

Answer Key for the Midterm

1. Derivational morphology (5 points)

- a. encase, encircle, encode, encourage, endanger, enfranchise, enlist, enmesh, enrapture, ensnare, entrap, entrench, entwine

$[X]_{Noun} \rightarrow [en [X]_{Noun}]_{Verb}$ *Meaning: "put something into X or a state of X"*

- b. What is, in general, the subcategorization of verbs formed with *en-*? [___ NP]

2. Reduplication (5 points)

numa	‘boat’	numama	‘large boat’
safi	‘yam’	safifi	‘large yam’
la	‘cat’	lala	‘large cat’
roro	‘dog’	rororo	‘large dog’

$[XCV]_{Noun} \rightarrow [[XCV]_{Noun} CV]_{Noun}$
 $\begin{matrix} 1 & 2 & 3 \\ 1 & 2 & 3 \end{matrix}$ $\begin{matrix} 2 & 3 \end{matrix}$ *Meaning: "large N"*

3. Inflectional morphology (20 points)

gata	‘cat-nominative’	gate	‘cat-accusative’	gato	‘cat-dative’
gatas	‘my cat-nom.’	gates	‘my cat-acc.’	gatos	‘my cat-dat.’
gatat	‘your sg. cat-nom.’	gatet	‘your sg. cat.-acc.’	gatot	‘your sg. cat-dat.’
gatar	‘his/her cat-nom.’	gate	‘his/her cat.-acc.’	gato	‘his/her cat.-dat.’
gatasu	‘our cat-nom.’	gatesu	‘our cat-acc.’	gatosu	‘our cat-dat.’
gatatu	‘your-plural cat-nom.’	gatetu	‘your-pl. cat-acc.’	gatotu	‘your pl. cat-dat.’
gataru	‘their cat-nom.’	gateu	‘their cat-acc.’	gatou	‘their cat-dat.’

- a. List the morphemes.

Stem	Case	Possessor Person	Possessor Number
<i>gat</i>	‘ <i>cat</i> ’	- <i>a</i> ‘nominative’	- <i>s</i> ‘first person’
		- <i>e</i> ‘accusative’	- <i>u</i> ‘plural’
		- <i>o</i> ‘dative’	
		- <i>t</i> ‘second person’	
		- <i>r</i> ‘third person’	

- b. Write inflectional rules.

Case Rule

<i>Suffix</i>	- <i>a</i>	when [Case:Nominative]
	- <i>e</i>	when [Case:Accusative]
	- <i>o</i>	when [Case:Dative]

Possessor Person Rule

Suffix -s when [PossessorPerson:1]
 -t when [PossessorPerson:2]
 -r when [PossessorPerson:3, Case:Nominative]

Possessor Number Rule

Suffix -u when [PossessorNumber:Plural]

c. Provide a derivation, of the kind taught in class, for the following two forms.

i. *gataru* ‘their cat-nominative’:

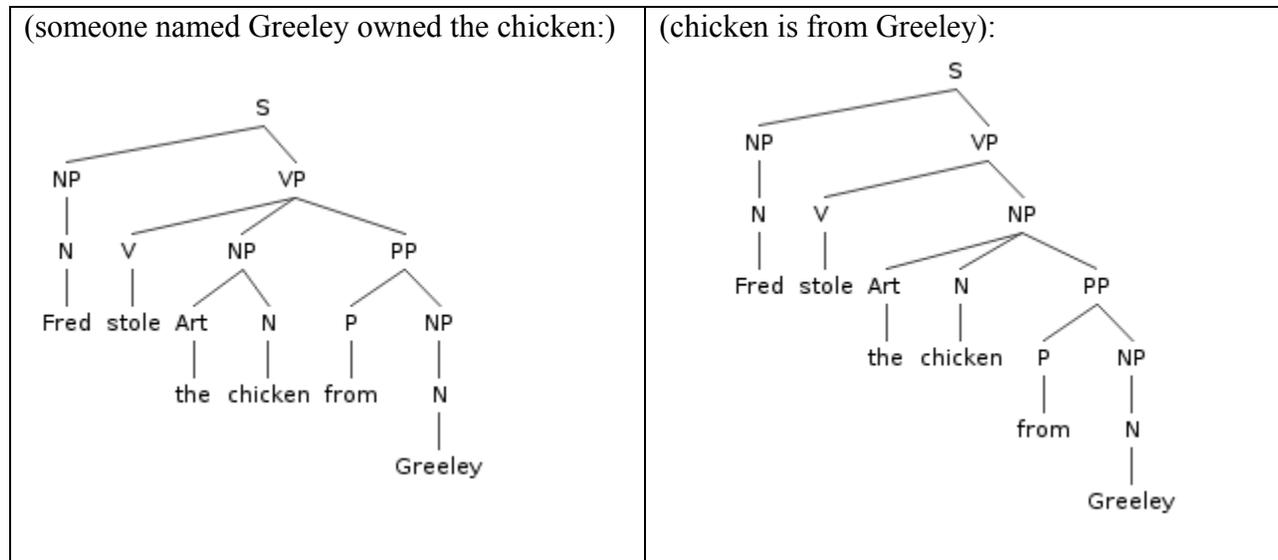
gat [① Case:Nominative, ② PossessorPerson:3, ③ PossessorNumber: Plural]
gata Case Rule ①
gatar Possessor Person Rule (only in nominatives) ②
gataru Possessor Number Rule ③

