

-4.5

Midterm Exam

Please read all directions with care.

There are no trick questions, and the directions are meant to help.

- You have one hour and fifty minutes.
- Please write all your answers on the exam itself.
- For scratch paper, you can use the back of the sheets.
- The rules you need are in an Appendix on the last two pages.

1. Word formation rules and inflection

These are Persian data. All of them have the present tense prefix *mi-* and the first person singular ending *-am*.

<u>mi</u> res <u>am</u>	'I arrive'
<u>mi</u> res <u>an</u> am	'I deliver'
<u>mi</u> xob <u>am</u>	'I sleep'
<u>mi</u> xob <u>an</u> am	'I put (someone) to sleep'
<u>mi</u> gard <u>am</u>	'I turn around'
<u>mi</u> gard <u>an</u> am	'I turn (something)'
<u>mi</u> ko <u>am</u>	'I eat'
<u>mi</u> ko <u>an</u> am	'I feed'
<u>mi</u> tars <u>am</u>	'I fear'
<u>mi</u> tars <u>an</u> am	'I make (someone) fear'

Assume that Persian has these rules, which we are giving you for free:

Present Tense Marking

Prefix *mi-* if [Tense:Present].

1st Singular Marking

Suffix *-am* if [Person:1, Number:Sing]

a. Write a rule of word formation for the derivational affix that is present. Be sure to include the affix itself, the change in meaning, and the parts of speech involved, as taught in the course.

1 word formation
[stem]v

Case rule:
suffix -an if [case>acc] ← Case is on nouns.
(if subject of sentence causes something to be [stem]ed) ✓

(-1)

b. Multiple choice. What ordering must be assigned to your rule given in (a), relative to 1st Singular Marking?

Rule in (a) comes first ✓
1st Singular Marking comes first

c. Why is this ordering expected in linguistic theory in general? Explain your answer based on a principle taught in the course.

the first singular marking is one of the last suffixes. The rule must go first because if not, the word order will be mixed up. For example, *mixoram* would become *mixoram an*. (U)E

yes... why do we expect that, in general, across languages there is no case on the verb.

2. Word formation rules and derivations

The word *semi-guitarist* is ambiguous. Meaning (a): "a person who is sort of like a guitarist" (because, for example, plays very poorly). Meaning (b): "a person who plays an instrument that doesn't quite count as a guitar".

Before formulating your answer, first study these sample data:

<i>semi-circle</i>	'that which is only half of a circle'
<i>semi-conductor</i>	'that which is not quite a conductor'
<i>semi-pro</i>	'someone who works at something but not as a full-time job'
<i>semi-desert</i>	'a region that is dry but not as dry as a desert'
<i>oboeist</i>	'someone who plays the oboe'
<i>saxophonist</i>	'someone who plays the saxophone'
<i>violinist</i>	'someone who plays the violin'

(a) Using the format taught in class, write the two word formation rules needed to derive the two meanings of *semi-guitarist*. Don't forget to name your rules.

-ist rule
 $[X]_N \rightarrow [[X]_N \text{ ist}]_N$ someone who plays X ✓

semi- rule
 $[X]_N \rightarrow [\text{semi-} [X]_N]_N$ something that is almost X, but not quite ✓

2

(b) Using the format taught in class, give morphological derivations for each of the two meanings of *semi-guitarist*.

i. "a person who is sort of like a guitarist"

1 -ist rule

$[guitar]_N \rightarrow [[guitar]_N ist]_N$ someone who plays guitar ✓

2 semi-rule

$[guitarist]_N \rightarrow [semi-[guitarist]_N]_N$ someone who is sort of like a guitarist but not quite (plays poorly) ✓

ii. "a person who plays an instrument that doesn't quite count as a guitar".

1 semi-rule

$[guitar]_N \rightarrow [semi-[guitar]_N]_N$ something that is almost a guitar, but not quite (like a ukulele) ✓

2 -ist rule

$[semi-guitar]_N \rightarrow [[semi-guitar]_N ist]_N$ someone who plays something that is almost a guitar (but not quite) ✓

3. Using subscript digits in morphological rules

Here are singulars and their corresponding plurals for an imaginary language.

Singular	Plural	Gloss
talo	talopu	'eagle'
miru	mirupu	'magistrate'
liko	likopu	'act of random kindness'
soremu	soremupu	'freckle'
vaka	vakapu	'grain of sand'
zube	zubepe	'papyrus scroll'
torimapa	torimapapa	'capybara'

Write a rule that can derive plurals in the following imaginary language, using the subscript notation taught in class. You may assume that the morphosyntactic representations of the language include the feature [Number: singular, plural]. Give your rule a name.

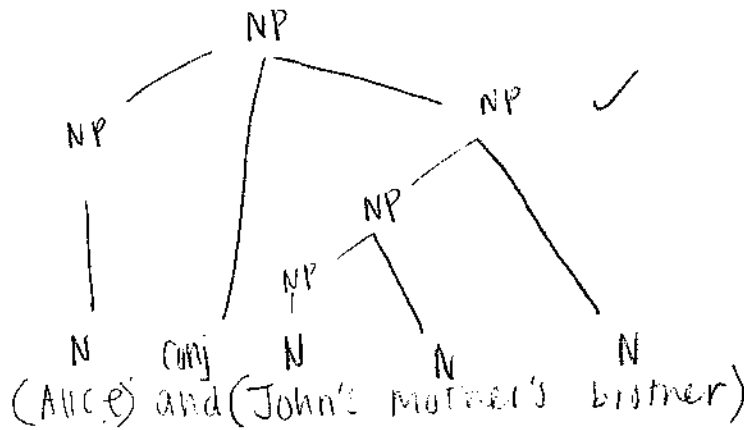
plural rule: $[XV]_N \rightarrow [X P V]_N$ meaning: more than one [noun] ✓

4. Parsing

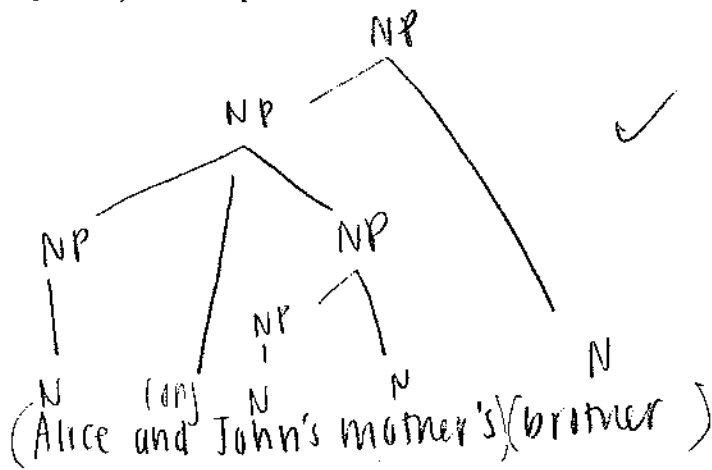
a. Consider this NP:

