

# Midterm Exam

## 11-721: Grammars and Lexicons

### November 1, 2002

## Instructions

- Do not be alarmed by the length of the exam. In the last problem, there are a lot of examples that illustrate the same thing.
- If you have questions, ask Lori. Ask as many questions as you want.
- Do not communicate with other students, including:
  - Do not talk to other students.
  - Do not show papers to other students.
  - Do not look at other students' papers.
  - Do not communicate with anyone outside of the classroom.

You will fail the exam if you do any of these things.

- You may eat during the exam.
- One person at a time may leave the room to use the bathroom or smoke.
- You may look at any of your own books and papers you have brought with you.

# 1 Using the English grammar rules developed in class

Draw a c-structure and f-structure for the following sentence using the grammar rules and lexicon handed out with this exam.

- (1) Sam was persuaded to be examined.

## 2 What is wrong with these sentences?

For each sentence below circle a reason for failure from the choices given. Use the rules and lexical entries in the grammar that was handed out with the exam. Be sure to cite an equation or a well-formedness condition that fails.

You can circle more than one reason for each sentence. You will get full credit for getting one reason right. You will lose credit for circling extra wrong answers.

Please remember to act like a computer. Follow the parsing algorithm, using the grammar. Human intuition may lead to the wrong answer, especially since the point of failure depends on how the grammar is written.

1. \*Sam ate a sandwich to school.
  - (a) Failure of phrase structure rules.  
Which words can't be parsed?
  - (b) Failure of a unification or constraint.  
Which one?
  - (c) Violation of completeness.  
What is missing?
  - (d) Violation of coherence.  
What is extra?
  
2. \*The cat cat ate a sandwich.
  - (a) Failure of phrase structure rules.  
Which words can't be parsed?
  - (b) Failure of a unification or constraint.  
Which one?
  - (c) Violation of completeness.  
What is missing?
  - (d) Violation of coherence.  
What is extra?

3. \*The cat ate ate a sandwich.
  - (a) Failure of phrase structure rules.  
Which words can't be parsed?
  - (b) Failure of a unification or constraint.  
Which one?
  - (c) Violation of completeness.  
What is missing?
  - (d) Violation of coherence.  
What is extra?
  
4. \*I persuaded Sam go.
  - (a) Failure of phrase structure rules.  
Which words can't be parsed?
  - (b) Failure of a unification or constraint.  
Which one?
  - (c) Violation of completeness.  
What is missing?
  - (d) Violation of coherence.  
What is extra?
  
5. \*A cats lives in the forest.
  - (a) Failure of phrase structure rules.  
Which words can't be parsed?
  - (b) Failure of a unification or constraint.  
Which one?
  - (c) Violation of completeness.  
What is missing?
  - (d) Violation of coherence.  
What is extra?

### 3 Constituent Structure – English

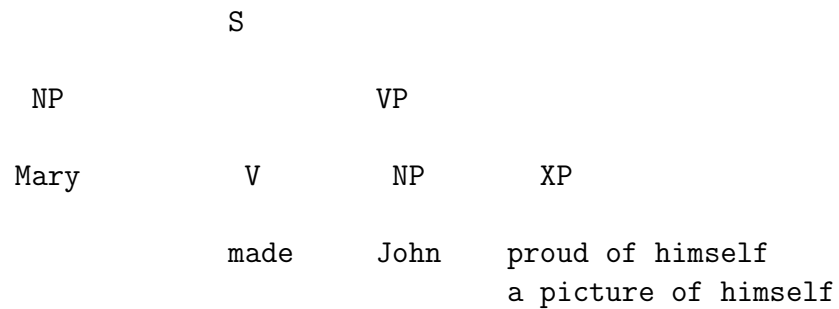
In this exercise we will examine the constituent structure of sentences (2)a and (2)b below:

- (2) a. Mary made John proud of himself.  
 b. Mary made John a picture of himself.