ii. *gatou* ‘their cat-dative’.

gat [① Case:Dative, ② PossessorPerson:3, ③ PossessorNumber: Plural]
gato Case Rule ①
 — Possessor Person Rule (only in nominatives) ②
gatou Possessor Number Rule ③

4. Parsing - subcategorization (10 points)

a. Provide tree structure diagrams for both meanings of ‘Fred stole the chicken from Greeley’.

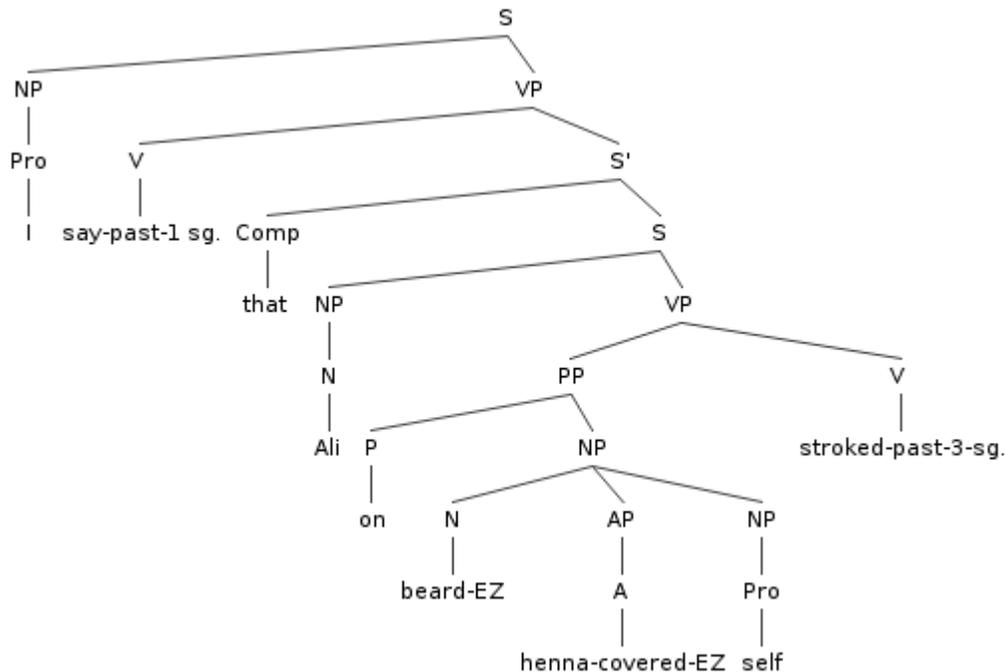


- b. The sentence ‘Fred killed the chicken from Greeley’ can only have the second of these two structures. Explain why this is so.

“Kill” has the subcategorization [___ NP]; that is, no PP (other than the usual place or manner phrases) is allowed. Thus it can’t occur in a tree with PP as a sister, wiping out the first of the two possible structures.

5. Persian phrase structure (5 points)

man goftam ke ali be riş-e hana:bastej-e xod dastkefid
 I say-past-1 sg. that Ali on beard-EZ henna-covered-EZ self stroked-past-3-sg.
 ‘I said that Ali stroked his hennaed beard’



6. Parsing and writing phrase structure rules in a new language (30 points)

- a. Parse, collect phrase structure rules.

