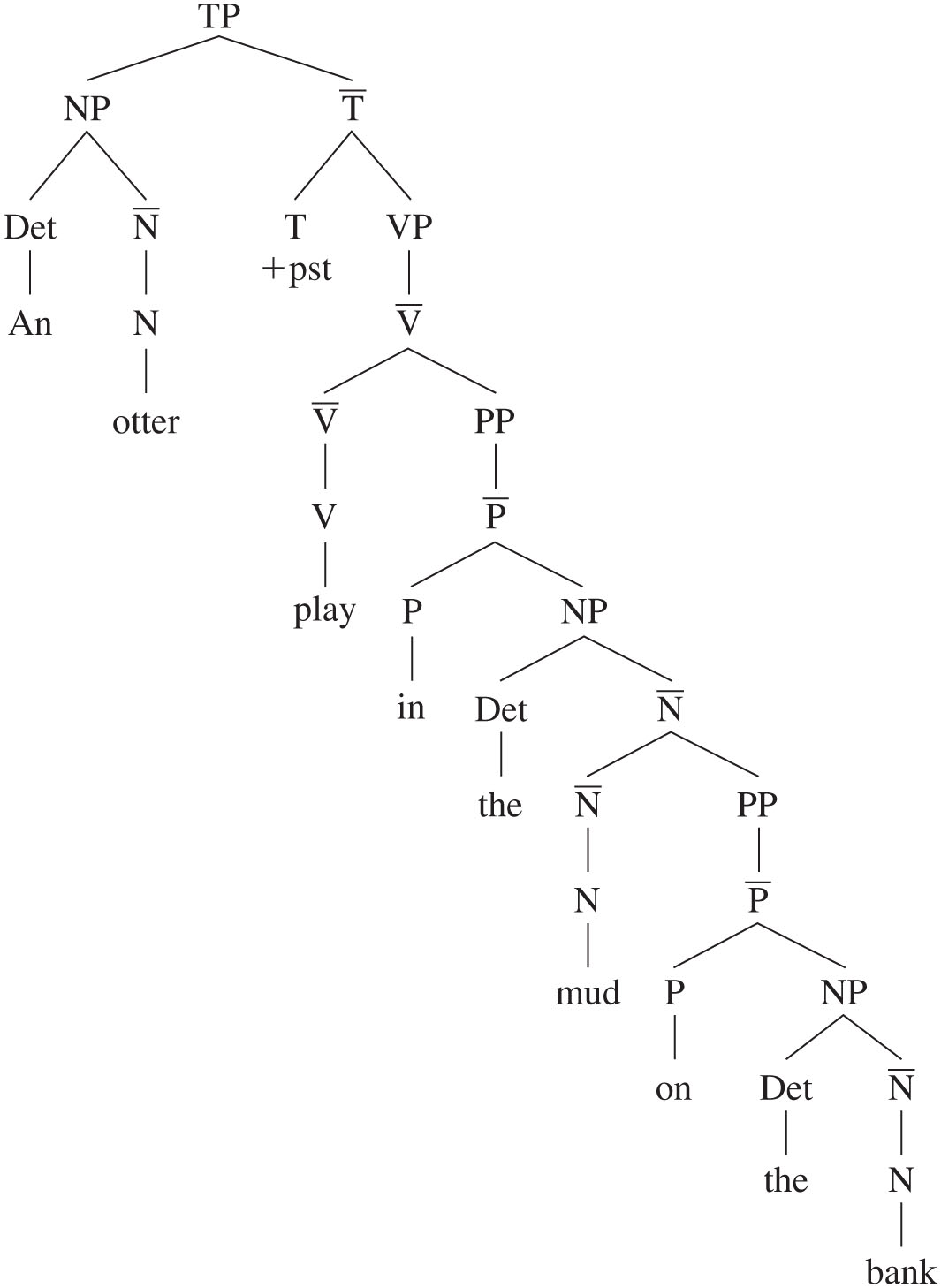


c. The young kids with this strange allergy hiccup. (8 words)