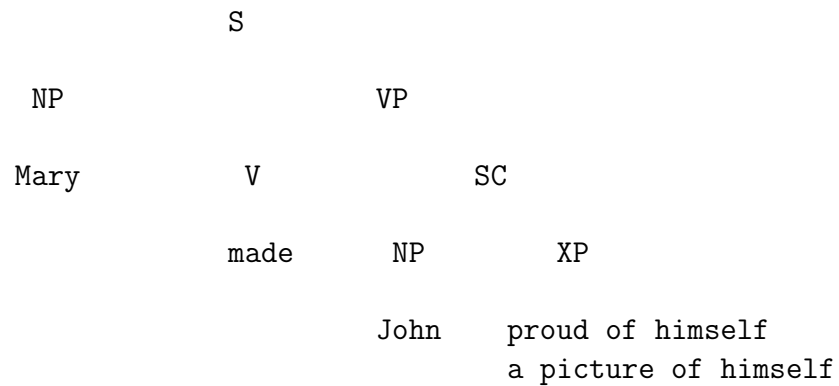
We will consider the two constituent structures below:

- XP can be AP (*proud of himself*) or NP (*a picture of himself*).
- SC is a *small clause* — an NP subject and a predicate that is an NP, AP, or PP.

#### Constituent Structure I:



#### Constituent Structure II:



**Applying tests for constituency:** In the next few tasks you will apply tests for constituency. **Ask me (Lori) for grammaticality judgements after you have applied your tests.** I will not tell you whether you have applied the test correctly, only whether the sentence is grammatical or not.

**Task 1:** Apply a movement test to *John proud of himself*.

**Task 2:** Apply a coordination test to *John proud of himself*.

**Task 3:** Apply a movement test to *John a picture of himself*.

**Task 4:** Apply a coordination test to *John a picture of himself*.

In this section of the problem, you will see how the reference of pronouns and reflexive pronouns relates to this constituency problem.

In English, a reflexive pronoun in a prepositional phrase can refer to either the subject or the object of the sentence.

(3) John(*i*) told Bill(*j*) about himself(*i/j*).

A non-reflexive pronoun cannot refer to an element in the same clause:

(4) John(*i*) told Bill(*j*) about him(*\*j/\*i*)

However a non-reflexive pronoun can refer to an element in a different clause:

(5) Mary(*i*) told John that Bill likes her(*j/i*).

Now consider the following sentences. Use the grammaticality judgements given, even if you don't agree with them.

(6) a.\* Mary made John proud of herself.

b. Mary(*i*) made John proud of her(*i/j*).

c. Mary made John proud of himself.

d. Mary made John(*i*) proud of him(*j/\*i*).

(7) a. Mary made John a picture of herself.

b. Mary(*i*) made John a picture of her(*\*i/j*).

c. Mary made John a picture of himself.

d. Mary made John(*i*) a picture of him(*j/\*i*).

**Task 5:** Fill in the following table. In each box, write:

**Tree 1** if the test supports Tree 1

**Tree 2** if the test supports Tree 2

**Both** if the test results are compatible with both trees

**Neither** if the test results are not compatible with either tree.

	<b>Movement</b>	<b>Coordination</b>	<b>Reflexive</b>	<b>Pronoun</b>
<b>John proud of himself</b>				
<b>John a picture of himself</b>				

**Task 6:** Which tree do you choose for *Mary made John a picture of himself*?

a. **Tree 1**

b. **Tree 2**

**Task 7:** Were some of your results inconsistent with the tree that you chose?

**Task 7a:** If so, why did you choose to ignore them?



Consider the following two f-structures for *Mary made John proud of himself*. MF is a mystery function; You might be biased toward one structure or the other if I used the name of a real grammatical function.

**F-structure 1:**

```

SUBJ  [ PRED  'Mary']

PRED  'make< SUBJ  OBJ  MF >'

OBJ   [ PRED  'John']

MF     PRED      'proud < OBL-of >'
      OBL-of    CASE      OBL-of
              PRED      'of< OBJ >'
              OBJ       [PRED  'reflexive-pronoun']

```

**F-structure 2:**

```

SUBJ  [ PRED  'Mary']

PRED  'make< SUBJ  OBJ  MF >'

OBJ   [ PRED  'John']

MF     SUBJ
      PRED      'proud < SUBJ OBL-of >'
      OBL-of    CASE      OBL-of
              PRED      'of< OBJ >'
              OBJ       [PRED  'reflexive-pronoun']

