

*INTD0111A/ARBC0111A: The Unity and Diversity of Human Language*

*Assignment #2 (due on Friday October 13 by 5pm, either by e-mail or by hand in my office at RAJ Room B03—you can just leave it in the black organizer dedicated to the course outside my office)*

*Instructions: This homework assignment consists of five exercises, some of which have subquestions (typically named A, B, C, etc.). Read each exercise carefully and make sure you answer all the questions. The whole assignment is worth 100 points (and 10% of your overall grade in the course, so please turn in “neat” work). The number of points each question is worth is given next to the question/subquestion.*

*Exercise #1*

Consider the following data from three human languages named *alpha*, *beta*, and *gamma*:

*Language alpha*

- (1) a. dèg khon níi kamlang kin  
boy classifier this progressive eat  
“This boy is eating.”  
b. mǎa tua nán kin khâaw  
dog classifier that eat rice  
“That dog ate rice.”

*Language beta*

- (2) a. m-toto a-li-vunja ki-kombe  
classifier-child he-past-break classifier-cup  
“The child broke the cup.”  
b. wa-toto wa-na-vunja vi-combe  
classifier-child they-present-break classifier-cup  
“The children break the cups.”

*Language gamma*

- (3) nakita ni Pedro-ng puno na ang bus  
saw article Pedro-that full already topic marker bus  
“Pedro saw that the bus was already full.”

**(Important Note:** The italicized words in the glosses are used in their technical grammatical sense, not in their literal meanings in English. So, “*progressive*” refers to the grammatical marker that indicates that an event is “in progress”; “*past* and “*present*” refer to familiar tenses; “*classifier*” refers to a marker associated with a noun in that particular language; “*article*” refers to words such as “the” in English, and “*topic marker*” refers to markers that signal the topic in the sentence.)

*Now, answer questions A and B below:*

- A. State at least three grammatical differences between English and each of the above languages on the basis of the data given. Just “surface” differences. Nothing technical here. (15 points)
- B. On the basis of the given data, indicate the position of each of the three languages on the index of synthesis for morphological typology. (5 points)

***Exercise #2***

Consider the following data from an anonymous language, which we’ll call “Mysterica” for convenience:

- (4) a. La?allei    doe?    injo    iBaso  
          took        money    the     Baso  
          “Baso took the money.”
- b. nra?bai    sapon    injo  
          collapsed    house    the  
          “The house collapsed.”
- c. Lataroi    doe?    injo    ri        lamari    injo    iBaso  
          put        money    the    in        cupboard    the    Baso  
          “Baso put the money in the cupboard.”

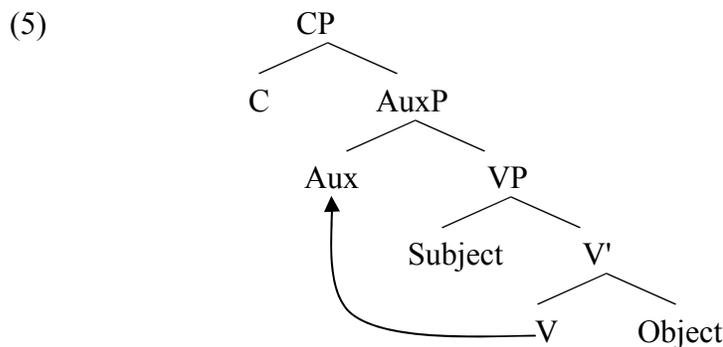
*Now, answer questions A, B, C, and D, below:*

- A. On the basis of these sentences, what do you think is the basic word order in Mysterica? (5 points)
- B. What parameters among those we talked about in class and discussed in your textbook are relevant for Mysterica? What are the settings for these parameters? (5 points)
- C. We have talked about several syntactic heads and their complements in class. These are V, P, N, Aux, and C. Looking at the data above from Mysterica, you should notice that there is another head we should add to this inventory. What is that head? What is its complement? Write a phrase structure rule for the phrase of that head (as we did in class for VP, for example: “VP → V NP”). Now, does that head pose any particular problems to the parametric settings you arrived at in your answer to question B? Explain how. (10 points)