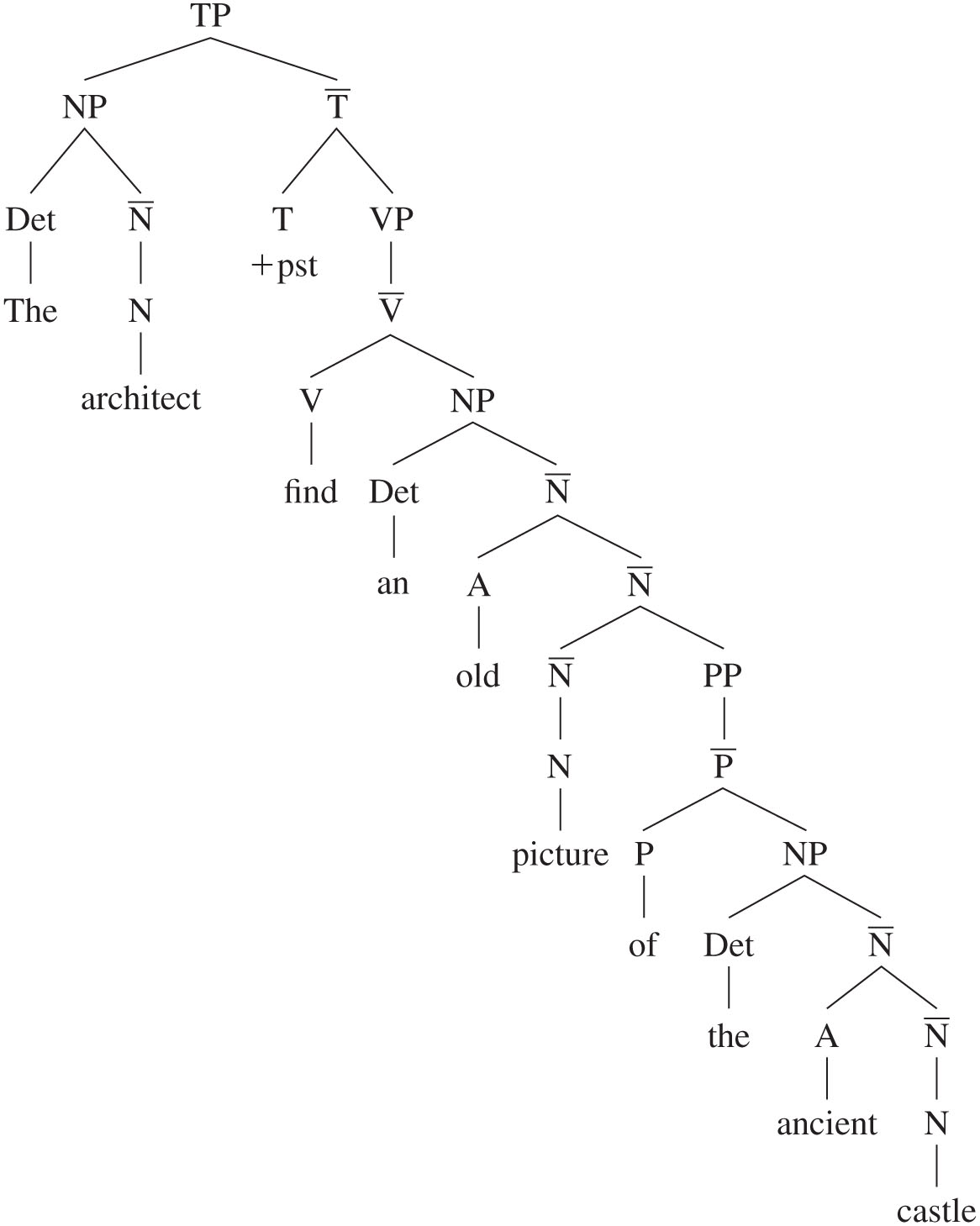


d. An otter played in the mud on the bank. (9 words)

The sentence is structurally ambiguous. This is one possible phrase structure tree.



e. The architect found an old picture of the ancient castle. (10 words)



12. Constituency tests:

a. a lovely pillow—NP

Stand-alone test: What did Martha find for the couch? A lovely pillow.