```

**Task 8:** Choose a constituent structure for *Mary made John proud of himself*:

a. **Tree 1**

b. **Tree 2**

**Task 9:** Choose an f-structure for *Mary made John proud of himself*:

a. **F-structure 1**

b. **F-structure 2**

**Task 10:** Explain your reason for choosing the c-structure that you chose for *Mary made John proud of himself*.

**Task 11:** Explain your reason for choosing the f-structure that you chose for *Mary made John proud of himself*.

## 4 Tests for Subject and Object in Choctaw

Choctaw (Muskogean family) is spoken in Oklahoma (which means Red People in Choctaw). The data is from papers by William Davies, University of Iowa.

### 4.1 Background: Agreement

Choctaw is a pro-drop language. Often, the verb's arguments do not appear as separate noun phrases, but only as agreement affixes. There are nominative, accusative, and dative agreement affixes.

- (8) Is-sa-bashli-tok.  
2NOM-1ACC-cut-PAST  
*You cut me.*

Third person nominative and accusative agreement affixes are null (zero morpheme), and are not shown in the data in this problem. In example (9), there is no agreement marker for the patient (*house*) because it is third person.

- (9) Chokka hachi-kāchi-li-tok.  
house 2PL.DAT-sell-1NOM-PAST  
*I sold you (pl.) the house.*

### 4.2 Background: Case

Choctaw has two case markers that appear on noun phrases, nominative and oblique (everything that is not nominative). Nominative case marking is obligatory and oblique case marking is optional.

- (10) Ofi-t katos-ã kopoli-tok.  
dog-NOM cat-DET.OBL bite-PAST  
*The dog bit the cat.'*

- (11) Soba-t ãpa-tok.  
horse-NOM eat-PAST  
*The horse ate.*

### 4.3 Background: Focus Constructions

Examples (12) and (13) show two focus constructions. In both examples, the nominative NP is marked with a focus marker.

- (12) An-a-t-o                      hoshi pisa-li-tok.  
1-DET-NOM-CONTR bird see-1NOM-PST  
*I saw the bird.*

- (13) Ofi-a-kosh                      katos kopoli-tok.  
dog-DET-FOCUS.NOM cat bite-PAST  
*The dog was the one that bit the cat.'*

Example (14) shows an oblique NP in a focus construction.

- (14) Katos-a-kō                      ofi-t              kopoli-tok.  
cat-DET-FOCUS.OBL dog-NOM bite-PAST  
*It was the cat that the dog bit.'*

### 4.4 Case marking and agreement for non-agents

Agents of transitive verbs have nominative case marking and trigger nominative agreement marking on the verb. However, some non-agent arguments behave differently.

**Question 1:** What is the agreement marker for the patient argument in sentence (15)?

- (15) Sa-ttola-tok.  
1ACC-fall-PAST  
*I fell.*

**Question 2:** What is the case marker on the patient noun phrase in Examples (16) and (17)?

**Question 3:** Why doesn't the verb have a marker agreeing with the patient in (16)?

(16) Chim-alla-t            ittola-tok.  
2POSS-child-NOM fall-PAST  
*Your child fell.*

(17) Pishn-a-kosh            pi-kapassa.  
1PL-DET-FOCUS.NOM 1PL.ACC-cold  
*We are the ones who are cold.*

We will follow Van Valin's terminology in identifying three kinds of experiencers — cognizers, perceivers, and emoters.

**Question 4:** What is the agreement marker for the cognizer in Example (18)a?

**Question 5:** What is the agreement marker for the cognizer in Example (18)b?

(18) a. Shokha anōpa is-yimmi    hō?  
story                    2NOM-believe Q  
*Do you believe the story?*

b. Shokha anōpa chi-yimmi    hō?  
story                    2ACC-believe Q  
*Do you believe the story?*