Alice and John's mother's brother

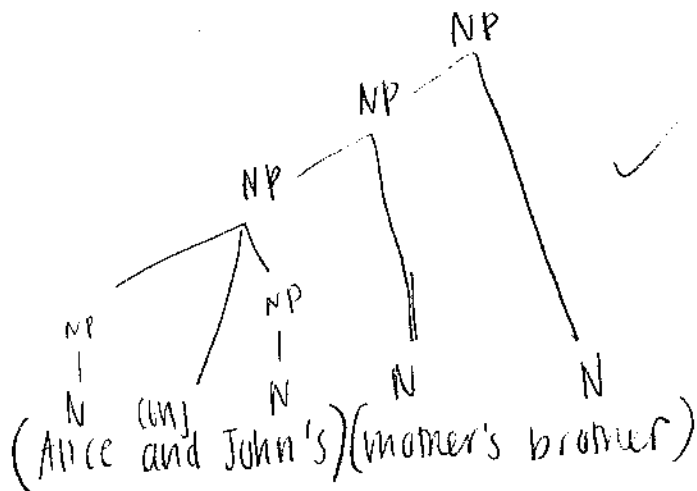
Provide three different syntactic parses of this expression, and explain their meanings. There is a set of phrase structure rules at the end of this exam.



1. Alice is married to John
Alice is with her uncle-in-law
(her husband's mother's brother)



2. Alice and John's mother are sisters. They have the same brother

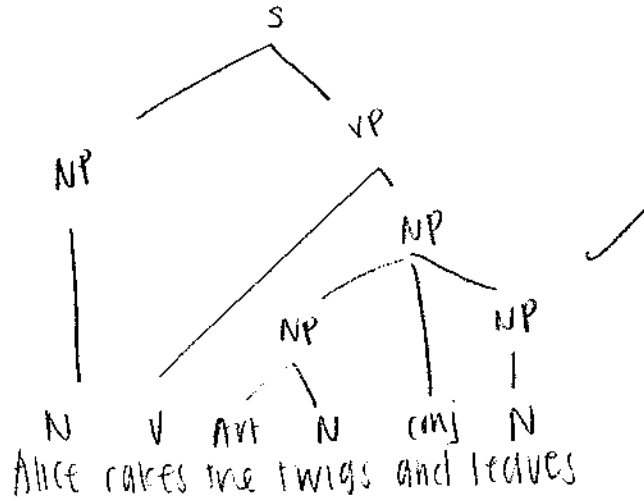


3. Alice & John are siblings
They go visit their uncle,
who is their mother's
brother

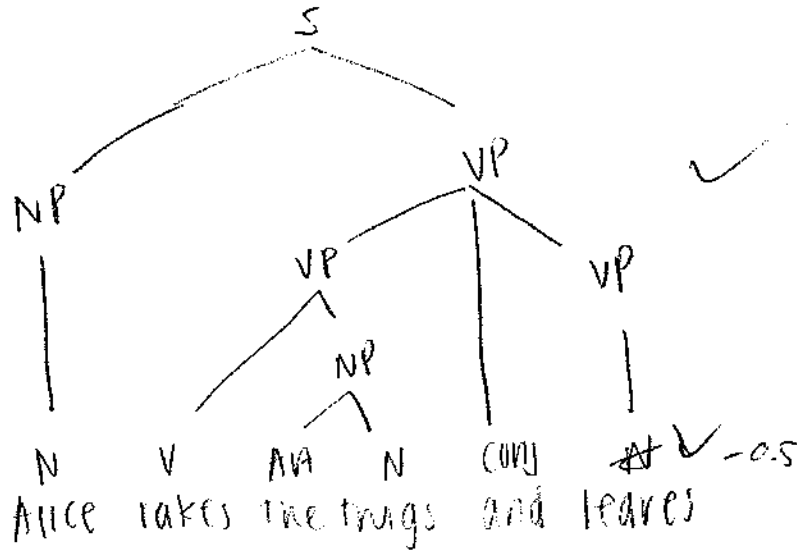
b. Alice rakes the twigs and leaves.

Provide a parse for each meaning. You can find all the phrase structure rules in the Appendix at the end of the test.

i. "... then she puts the twigs and leaves into big plastic bags"



ii. "... I assume she'll be back some day, perhaps bringing the twigs with her."



5. Phrase structure rules in a new language

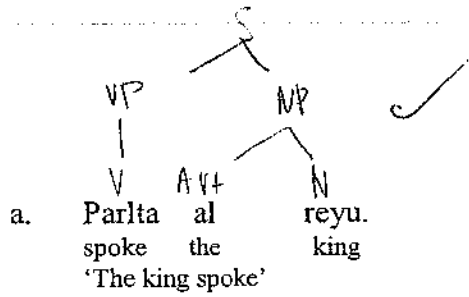
Here is a batch of sentences in a made up language.

Please note:

- i. There is no case in this language.
- ii. "fon fon" in sentence (i) is not a typo.

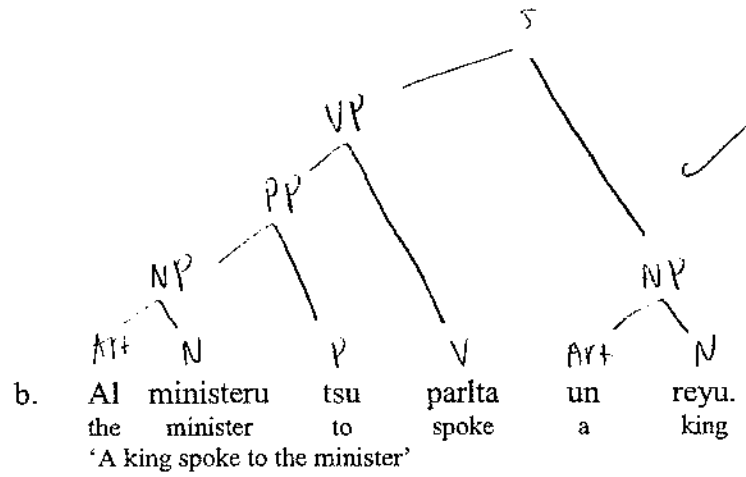
(a) Parse each sentence (you can put the parse on top of the printed version, rather than copying the sentence over.)