Move as a unit test: A lovely pillow Martha found for the couch.

Pronoun test: Martha found it for the couch.

b. light in this room—not a constituent

Stand-alone test: What is terrible? \*Light in this room.

Move as a unit test: \*Light in this room the is terrible.

Pronoun test: \*The it is terrible.

c. whether Bonnie has finished packing her books—CP

Stand-alone test: What do you wonder? Whether Bonnie has finished packing her books.

Move as a unit test: *?Whether Bonnie has finished packing her books,* I wonder.

Pronoun test: I wonder that, too.

d. in her class—PP

Stand-alone test: Where did Melissa sleep? *In her class.*

Move as a unit test: In her class, Melissa slept.

Pronoun test: Melissa slept there.

e. Pete and Max—NP

Stand-alone test: Who is fighting over the bone? Pete and Max.

Move as a unit test (with clefting): It’s Pete and Max who are fighting over the bone.

Pronoun test: They are fighting over the bone.

f. and to Max—is a constituent

Stand-alone test: Did you give a bone to Pete, yesterday? Yes, and to Max, too.

Move as a unit test: I gave a bone to Pete yesterday and to Max.

Pronoun test: Does not apply: since and to Max is not an NP, we don’t expect a pronoun to be able to substitute for it, and since it’s not a VP, we don’t expect a pro-verbal form to substitute for it.

Another interpretation is that and to Max fails this test and perhaps argues against constituency: \*I gave a bone to Pete him yesterday. But remember that negative evidence from constituency tests is not as conclusive as positive evidence, since independent grammatical constraints sometimes interfere, leading to false negative results for constituency tests.

g. Pete and—not a constituent

Stand-alone test: \*Who did I give a bone to to Max yesterday? \**Pete and.*

Move as a unit test: \**Pete and,* I gave a bone to to Max yesterday.

Pronoun test: As with (f) above, either this test does not apply, or it provides negative evidence: \*I gave a bone to him to Max yesterday.

13. Verbal particles. (answers will vary)

a. *Constituency. Up the bill* does not seem to form a constituent in the sentence *He ran up the bill*. Note that in the sentence *He ran up the hill,* we can use the fact that only like constituents can be coordinated to add *off the dock* to create *He ran [up the hill] and [off the dock]*. However, we cannot do the same thing with *He ran up the bill*. Attempting to coordinate *off his mouth* with *up the bill* results in an ungrammatical sentence: \**He ran up the bill and off his mouth*. It seems that *up* forms a constituent with *ran* in *He ran up the bill*. Notice that an adverb cannot intervene between these elements (\**He ran completely up the bill*), while in the sentence *He ran up the hill* an adverb may occur in that position: *He ran completely up the hill*. Additional evidence comes from movement: note that the constituent PP *up the hill* can be moved together as a unit to the beginning of the sentence: *Up the hill, he ran*. However, *up the bill* cannot be moved to the beginning of the sentence (\**Up the bill, he ran*), again showing a difference in constituency between the two.

b. 1. *run off* (*one’s mouth*)

2. *finish up* (*homework*)

3. *make up* (*a story*)

4. *look over* (*the proposal*)

5. *clean up* (*the mess*)

14. C-selection restrictions.

a. \*The man located. The verb locate is transitive: it requires an NP object.

b. \*Jesus wept the apostles. The verb weep is intransitive: it does not allow an object.

c. \*Robert is hopeful of his children. The adjective hopeful allows a sentential complement (e.g., that his children will succeed) or no complement, but it cannot take a PP complement with of.

d. \*Robert is fond that his children love animals. The adjective fond allows a PP complement with of, but cannot take a sentential complement.

e. \*The children laughed the man. Like weep, the verb laugh is intransitive and may not take a direct object.