2. ra ma lid-um kant
 will Mother song-accusative sing
 ‘Mother will sing a song’

<p>A syntax tree for the sentence 'will Mother sing song-accusative'. The root node S branches into three children: Aux, NP, and VP. Aux branches to the word 'will'. NP branches to N, which branches to 'Mother'. VP branches into two children: NP and V. The inner NP branches to N, which branches to 'song-accusative'. V branches to the word 'sing'.</p>	<p>S → Aux NP VP VP → NP V</p>
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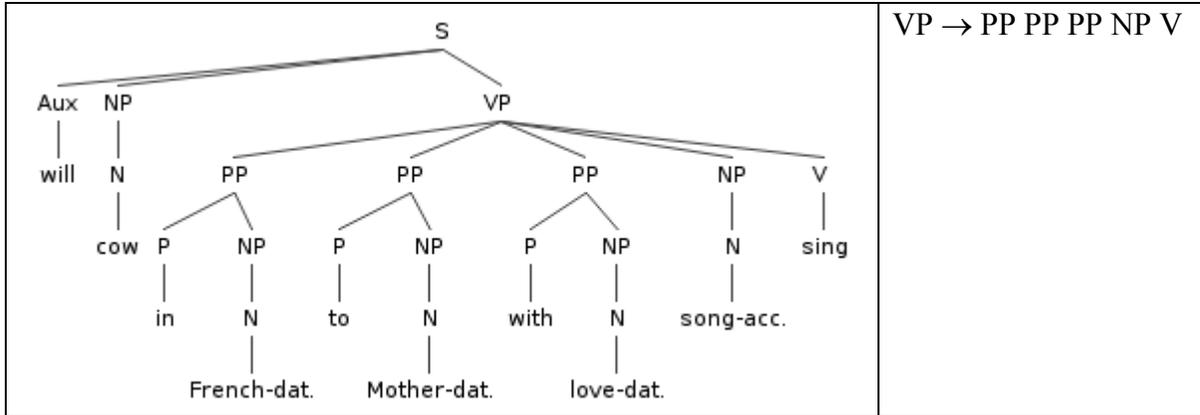
3. zo ma na ku-ni kant
 should mother of cow-dative sing
 'The mother of the cow should sing'

<p>A syntax tree for the sentence 'should mother of cow-dative sing'. The root node S branches into three children: Aux, NP, and VP. Aux branches to the word 'should'. NP branches into two children: N and PP. N branches to 'mother'. PP branches into two children: P and NP. P branches to 'of'. The inner NP branches to N, which branches to 'cow-dat.'. VP branches to V, which branches to 'sing'.</p>	<p>NP → N PP PP → P NP</p>
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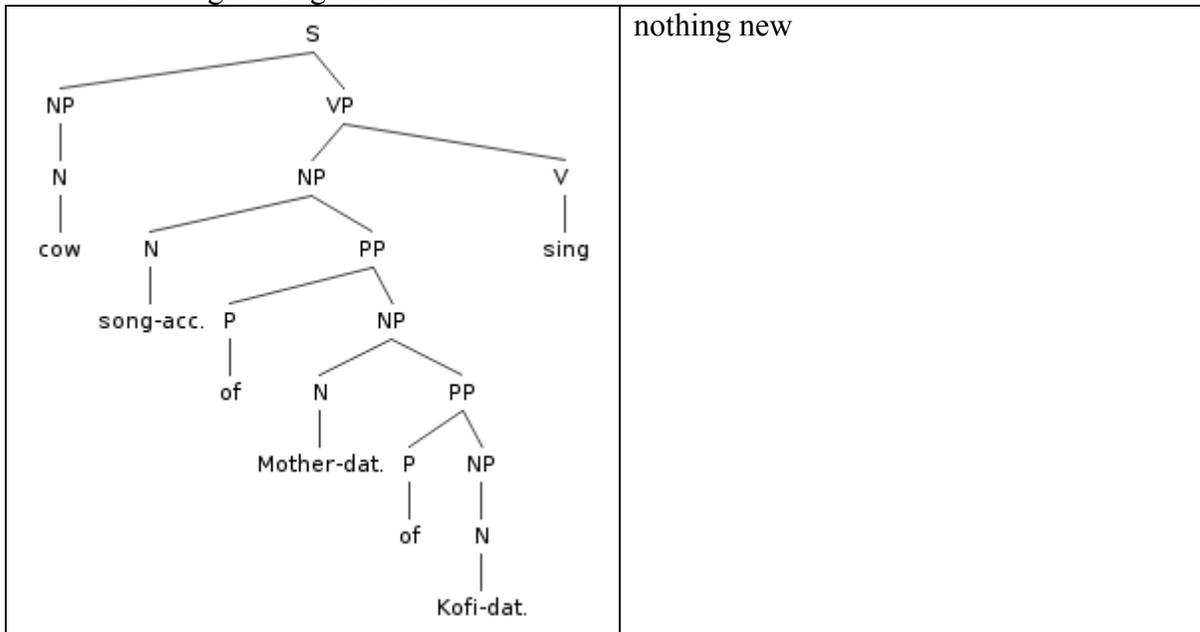
4. pe ku a ma-ni kant
 can cow to mother-dat. sing
 'The cow can sing to Mother'