**Question 6:** What is the agreement marker for the cognizer in Example (19)a?

**Question 7:** What is the agreement marker for the stimulus in Example (19)a?

**Question 8:** What is the agreement marker for the cognizer in Example (19)b?

**Question 9:** What is the agreement marker for the stimulus in Example (19)b?

(19) a. Chi-banna-li.  
2ACC-want-1NOM  
*I want you.*

b. Chi-sa-banna.  
2ACC-1ACC-want  
*I want you.*

**Question 10:** What is the agreement marker for the cognizer in Example (20)?

**Question 11:** What is the agreement marker for the stimulus in Example (20)?

**Question 12:** What is the case marker for the cognizer in Example (20)?

(20) Chishn-a-kosh shokha anõpa chi-anoktklo.  
2-DET-FOC.NOM story 2ACC-doubt  
*You are the one who doubts the story.*

**Question 13:** What is the agreement marker for the cognizer in Example (21)?

**Question 14:** What is the agreement marker for the stimulus in Example (21)?

**Question 15:** What is the case marker for the cognizer in Example (21)?

(21)    An-a-t-o                    chi-sa-banna.  
          1-DET-NOM-CONTR 2ACC-1ACC-want  
          I *want you.*

**Question 16:** Summarize. What case markers can appear on cognizer NPs?

**Question 17:** Summarize. What agreement markers can be triggered by cognizer NPs?

This page contains more examples of cognizers and stimuli. There are no new facts on this page.

- (22) a. Chi-si-anoktoklo.  
2ACC-1ACC-doubt  
*I doubt you.*
- b. Shokha anõpa chi-anokfohka hõ?  
Story 2ACC-understand Q  
*Do you understand the story?*
- c. chi-pi-anokfohka.  
2ACC-1PL.ACC-understand  
*We understand you?*
- d. Sa-chi-anokfohka hõ?  
1ACC-2ACC-understand Q  
*Do you understand me?*



## 4.5 Dative-Accusative Alternation

In Example (23)a, the verb agrees with *horse* with a zero accusative agreement marker.

**Question 18:** What is the agreement marker for *horse* in (23)b?

- (23) a. Issoba shilli-li-tok.  
horse comb-1NOM-PAST  
*I combed the horse.*
- b. Issoba  $\tilde{i}$ -shilli-li-tok.  
horse 3DAT-comb-1NOM-PAST  
*I combed the horse.*

**Question 19:** What is the agreement marker for the agent in (24)a?

**Question 20:** What is the agreement marker for the patient in (24)a?

**Question 21:** What is the agreement marker for the patient in (24)b?

- (24) a. Chi-alikchi-l-a:- $\tilde{c}h\tilde{i}$ .  
2ACC-doctor-1NOM-IRR-FUT  
*I will doctor you.*
- b. Chim-alikchi-l-a:- $\tilde{c}h\tilde{i}$ .  
2DAT-doctor-1NOM-IRR-FUT  
*I will doctor you.*

## 4.6 Emotion Verbs

**Question 22:** What agreement markers can be triggered by emoters in the examples on this page?

**Question 23:** What agreement markers can be triggered by stimuli of emotion verbs in the examples on this page?

- (25) a. Is-sã-nokkilli hõ?  
2NOM-1DAT-hate Q  
*Do you hate me?*
- b. ã-chi-nokkilli hõ?  
1DAT-2ACC-hate Q  
*Do you hate me?*
- (26) a. Chi~nokhãklo-li.  
2DAT-pity-1NOM  
*I pity you.*
- b. Chi~sa-nokhãklo.  
2DAT-1ACC-pity  
*I pity you.*
- (27) a. Nita-ma ã-noksho:pa-li.  
bear-DET 3DAT-fear-1NOM  
*I am afraid of the bear.*
- b. Nita-ma ã-sa-noksho:pa.  
bear-DET 3DAT-1ACC-fear  
*I am afraid of the bear.*

**Question 24:** What case marker can be used for an emoter NP?

- (28) a. An-a-kosh                      chĩ-sa-palata.  
1-DET-FOCUS.NOM 2DAT-1ACC-miss.  
*I am the one who misses you.*
- b.\* An-a-kõ                              chĩsa-palata.  
1-DET-FOCUS.OBL 2DAT-1ACC-miss.  
*I am the one who misses you.*

## 4.7 Test 1: Possessor Ascension

Example (30) illustrates *possessor ascension*. In this construction, a possessor of a noun phrase “ascends” up to become an argument of the verb. English does not really have possessor ascension. The closest thing we have is shown in (29). In (29)a, *my* is a possessor of *arm*. It is not an argument of *hit*. In (29)b, *me* is an argument of *hit*.