15. Ditransitive verbs. Sample answers:

(1) bring: The vassal brought the emperor a gift.

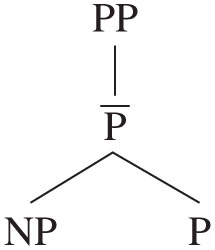
(2) throw: The pitcher threw Sam the ball.

(3) send: I sent Mary a letter.

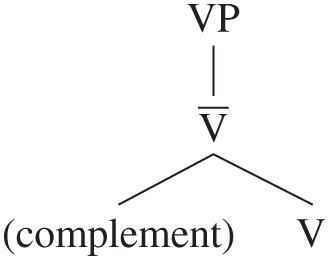
16. Tamil.

i. Head final. These prepositional phrases all end with a preposition.

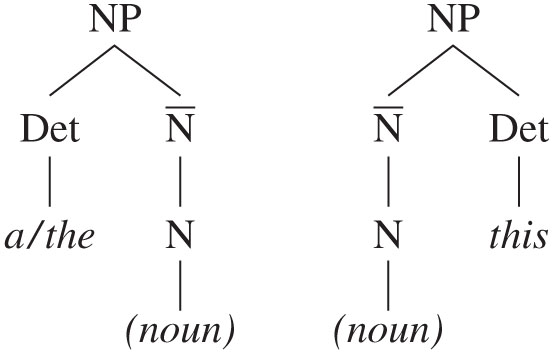
ii.



17. Tamil VPs and NPs. The data further support the hypothesis in 16 that Tamil is head final. The data shows head final VPs: a story tell where tell is the head V and it follows its complement a story and a cow sell where the head V sell follows the complement a cow. The VP structure in Tamil is:



We are also given data on NPs in Tamil: a story, the boy, a cow, and woman this. If we treat this as a determiner, then we must say that some determiner can appear to the right of the noun in Tamil, perhaps demonstrative determiners. This isn’t a counter-example to the head final of Tamil, however, since that specification has to do with the head and its complement, not a head and its specifier. We have no examples of complements to nouns in Tamil, so we cannot say whether NPs are head initial or head final in Tamil. The two possible structures we have for NPs in Tamil are:



18. Wh movement.

Provide the d-structure for each of the following *wh-* questions. Then state the grammatical function of the *wh-* phrase (e.g., subject, object, etc.)

a. ***Who*** *left the party early*.  **subject**

b. *Mary left her wallet* ***where***. **locational complement**

c. *You ate* ***what*** *for dinner last night*. **object**

d. *Mary wrote to* ***who****.* **object of a preposition / indirect object**

e. *Sue read* ***which book***. **object**

f. *You are wearing* ***whose jacket***. **object**

g. *Al forgot that Betty invited* ***who*** *to the party*. **object**

h. *Goldilocks said that Mama Bear gave porridge to* ***which bear***. **object of a preposition / indirect object**

i. *Goldilocks said that Mama Bear gave* ***what*** *to Baby Bear.* **object**

19. Wh- movement constraints. The ungrammatical sentences d and h show that it is not possible to both question and move one member of a coordinated structure. It is possible to just question one member of a coordinated structure without movement, since sentence c is fine. Moreover, sentence g shows that questioning the object of a preposition and moving it is possible, so this does not seem to be a more general principle, but rather something specific about coordination.

20. *Existential* there *sentences.* When you have a sentence that has (i) an indefinite subject N and (ii) uses the verb *be* (in present or past tense), a transformation can be applied where the indefinite NP subject is moved to the position following the verb *be* and *There* is inserted into the vacated subject position, and then the rest of the sentence continues normally:

E.g. *A boy is on the roof.*

1. Move the indefinite subjectNP *a boy* directly after *be*:\_\_\_\_ *is a boy on the roof.*

2.Insert *there* into empty subject position: *There a boy is on the roof.*

*Challenge exercise*. Sentences g(i) and g(ii)do not mean the same thing: (i) focuses on the students, saying, regarding any students, they must be in the dorm by midnight, while (ii) focuses on the dorm, saying regarding the dorm, there must be students in it by midnight. In the case where there are no students, the restriction in (i) would be satisfied vacuously—there are no students, so the “rule” is satisfied. However, if there were no students, the restriction in (ii) would seem to not be satisfied. In order to comply with this “rule,” we would have to go get some students!