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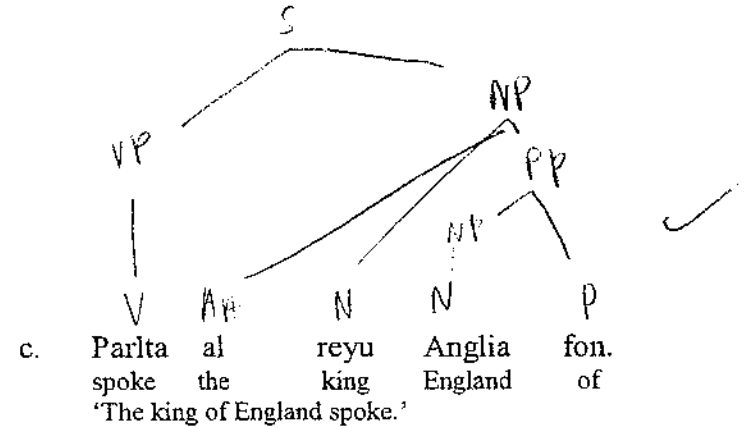
$S \rightarrow VP NP$

a. Parlta al reyu.
 spoke the king
 'The king spoke'



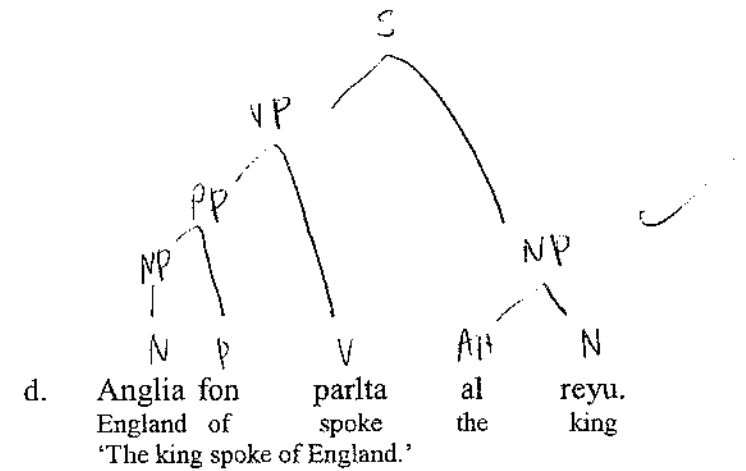
$VP \rightarrow (PP) V$
 $PP \rightarrow (NP) P$

b. Al ministeru tsu parlta un reyu.
 the minister to spoke a king
 'A king spoke to the minister'

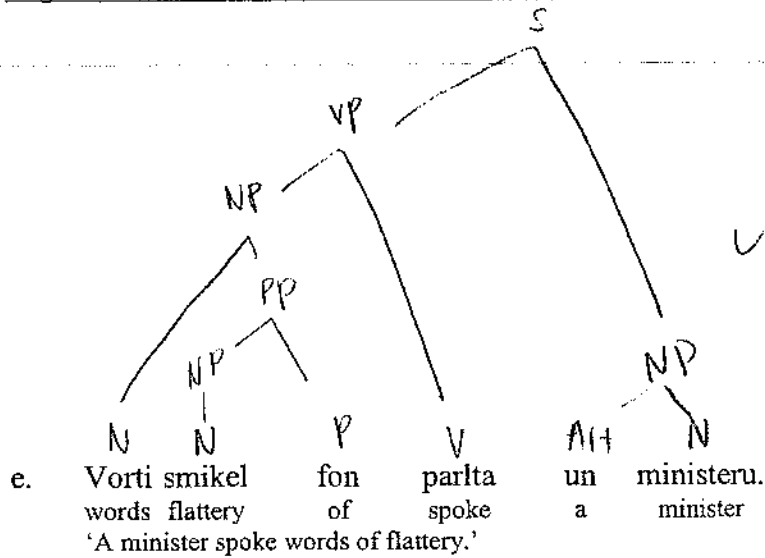


$NP \rightarrow (Art) N (PP)$

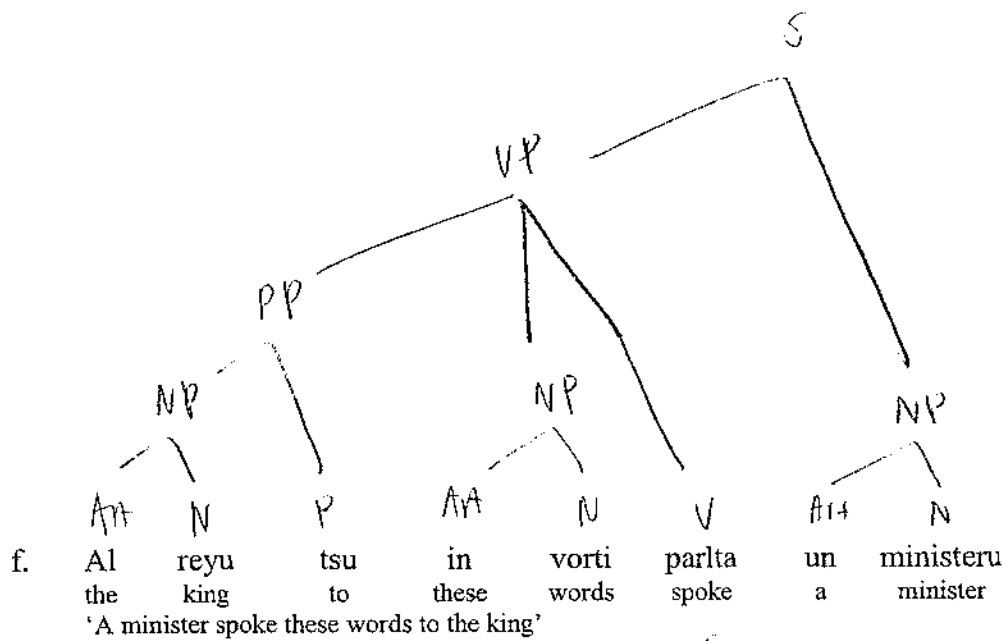
c. Parlta al reyu Anglia fon.
 spoke the king England of
 'The king of England spoke.'