- (29) a. He hit my arm.  
b. He hit me on the arm.

**Question 25:** Does the verb have an agreement marker for *my* in Example (30)a?

**Question 26:** Does the verb have an agreement marker for *my* in Example (30)b?

**Question 27:** What is the verb agreement marker for *my* in Example (30)b?

- (30) a. Ofi-t      ã-katos      kopoli-tok.  
dog-NOM 1POSS-cat bite-PAST  
*The dog bit my cat.*'
- b. Ofi-t      katos ã-kopoli-tok.  
dog-NOM cat 1DAT-bite-PAST  
*The dog bit my cat.*'
- (31) a. Chim-issoba shilli-li-tok.  
2POSS-horse comb-1NOM-PAST  
*I combed your horse.*
- b. Issoba chí-shilli-li-tok.  
horse 2DAT-comb-1NOM-PAST  
*I combed your horse.*

It is important to notice that (30)b cannot mean *My dog bit the cat*. That is, only the possessor of the object can ascend. A possessor of the subject cannot ascend. However, the possessor of the subject of an intransitive verb can ascend.

- (32) a. Am-alla-t           ĩpa-tok.  
 1POSS-child-NOM eat-PAST  
*My child ate.*
- b. alla-t           am-ĩpa-tok.  
 child-NOM 1DAT-eat-PAST  
*My child ate.*

Examples (33) and (34) show possessor ascension with cognition verbs.

**Question 28:** Which noun phrases can the possessor ascend from (cognizer or stimulus)?

- (33) a. Alla-t           ã-shoka anõpa anoktoklo.  
 child-NOM 1POSS-story   doubt.  
*The child doubts my story.*
- b. Am-alla-t           shoka anõpa anoktoklo.  
 1POSS-child-NOM story           doubt.  
*My child doubts the story.*
- c. alla-t           shoka anõpa am-anoktoklo.  
 child-NOM story           1DAT-doubt.  
*My child doubts the story.* OR *The child doubts my story.*
- (34) Issoba-ya-t           tãchi ã-banna.  
 horse-DET-NOM corn 1DAT-want  
*The horse wants my corn.* OR *My horse wants corn.*

Examples (35) and (36) show possessor ascension with emotion verbs.

**Question 29:** Examples (35) and (36) show possessor ascension from which argument (emoter or stimulus)?

(35) a. Am-alla-t            chĩ-nokhãklo.  
1POSS-child-NOM 2DAT-pity  
*My child pities you.*

b. Alla-t            ã-chĩ-nokhãklo.  
child-NOM 1DAT-2DAT-pity  
*My child pities you.*

(36) a. Am-ofi-t            chĩ-komõta.  
1POSS-dog-NOM 2DAT-fear  
*My dog is afraid of you.*

b. Ofi-t            ã-chĩ-komõta.  
dog-NOM 1DAT-2DAT-fear  
*My dog is afraid of you.*

**Question 30:** Examples (37)–(40) show possessor ascension from patients and stimuli. What is the agreement marker of the NP that the possessor ascends from?

- (37) a. Chim-issoba  $\tilde{i}$ -shilli-li-tok.  
 2POSS-horse 3DAT-comb-1NOM-PAST  
*I combed your horse.*
- b. Issoba chim- $\tilde{i}$ -shilli-li-tok.  
 horse 2DAT-3DAT-comb-1NOM-PAST  
*I combed your horse.*
- (38) a. Chim-ofi  $\tilde{i}$ -nokkilli-li.  
 2POSS-dog 3DAT-hate-1NOM  
*I hate your dog.*
- b. Ofi chim- $\tilde{i}$ -nokkilli-li.  
 dog 2DAT-3DAT-hate-1NOM  
*I hate your dog.*
- (39) a. Ch $\tilde{i}$ -chokka  $\tilde{i}$ -pi-noksho:pa.  
 2POSS-house 3DAT-1PL.ACC-fear  
*We are afraid of your house.*
- b. chokka chim- $\tilde{i}$ -pi-noksho:pa.  
 house 2DAT-3DAT-1PL.ACC-fear  
*We are afraid of your house.*
- (40) a. Ch $\tilde{i}$ -katos  $\tilde{i}$ -sa-nokhāklo.  
 2POSS-cat 3DAT-1ACC-pity  
*I feel sorry for your cat.*
- b. katos chim- $\tilde{i}$ -sa-nokhāklo.  
 cat 2DAT-3DAT-1ACC-pity  
*I feel sorry for your cat.*