This meaning difference should not complicate the analysis of *There* sentences presented above slightly. The transformation applies in cases where *be* is the main verb—and the only verb—as in (a), where it is an auxiliary verb—as in (c, d), or where it is the main verb and there is another auxiliary verb, as in the current sentences (g). The transformation applies in all these cases and is blind to the exact meaning differences between the original sentence and the transformed sentence.

21. Cross-linguistic syntactic variation. Sample answers:

a. French:

i. French marks future tense on the main verb, while English requires an auxiliary verb to mark the future.

ii. In French, the adjective follows the noun it modifies, while in English the adjective precedes the noun it modifies.

iii. In French, the adjective agrees in number with the noun it modifies, while in English it does not.

iv. In French, the definite article agrees in number with the noun it precedes, while in English it does not.

b. Japanese:

i. Japanese has subject markers and object markers, which indicate grammatical relations in all noun phrases (nominal and pronominal), while English does not.

ii. In Japanese, the verb follows the object, while in English the object follows the verb.

iii. In Japanese, the auxiliary iru follows the main verb, while in English auxiliaries always precede the main verb.

c. Swahili:

i. Swahili has class markers. These are prefixes that distinguish various classes of nouns and indicate whether they are singular or plural. English has only plural suffixes.

ii. Swahili verbs are marked for present and past tense with a prefix.

English verbs are marked for tense with a suffix or with auxiliary verbs.

iii. Swahili verbs (both in the past and present tenses) have prefixes agreeing in number (and class) with the subject. English regular verbs agree in number only in the present tense with a third-person singular subject; the agreement is marked by one suffix (-s).

d. Korean:

i. Korean (like Japanese) has suffixes on all noun phrases indicating grammatical relations like subject and object, while in English the distinction only surfaces in pronouns.

ii. Korean has verb suffixes that indicate whether the sentence is an assertion or a question. English has no such suffixes.

iii. In a wh- question in Korean, the wh- phrase does not move to the beginning of the sentence, while in English it does.

iv. In Korean (like Japanese), the verb follows the object, while in English the verb precedes the object.

v. Korean does not use auxiliary verbs to form questions, while ­English does.

e. Tagalog:

i. In Tagalog, proper names like Pedro occur with articles, while in English they cannot.

ii. In Tagalog, the verb precedes the subject, while in English the ­subject precedes the verb.

iii. In Tagalog, there are topic markers, while in English topics are not marked overtly.

iv. In Tagalog, the complementizer (-ng) introducing an embedded clause is a nominal suffix on the subject of the main clause. In English, the complementizer (that) is a free morpheme that precedes the subject of an embedded clause.

22. Ellipsis.

a. (i) Mary will study hard for the exam and John will **~~study hard for the exam~~** too.

(ii) John wrote a letter to someone, but I don’t know who **~~John wrote a letter to \_\_\_~~\_**.

(iii) John loves carrots and Mary **~~loves~~** broccoli.

b. Provide three more examples of each kind of “ellipsis” illustrated above.

(i) 1. Pat should walk every day and Chris should **~~walk every day~~** too.

2. Jane might move to New York and Anna might **~~move to New York~~** too.

3. Tim can do a cartwheel but Rachel can’t **~~do a cartwheel.~~**

(ii) 1. Colin got a promotion but I can’t imagine how **~~he got a promotion.~~**

2. Emma is going to cook something, but she didn’t say what **~~she is going to cook \_\_\_~~\_**.

3. She borrowed someone’s shirt, but I don’t know whose **~~shirt she borrowed \_\_\_\_.~~**

(iii) 1. I will have the chicken, and my wife **~~will have~~** the fish.