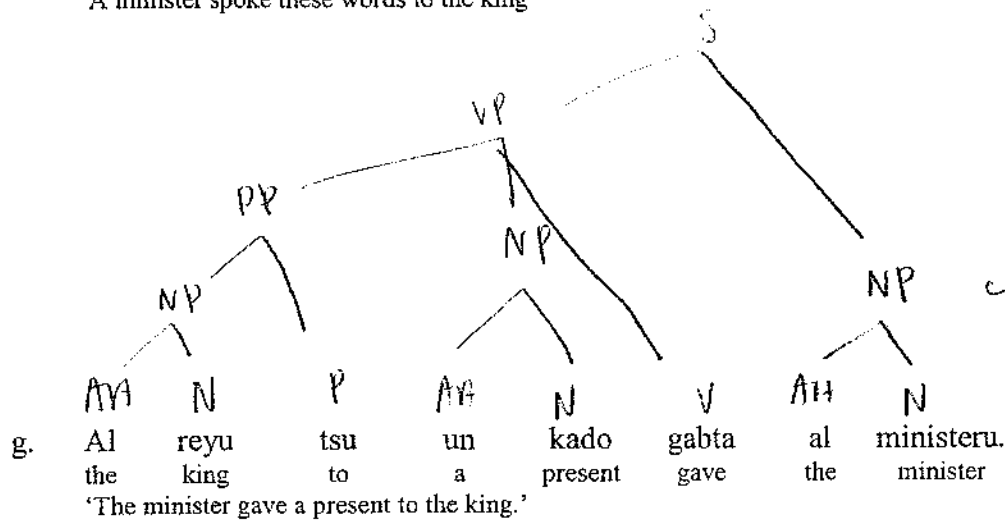
d. Anglia fon parlta al reyu.
 England of spoke the king
 'The king spoke of England.'



VP → NP(V)
 NP → N(NP)

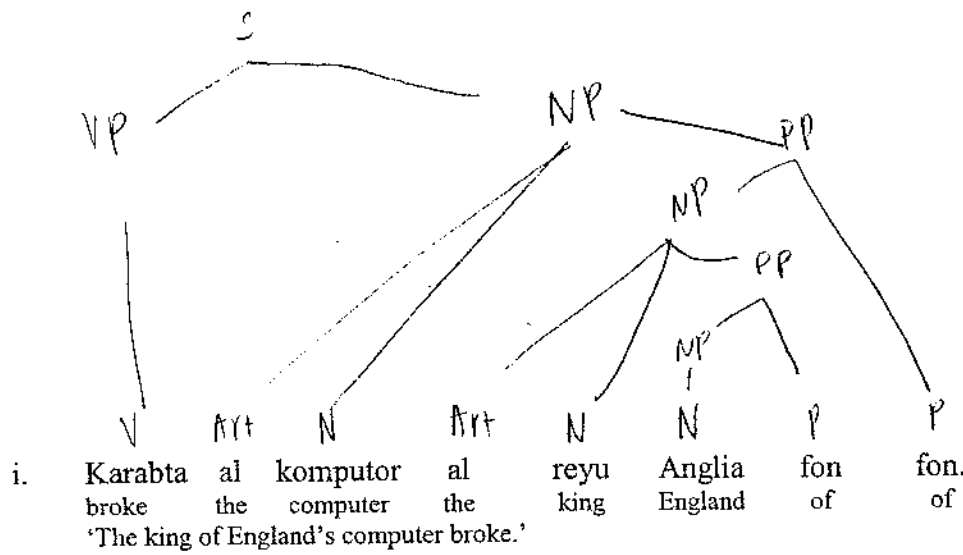
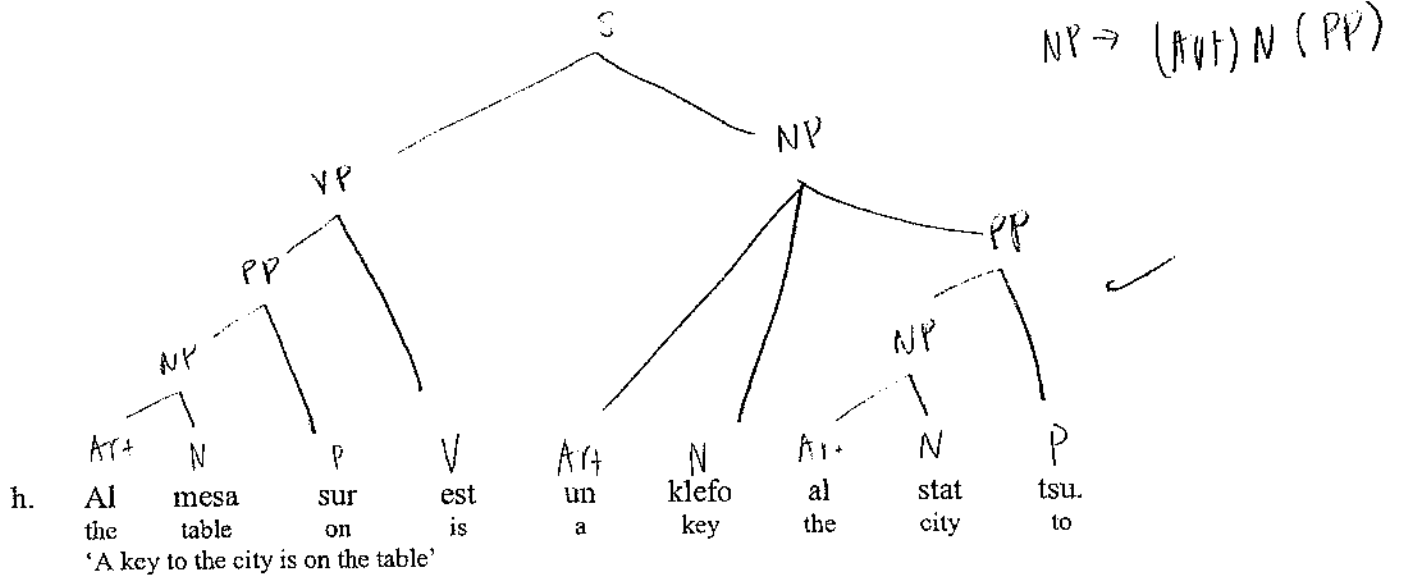