<p>A syntax tree for the sentence 'can cow to mother-dat. sing'. The root node S branches into three children: Aux, NP, and VP. Aux branches to the word 'can'. NP branches to N, which branches to 'cow'. VP branches into two children: PP and V. PP branches into two children: P and NP. P branches to 'to'. The inner NP branches to N, which branches to 'mother-dat.'. V branches to the word 'sing'.</p>	<p>VP → PP V</p>
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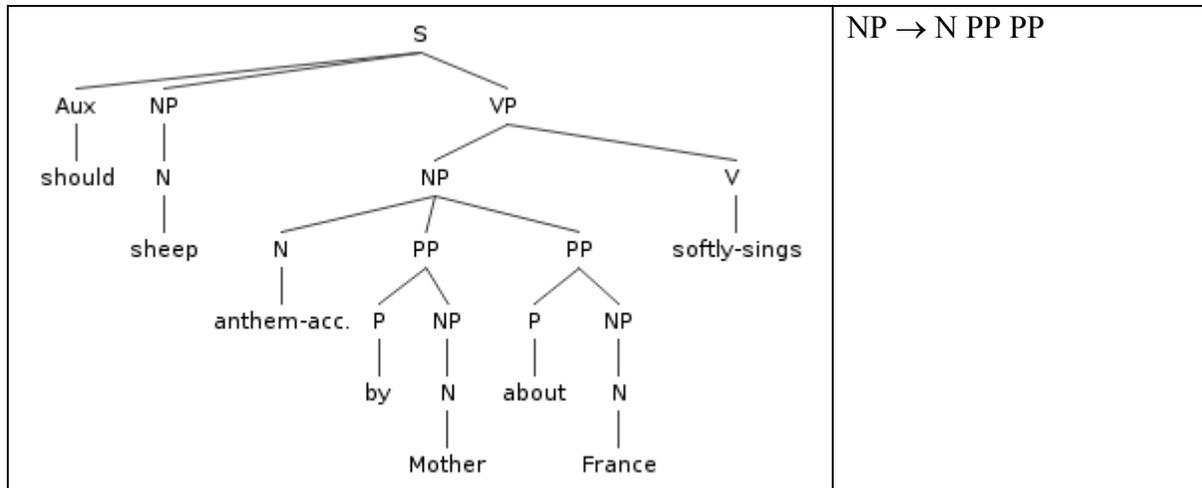
5. ra ku be firanse-ni a ma-ni kon amore-ni lid-um kant
 will cow in French-dat. to Mother-dat. with love-dat. song-acc. sing
 'The cow will sing a song, in French, to Mother, with love.'



6. ku lid-um na ma-ni na Kofi-ni kant
 cow song-acc. of Mother-dat. of Kofi-dat. sing
 'The cow sings a song about Kofi's mother'



7. zo sap antem-um fon ma-ni na Firanes-ni kurun
 should sheep anthem-acc. by Mother about France softly-sings
 'The sheep should softly sing the anthem by Mother about France'



b. Provide a small, compact set of phrase structure rules that generates all seven sentences.

$S \rightarrow (Aux) NP VP$

$NP \rightarrow N (PP)^*$

$VP \rightarrow (PP)^* (NP) V$

$PP \rightarrow P NP$

c. Explain how your phrase structure rules could apply in a “loop” (as taught in class) to generate an infinite number of sentences.

The NP rule introduces PP, and the PP rule introduces NP, so they could keep one applying in alternation to generate an indefinite large NP; and thus (if you include this NP in a sentence) an infinitely large number of sentences.

d. Explain in words which NP’s are marked for accusative case (very short answer).

objects of verbs (or: daughters of VP)

e. Multiple choice: accusative case appears on: x the head of NP, ___ the rightmost word of NP. List an NP from the sentences above that proves this point.