2. She takes care of me, and I **~~take care of~~** her.

3. Can you give me my grade and **~~can you give~~** Mary hers?

*Research question:* Answers will vary. An example of a possible answer using Mexican Spanish is provided here. In this variety of Spanish, only one of these kinds of ellipsis is grammatical, namely (iii):

(iii) English: John loves carrots and Mary **~~loves~~** broccoli.

In Spanish you can say:

Juan come zanahoria y María **c~~ome~~** brócoli.

Which is equivalent to *John eats carrots and Mary* ***~~eats~~*** *broccoli*. Thus, this type of ellipsis seems to be possible in both English and Spanish. (The verb was changed from ‘love’ to ‘eat’, since the verb ‘love / like’ in Spanish works differently in terms of its argument structure.)

The patterns of ellipsis in English exemplified in (i) and (ii) don’t work straightforwardly in Spanish. Let’s first consider (i).

1. English: Mary will study hard for the exam and John will **~~study hard for the exam~~** too.

Spanish does not have a free morpheme for the future so it could not form a sentence that elided the VP and left behind the future marker. To express future, Spanish uses either a bound morpheme (*estudio* “I study,” *estudiaré* “I will study”) or uses the verb “go” (*voy a estudiar* ‘I am going to study). Considering a sentence that talks about the future isn’t a good comparison. However, Spanish has other modal-like verbs, for example, *poder* “can.” With *poder* you can get ellipsis that looks similar to a corresponding English sentence:

Mary can study hard for the exam and John can **~~study hard for the exam~~** too.

Maria puede nadar y Juan también puede **~~nadar~~**.

Thus, after account for the issues related to the expression of the future, it seems that this type of ellipsis also takes place in Spanish. (Though there may be additional complications related to inflection, that we will set aside for now.)

Finally, the pattern shown in (ii) also works differently in English and in Spanish:

(ii) John wrote a letter to someone, but I don’t know who **~~John wrote a letter to \_\_\_\_~~**~~.~~

Here, the difference lies in a syntactic requirement that doesn’t allow the preposition *a* “to”to be stranded from its object *quién* “who.” This it is not possible to say the following sentence because it isn’t possible to leave *a* “to” hanging there at the end of the sentence.

\*Juan le escribió una carta a alguien, pero no se quién **~~escribió una carta a~~** ~~\_\_\_\_.~~

But rather you have to say something like the following, where *a* is moved together with *quién*:

Juan le escribió una carta a alguien, pero no se a quién **~~le escribió una carta~~** ~~\_\_\_\_.~~

While saying the English equivalent of this last Spanish sentence, where *to* gets moved with *who(m)*, sounds stilted in our dialect, some English speakers may use it:

John wrote a letter to someone, but I don’t know to who(m) **~~John wrote a letter \_\_\_\_~~**~~.~~

23. *Challenge exercise:* Adverbs in French and English.

a. In French, adverbs of frequency must follow the verb, whereas in English, they must precede the verb.