VP → (PP)(NP)V



VP → (PP)(NP)V

- C

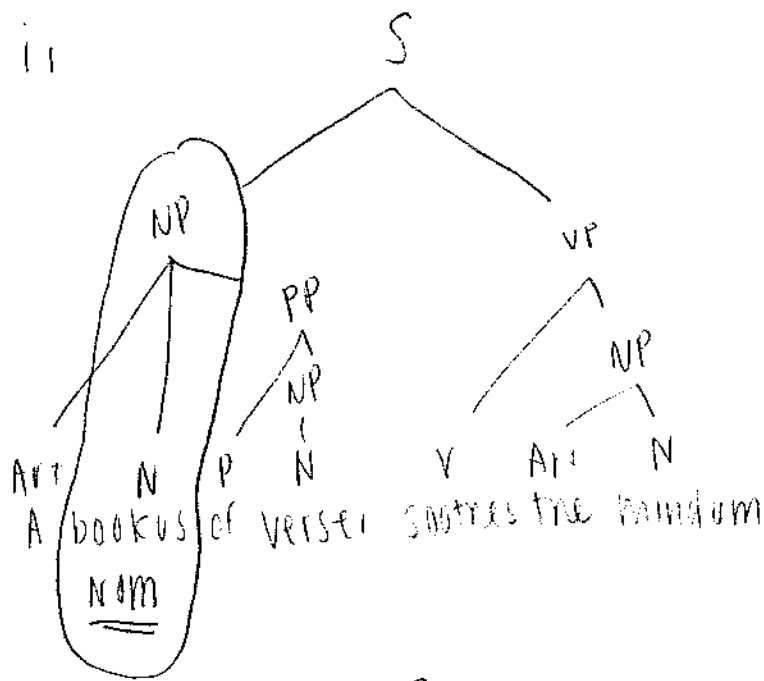


(b) Write a simple set of phrase structure rules that can derive all of the sentences above.

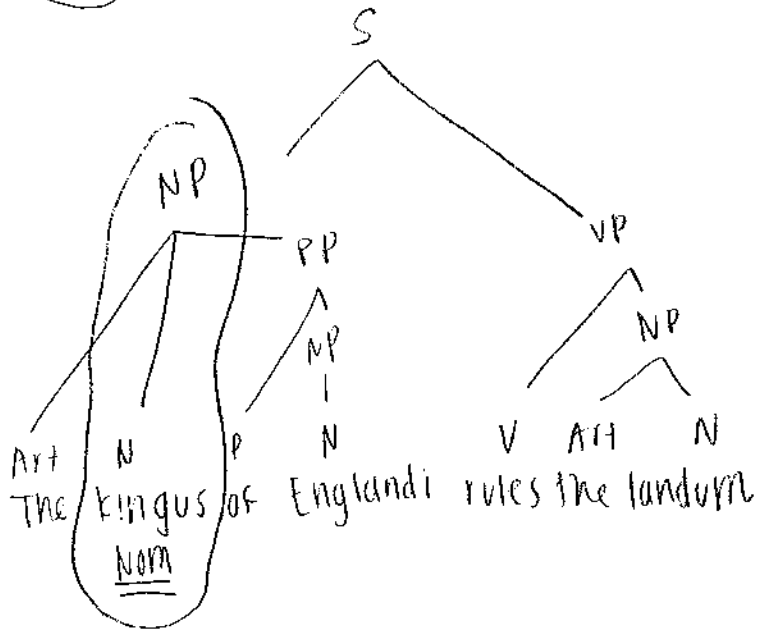
- S → VP NP ✓
- VP → (PP) (NP) V ✓
- PP → [NP] P ✓
- NP → (Art) N (PP) ✓

6. ii

d.



e.



D and E and K + h

6. Case

Pseudo-English is like English but has a richer case system. This includes a Nominative -us, an Accusative -um, a Dative -i, and a Genitive -is. There is no 's morpheme in Pseudo-English as in real English.

The problem is based on the following sentences of Pseudo-English. For simplicity, all the noun phrases are singular. You may assume that the names are ordinary names of English, like "Bill" and "Alice."

- a. Billus gave Sharoni a bookum.
- b. Jackus told Bessi the truthum.
- c. Susanis catus ate the mousum.
- d. A bookus of versei soothes the mindum.
- e. The kingus of Englandi rules the landum.
- f. The committeus awarded the kingis assistenti a medalum.
- g. Johnus awarded a medalum to the kingis dogi.
- h. A guidus to UCLAi was sold to the studenti.
- i. Fredus went to the big museumi.
- j. Arthurus believes that Alexanderus partook of the soupi.
- k. The sizeus of the buildingis stairwayi impressed Fredum.
- l. Fredus read a guidum to the fieldi of linguisticsi.
- m. Saraus paid attentionum to the sizei of the buildingi.
- n. The kingis of Englandi hatus is made of felti.

- i. This question is partly multiple choice and partly fill-in-the-blanks. ✓

Nominative case is attached to (the rightmost word/the head) of daughter NP of S.



- ii. What sentence or sentences tell you the correct answer to "(the rightmost word/the head)" in the previous question?

see backside of previous page (-1)

7. Subcategorization

Here are the data. The grammatically judgments are mine; if you disagree, please just be patient and accept the judgments for purposes of the question.

- *Fred portrayed.
- Fred portrayed Sue.
- Fred portrayed Sue in a painting.
- *Fred portrayed in a painting.
- *Fred portrayed Sue a picture.
- *Fred portrayed that Sue was in the picture.

[— NP (PP)]