## 4.8 Switch Reference and Same Subject

The sentences in this section illustrate conjoined sentences (with no conjunction reduction). There are two special morphemes: SS means that the two conjoined clauses have the same subject. SR means that the two conjoined clauses have different subjects.

**Question 31:** Why is sentence (41)b ungrammatical?

**Question 32:** Why is sentence (42)b ungrammatical?

(41) a. Tobi apa-li-*cha* oka ishko-li-tok.  
beans eat-1NOM-SS water drink-1NOM-PAST  
*I ate beans and drank water.*

b.\* Tobi apa-li-*na* oka ishko-li-tok.  
beans eat-1NOM-SR water drink-1NOM-PAST  
*I ate beans and drank water.*

(42) a. Tobi apa-li-*na* t̄achi ish-pa-tok.  
beans eat-1NOM-SR corn 2NOM-eat-PAST  
*I ate beans and you ate corn.*

b.\* Tobi apa-li-*cha* t̄achi ish-pa-tok.  
beans eat-1NOM-SS corn 2NOM-eat-PAST  
*I ate beans and you ate corn.*



**Question 32:** What is the semantic role of the subject of *afraid* in (43)?

**Question 33:** What is the agreement marker of the subject of *afraid* in (43)?

**Question 34:** Why is (43)b ungrammatical?

(43) a. Nita-ma   ĩ-noksho:pa-li-cha   ĩ-bali:li-li-tok.  
bear-DET 3DAT-fear-1NOM-SS 3DAT-run-1NOM-PAST  
*I was afraid of the bear and ran from it.*

b.\* Nita-ma   ĩ-noksho:pa-li-na   ĩ-bali:li-li-tok.  
bear-DET 3DAT-fear-1NOM-SR 3DAT-run-1NOM-PAST  
*I was afraid of the bear and ran from it.*

**Question 35:** What is the agreement marker of the subject of *afraid* in (44)?

**Question 36:** What is surprising about (44)b?

(44) a. Nita-ma   ĩ-sa-noksho:pa-cha   ĩ-bali:li-li-tok.  
bear-DET 3DAT-1ACC-fear-SS 3DAT-run-1NOM-PAST  
*I was afraid of the bear and ran from it.*

b. Nita-ma   ĩ-sa-noksho:pa-na   ĩ-bali:li-li-tok.  
bear-DET 3DAT-1ACC-fear-SR 3DAT-run-1NOM-PAST  
*I was afraid of the bear and ran from it.*

More examples. No new facts in (45)–(47).

- (45) a. Sa-hohchafo-*cha* tobi nonachi-li-tok.  
1ACC-hungry-SS beans cook-1NOM-PAST  
*I was hungry and cooked some beans.*
- b. Sa-hohchafo-*na* tobi nonachi-li-tok.  
1ACC-hungry-SR beans cook-1NOM-PAST  
*I was hungry and cooked some beans.*
- (46) a. Chĩ-shokha anõpa si-anoktoklo-*cha* chim-anoli-li-tok.  
2POSS-story 1ACC-doubt-SS 2DAT-tell-1NOM-PAST  
*I doubted your story and told you so.*
- b. Chĩ-shokha anõpa si-anoktoklo-*na* chim-anoli-li-tok.  
2POSS-story 1ACC-doubt-SR 2DAT-tell-1NOM-PAST  
*I doubted your story and told you so.*
- (47) a. Soba sa-banna-*cha* chõpa-li-tok.  
horse 1ACC-want-SS buy-1NOM-PAST  
*I wanted a horse and bought one.*
- b. Soba sa-banna-*na* chõpa-li-tok.  
horse 1ACC-want-SR buy-1NOM-PAST  
*I wanted a horse and bought one.*

## 4.9 Another Test

**Question 37:** What behavioral property of subjects is illustrated in (48)b? (This is one that you are familiar with.) The morpheme COMP means that the verb is a complement of another verb.