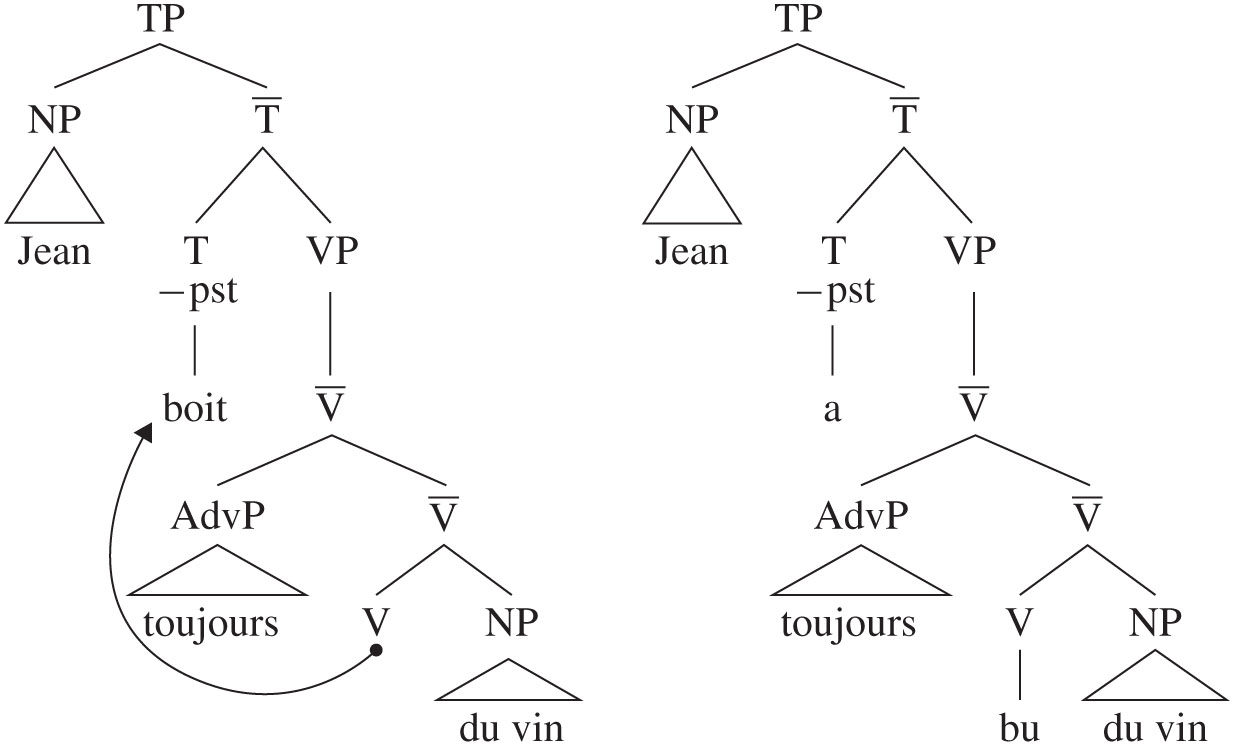
b. If adverbs of frequency originate left adjoined to V and do not move, then in order for the adverb to end up after the verb in French, the verb must move to a position in front of (higher than) the adverb. The additional grammatical sentence helps us hypothesize where the verb moves to:

Jean a toujours bu du vin.