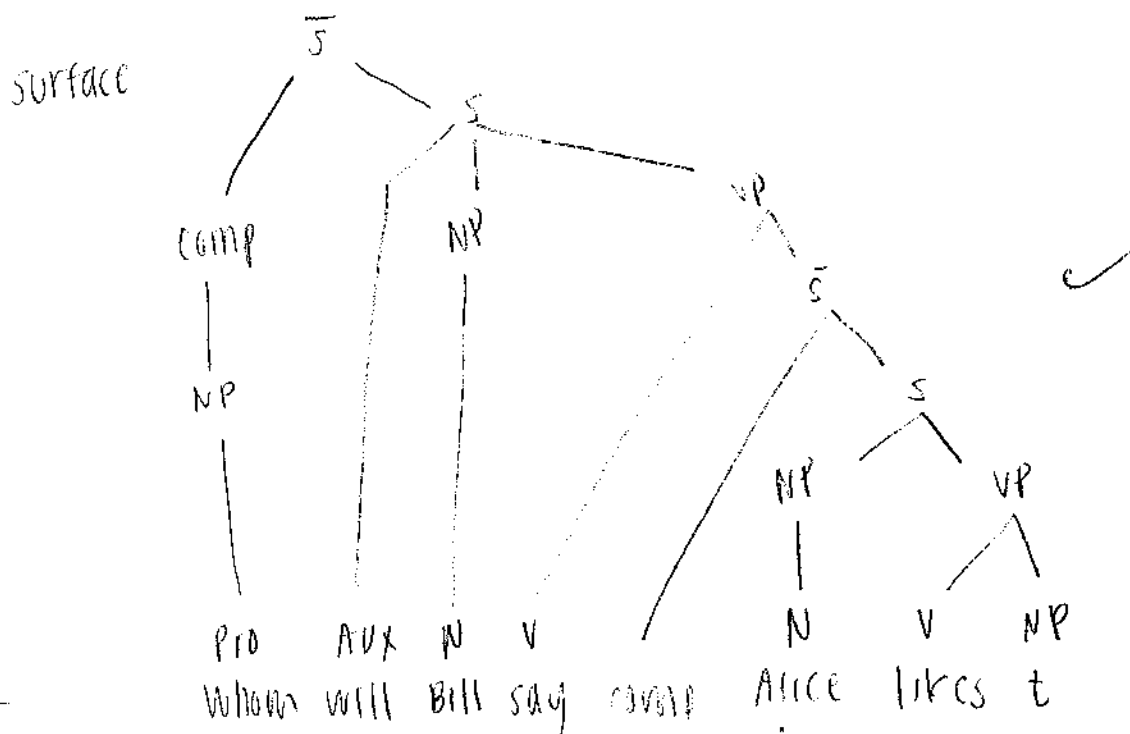
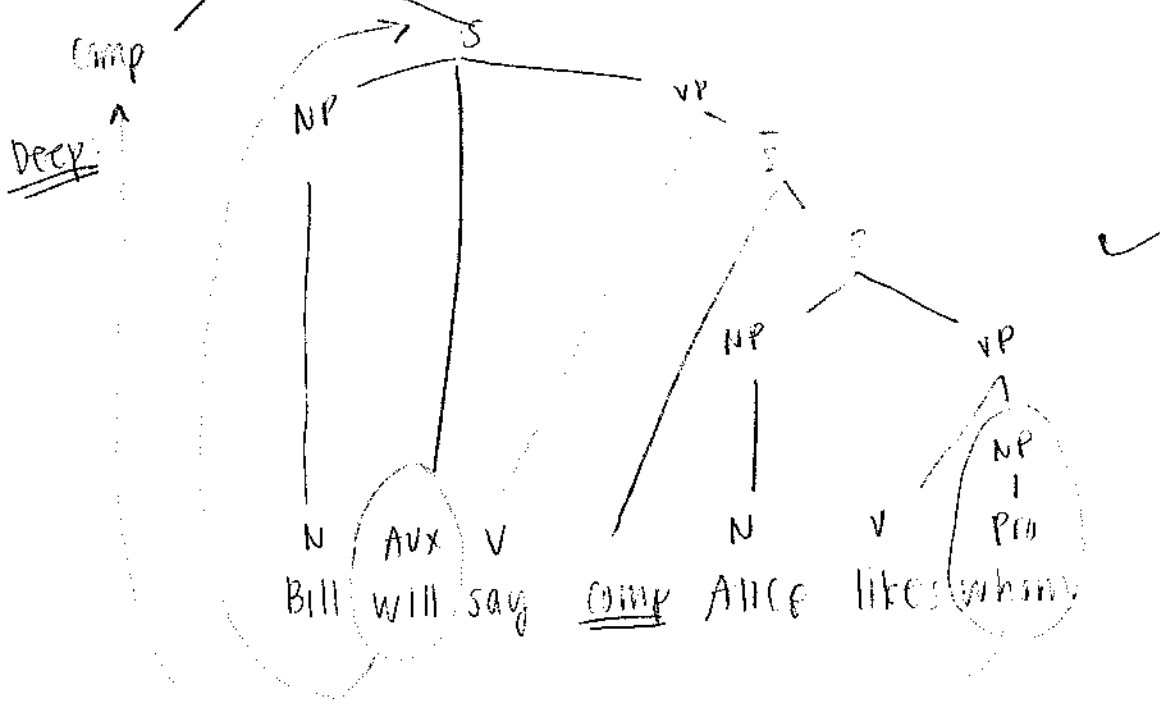
Question: based solely on the data given, provide the subcategorization for *portray*. Make your answer as brief as you can by including () in your frame(s).

portray [NP (PP)] ✓

8. Wh- Movement

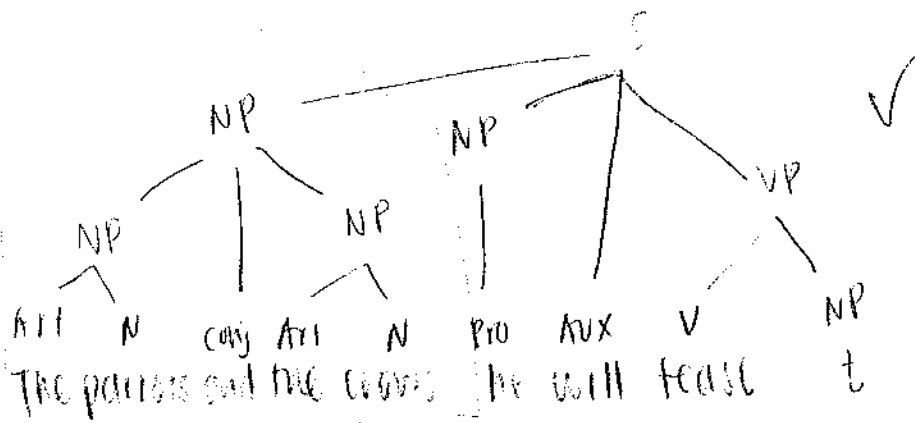
Derive this sentence in the way we've done it in class. Show deep structure, arrows indicating movement, and also surface structure. The rules are given at the end of the test.

Whom will Bill say Alice likes?