- (48) a. Mary ish-ahpal-a:-ya-t            ish-ahni.  
      Mary 2NOM-kiss-IRR-COMP-SS 2NOM-think.  
      *You think you should kiss Mary.*
- b. Mary ahpal-a:-ya-t            ish-ahni.  
      Mary kiss-IRR-COMP-SS 2NOM-think.  
      *You think you should kiss Mary.*

**Question 38:** What is the agreement marking for cognizers and emoters of the embedded clause in (49)–(51)?

**Question 39:** Do they pass the test for subjecthood illustrated in (48)b?

- (49) a. Sa-nayokpa-ka-t ikha:na-li.  
1ACC-happy-COMP-SS know-1NOM  
*I know I am happy.*
- b. Nayokpa-ka-t ikha:na-li.  
happy-COMP-SS know-1NOM  
*I know I am happy.*
- (50) a. Shokha anõpa chi-anoktoklo-ka-t ish-ikha:na.  
story 2ACC-doubt-COMP-SS 2NOM-know  
*You know you doubt the story.*
- b. Shokha anõpa anoktoklo-ka-t ish-ikha:na.  
story doubt-COMP-SS 2NOM-know  
*You know you doubt the story.*
- (51) a. Chi-si-anokfohka-ka-t ahni-li.  
2ACC-1ACC-understand-COMP-SS think-1NOM  
*I think I understand you.*
- b. Chi-anokfohka-ka-t ahni-li.  
2ACC-understand-COMP-SS think-1NOM  
*I think I understand you.*

## 4.10 Reflexive Pronouns

**Question 40:** What can Choctaw reflexive pronouns refer to (subject, object, recipient)?

(52) Ili-bashli-li-tok.  
REFL-cut-1NOM-PAST  
*I cut myself.*

(53) a. Hattak-a-t      alla-yã      ilĩkãchi-tok.  
man-DET-NOM child-DET.OBL REFL.DAT-sell-PAST  
*The man(i) sold the child(j) to himself(i/\*j).*

b. John holisso ilim-ĩ-kaãchi-li-tok.  
John book REFL.DAT-3DAT-sell-1NOM-PAST  
*I sold the book to John for myself/\*himself.*

**Question 41:** In the a sentences of (54)–(57) what is the agreement marker of the cognizer or emoter?

**Question 42:** Can the cognizers and emoters in the a sentences be antecedents of reflexive pronouns?

**Question 43:** In the b sentences of (54)–(57) what is the agreement marker of the cognizer or emoter?

**Question 44:** Can the cognizers and emoters in the b sentences be antecedents of reflexive pronouns?

(54) a. Ish-ili-banna.  
2NOM-REFL-want  
*You want yourself.*

- b. ili-chi-banna.  
REFL-2ACC-want  
*You want yourself.*
- (55) a. Il-ili-yimmi.  
1PL.NOM-REFL-believe  
*We believe ourselves.*
- b. Ili-pi-yimmi.  
REFL-1PL.ACC-believe  
*We believe ourselves.*
- (56) a. Iĩ-komõta-li.  
REFL-fear-1NOM  
*I fear myself.*
- b. Iĩ-sa-komõta.  
REFL-1ACC-fear  
*I fear myself.*
- (57) a. Iĩ-nokhãklo-li.  
REFL-pity-1NOM  
*I feel sorry for myself.*
- b. Iĩ-sa-nokhãklo.  
REFL-1ACC-pity  
*I feel sorry for myself.*

## 4.11 Summarize

Summarize your findings about the behavior of cognizers and emoters with accusative verb agreement.

**Question 45:** Do they act like subjects with respect to possessor ascension?

**Question 46:** Do they act like subjects with respect to switch reference?

**Question 47:** Do they act like subjects in Section ???

**Question 48:** Do they act like subjects with respect to reflexive pronouns?