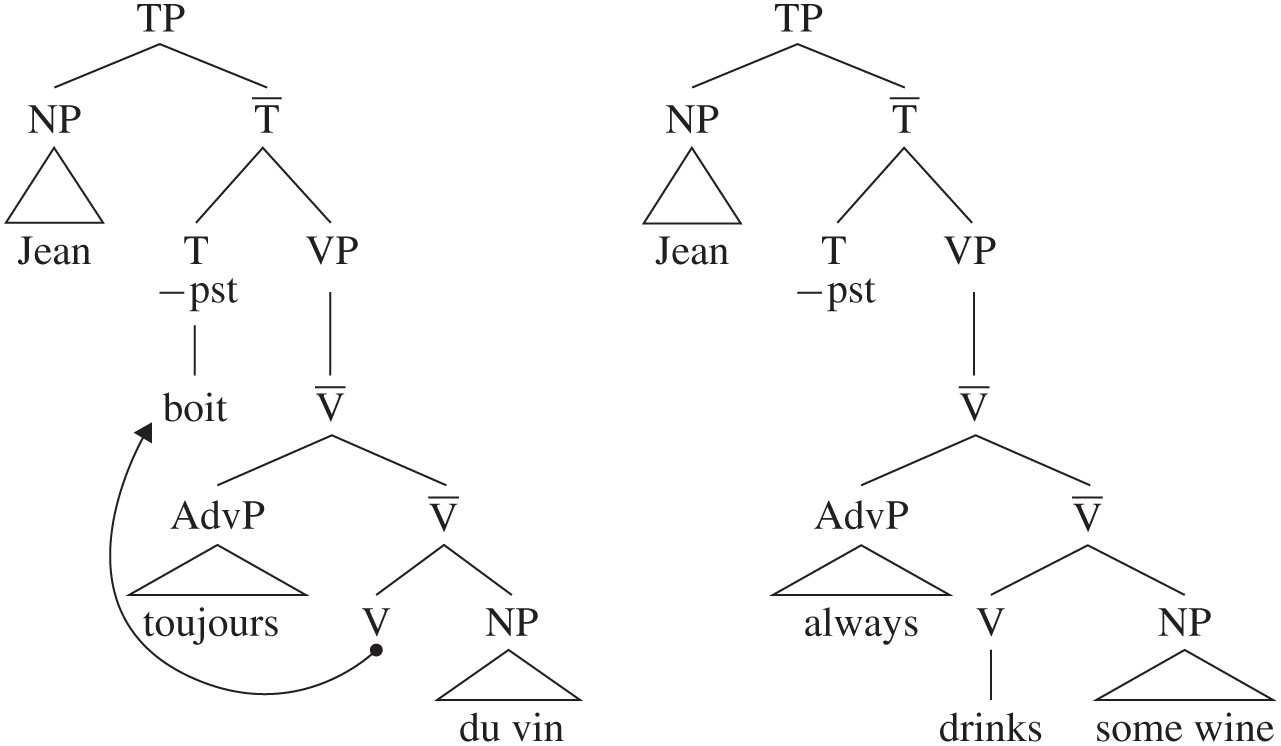
Jean has always drunk wine

‘Jean has always drunk wine.’

In the sentence Jean a toujours bu du vin we see that if T is already occupied by an overt lexical item, like the auxiliary verb a ‘has’, then it blocks the verb from moving into that position. Notice in both the PS trees below, the AdvP toujours originates left adjoined to V and remains there. In the case with no overt auxiliary verb (on the left), the verb raises to T giving the order S-V-Adv-O. In the case with an overt auxiliary verb (on the right), the verb cannot raise to T, as it is already filled, and we get the order S-Aux-Adv-V-O.



c. English and French are the same in terms of the d-structure. In both English and French, the adverb of frequency originates in the same place, as does the verb, the tense, and the subject and object. Where English and French differ is that French raises main verbs to T as long as there is no lexical item (e.g., an aux verb) there. English, however, appears to leave main verbs in V, as seen in the trees below:



24. Dutch and German questions. The data show that Dutch and German questions are different from English questions in that do-insertion is not used either for wh- questions that question the object (ii) nor for yes/no questions (iii). It appears that Dutch and German do not use the do-insertion strategy at all.

25. *Challenge exercise: One*-replacement test.

a. with the golden arm = adjunct

The man with the golden arm and the one with the bionic leg . . .

b. for proposition eighteen = adjunct

A voter for proposition eighteen and one against were both interviewed by the news.

c. at his home = complement

\*My cousin’s arrival at his home and the one at his office surprised everyone.

d. of a retaining wall = complement

\*The construction of a retaining wall and the one of the guest house were both expensive.

e. in the river = adjunct

The boat in the river and the one at the dock are both brand new.

f. white with foam = adjunct

There are three oceans on this planet: the ocean white with foam and the one red with blood are the largest.

g. of the temple = complement

\*The desecration of the temple and the one of the sanctuary were especially abhorrent.

h. of Julius Caesar = complement

\*The betrayal of Julius Caesar and the one of Jesus Christ are both well known.

26. Challenge research exercise: ditransitive verbs in X-bar theory. There are several proposals for handling ditransitive verbs in X-bar theory, most of which involve positing additional structure above the VP. One common realization of this hypothesis is known as “little-v,” or “vP shells.” (Note that the v here is intentionally lower case.) The vP is posited to be a level above the VP. For ditransitive verbs, both objects originate in the lowest VP: one as the complement to the V and one in the specifier position to V. The verb then raises from V to v, as shown below:

s