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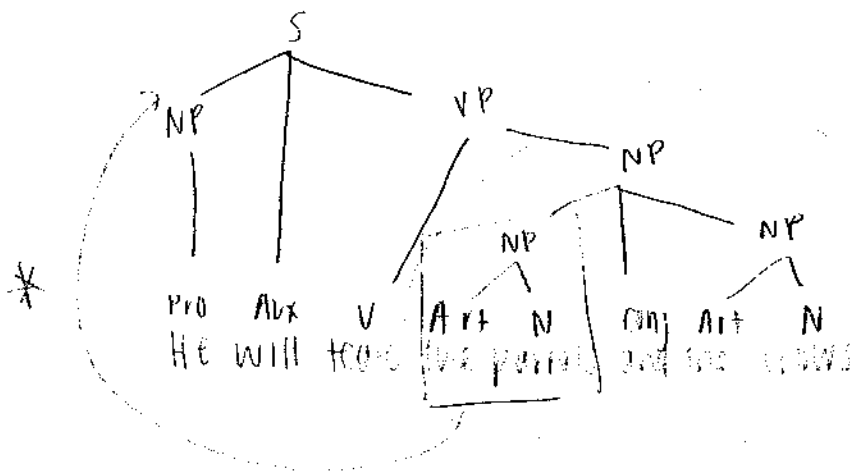
critical topologicalization / surface structure
(more entire island)



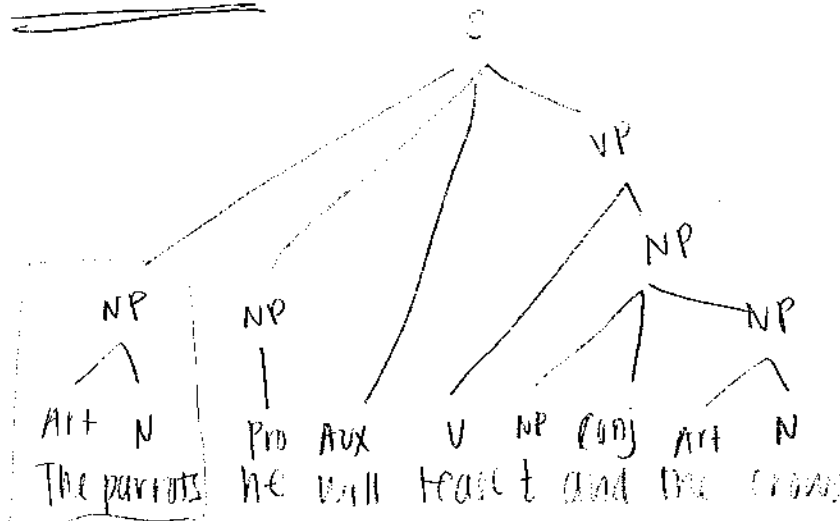
9. Islands

Invent a new sentence that demonstrates that Topicalization obeys the Coordinate Structure Constraint. Your sentence must mention a parrot and include the verb *tease*. Give the deep structure of the sentence, a circle around the island, a rectangle around the moved constituent, and a * showing where the Topicalized constituent exits the island, as taught in the course. Then show the surface structure.

DEEP



* Ungrammatical: violates coordinate structure constraint



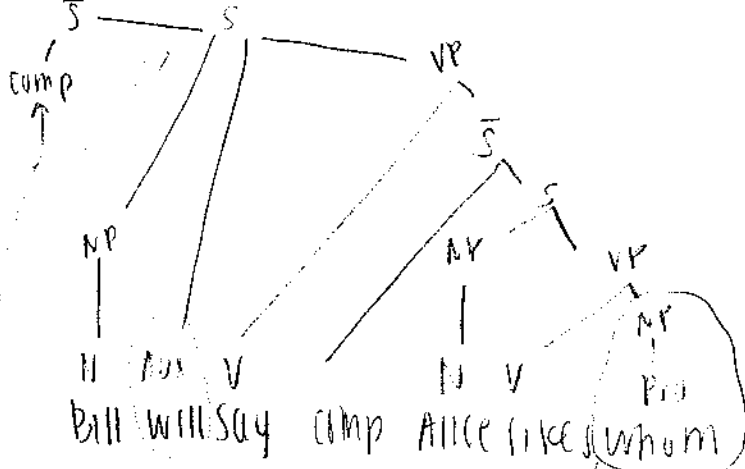
← see back side of previous page (10)

← 0

Correct

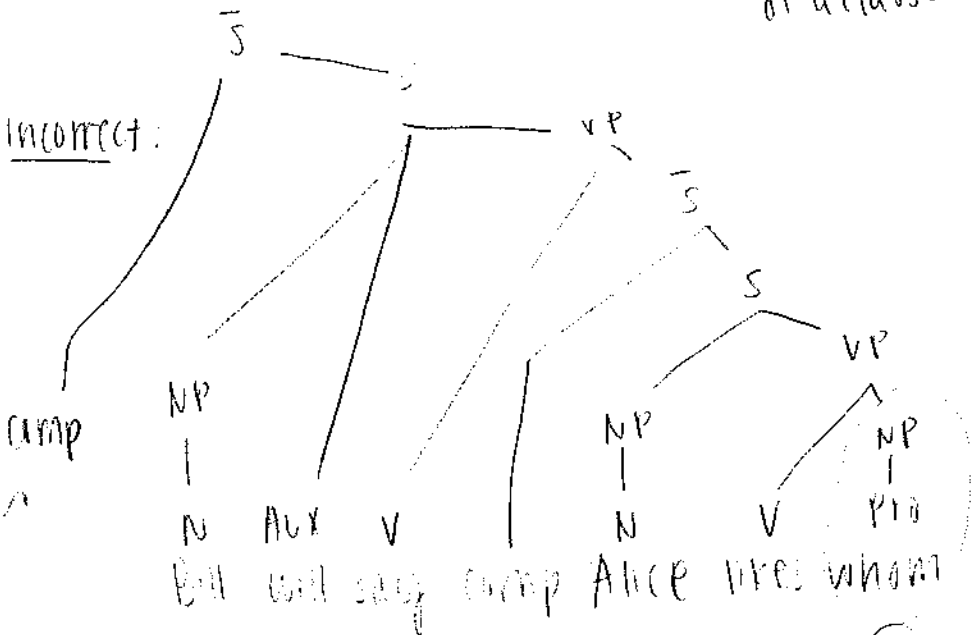
(2)

Wh-
movement



(1) Whom receives [case: accusative] as the head of an NP object of a clause

Incorrect:



(1) Wh- movement

(2) Whom receives no case marking because it is neither the head of NP subject of a clause (nom.) nor the NP object of a clause (acc)

10. Rule ordering in syntax

This question is about Formal English, a variety of English used in scholarly writing and other formal contexts. Here are some Case Assignment rules for Formal English:

Nominative Case Assignment

Assign [Case:Nominative] to the head of the NP subject of a clause (daughter of S).