Possible answers:

lidum na ma-ni na Kofi-ni ‘song of Kofi’s mother’, not

**lid na ma-ni na Kofi-ni-um*

antem-um fon ma-ni na Firanes-ni ‘anthem by Mother about France’, not

antem fon ma-ni na Firanes-ni-um

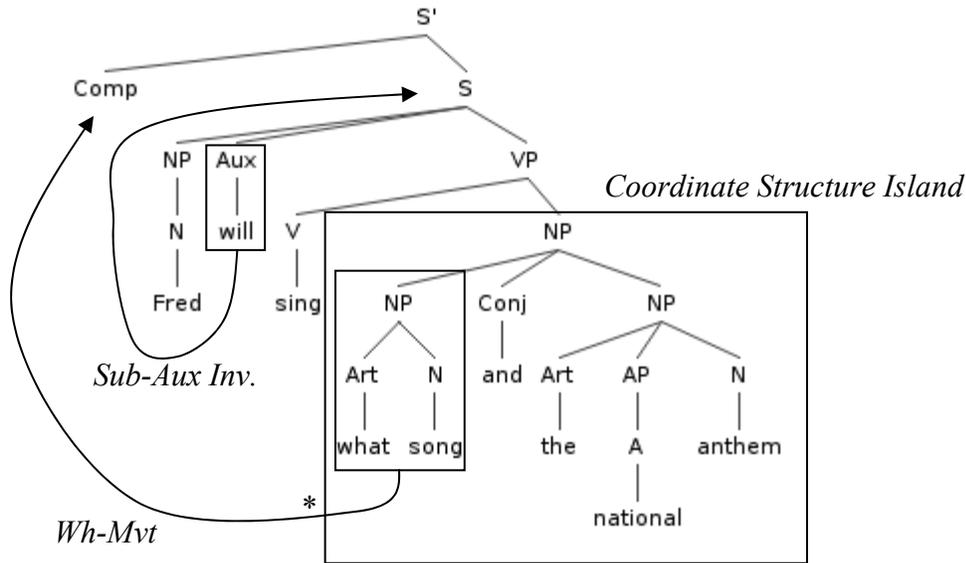
f. State in words which NP’s are marked for dative case (very short answer).

objects of prepositions (or: daughters of PP)

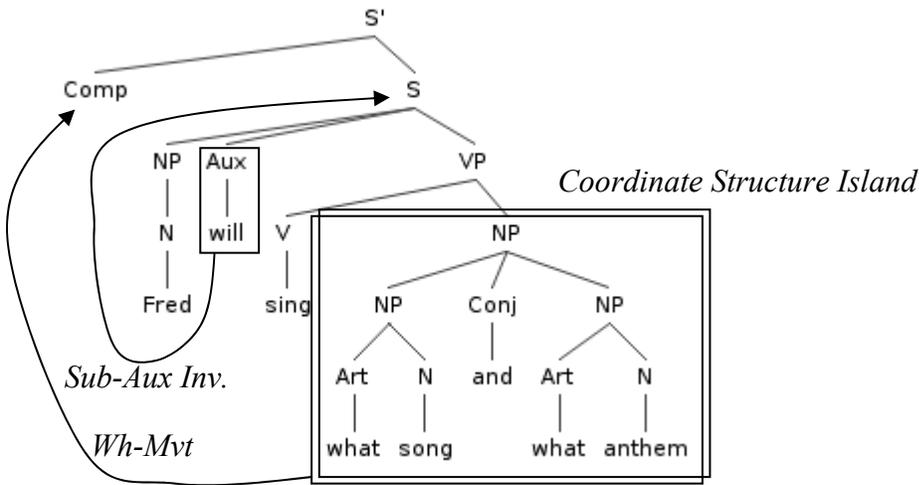
7. Island constraints (15 points)

a. Give a derivation for *What song will Fred sing and the national anthem?

Deep structure, showing Subject-Aux Inversion, Wh-Movement, and the violation of the Coordinate Structure Constraint:



b. The following sentence (What song and what anthem will Fred sing?), though rather similar to the preceding one, is nevertheless grammatical. Explain why.



The derivation extracts the whole island, rather than extracting from inside the island. Only extraction from **within** the island is forbidden by the constraint.

8. Case Marking and Wh- Movement (10 points)

a. kwel lid-um zo ku kant

which song-acc. should cow sing
'Which song should the cow sing?'

b. kwel swin-ni zo ku lidum na kant
which pig-dat. should cow song of sing
'Which pig should the cow sing a song about?'

- a. Give a reason why we would expect to get Accusative case on the wh-phrase in (a) but Dative on the wh-phrase in (b).

*These case markings match up with what we would expect given where these phrases occur in the Deep structure. **kwi lid-um** is the object of the verb **kant**, and **kwi swin-ni** is the object of the preposition **na**.*

- b. Propose an analysis under which would could obtain this case marking.

Answer #1:

Rule ordering: have the case marking rules apply before Wh-Movement. Then we would already have the right case on the Wh-phrase even before it got moved.

Answer #2:

Long distance case marking: write a rule saying that a Wh-phrase in Comp is assigned the same case as its trace. In this analysis, Case Marking must applying after Wh- Movement.