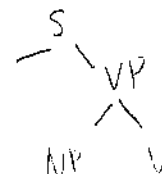
Accusative Case Assignment

Assign [Case:Accusative] to the head of an NP object of a clause (sister of V in VP).

Here is a spell-out rule for Formal English:

Who Spellout

who is spelled out as *whom*.
[Case:Accusative]



Here are data from this dialect:

- a. Who will Bill say likes Alice?
(*Whom will Bill say likes Alice?)

Bill will say Alice likes whom?
(acc acc)

- b. Whom will Bill say Alice likes?
*Who will Bill say Alice likes?

1. Multiple choice question about syntactic rule ordering. Which must apply first, Case Assignment or Wh- Movement? Place a check after the correct answer.

Case Marking ✓

Wh- Movement

2. State clearly in words what would go wrong if we used the wrong rule order. Include in your answer an example of a bad sentence that could be derived. You do not have to give a derivation, but you may find it useful to do derivations in your head or on the back of the page to help you find the answer.

If the wrong rule order happens, the case may be assigned to a different noun, or the same noun may get a different case. For example, the accusative case is assigned to the head of an NP object of a clause, but if wh-movement is first, this noun can be moved to become the head of the NP subject of a clause, which would receive a nominative ✓

11. Harder question on islands case marking, see back of pg 11 for example ✓

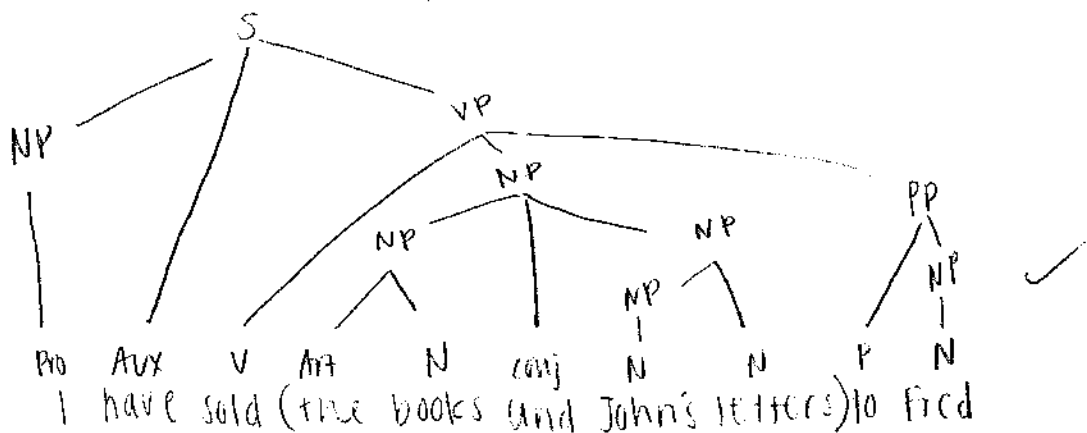
This question is meant to be harder; save it for last.

Sentence (i) is ambiguous:

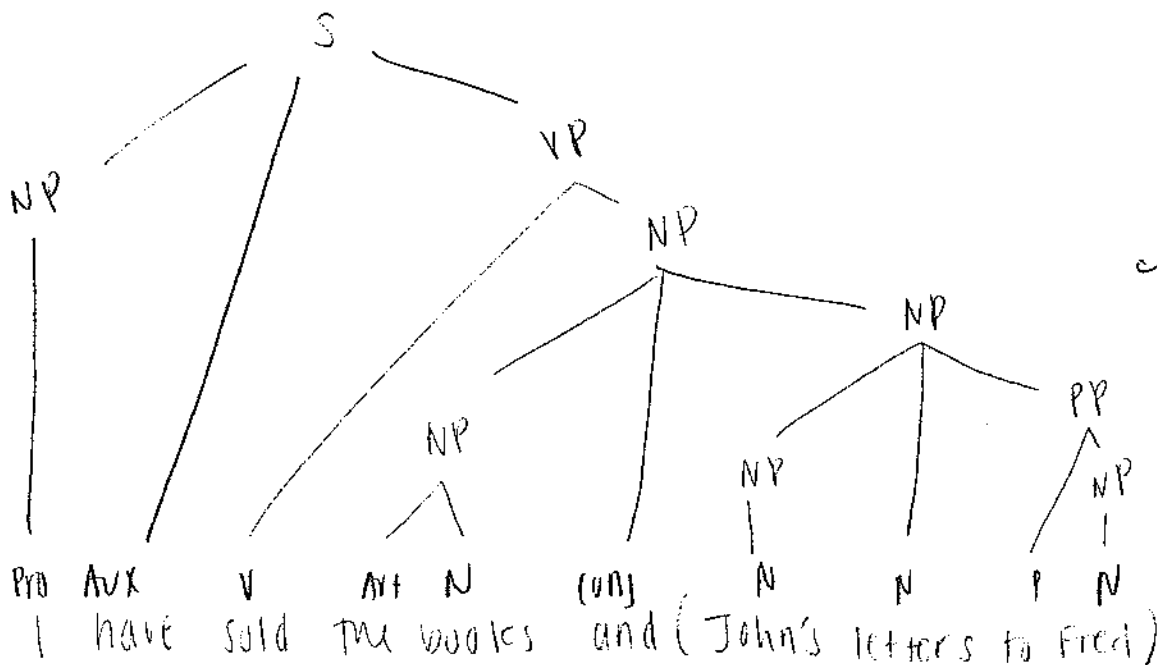
I have sold the books and John's letters to Fred.

Provide phrase structure diagrams for both meanings.

(a) "...even though Fred didn't really want to buy any of this stuff."



(b) "...but I couldn't find a buyer for John's other letters."



c. Note that the ambiguity persists if we make an echo question, substituting *you* for *I* and *who* for *Fred*:

(ii) You have sold the books and John's letters to *who*?

But when we form a Wh-question out of (ii), the ambiguity disappears:

(iii) Who have you sold the books and John's letters to?

This sentence could only be answered with something like "I sold all that stuff to Bill."

Explain clearly why sentence (iii) is ^{NOT} ambiguous in the same way that (i) is. You should be able to give a clear answer in just one sentence. No diagram is needed.

(iii) is not ambiguous because the "who" in deep structure is not within an island, therefore implying that there is a buyer. ✓

====END OF EXAM====