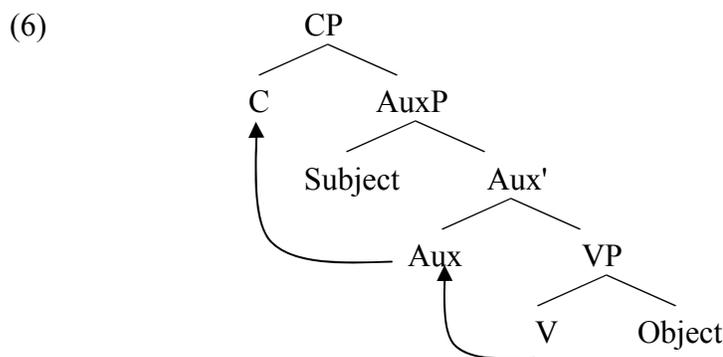
- D. Write a mini phrase structure grammar for Mysterica (i.e., with rewriting rules like the ones we did for English and Japanese in class). Then, use this mini-grammar to draw tree structures for each of the above sentences. (*Note: You will need to use the phrase structure rule you created in Part C as well as create a phrase structure rule that we did not mention in class. Be creative, but within the “rules”!*) (15 points)

**Exercise #3**

In our discussion of VSO languages like Welsh, we argued that the VSO order is derived through the interaction between the subject placement parameter and the verb attraction parameter: Specifically, in Welsh-type languages the subject is inside the VP, and V moves up to Aux, generating the surface VSO order, as shown in the following tree diagram:



An alternative analysis, however, would be to derive the VSO order in the same way we analyzed the verb-second (V2) effect in languages like German, i.e., by keeping the subject in the specifier of AuxP, but raising the verb all the way up to C, as in the following tree structure:



Of course, for the “V2 analysis” to work for Welsh, we will have to assume that Welsh is parametrically different from German in that it does not require the specifier of CP to be filled, but such an analysis should still get us the desired surface VSO word order.

Now, consider the following data from Irish, a Welsh-type language:

- (7) a. Chonaic Seán an madra  
 see(past) Sean the dog  
 “Sean saw the dog.”
- b. \*Seán chonaic an madra  
 John see(past) the dog
- c. Ceapaim go bhfaca Seán an mdara  
 think(present.1sg) that see(past) Sean the dog  
 “I think that Sean saw the dog.”
- d. \*Ceapaim go Seán bhfaca an mdara  
 think(present.1sg) that Sean see(past) the dog

And here’s the data from German that we discussed in class:

- (8) a. Ich las schon letztes Jahr diesen Roman  
 I read already last year this book
- b. Diesen Roman las ich schon letztes Jahr  
 this book read I already last year
- c. Schon letztes Jahr las ich diesen Roman  
 already last year read I this book

And two more German sentences from Assignment #1:

- (9) a. Hans schlug den Ball  
 Hans hit the Ball  
 “Hans hit the ball.”
- b. Ich denke daß Hans den Ball geschlagen hat  
 I think that Hans the Ball hit has  
 “I think that Hans hit the ball.”

***Now, answer the following question:***

On the basis of both the German and the Irish data given above, is it possible to analyze VSO order in terms of the V2 parameter? In other words, do you think the structure in (5) is the only correct analysis, or could (6) be a correct analysis as well? If you think that only one of the two analyses is correct, state which one and explain why. (15 points)

#### **Exercise #4**

In class and in your textbook, it has been proposed that English and French differ from Welsh with regard to the subject placement parameter: In English and French, the subject is in the specifier of AuxP; in Welsh, the subject is in the specifier of VP. Now consider these further data from both English and French:

- (10) a. All the children have seen that movie.  
b. The children have all seen that movie.
- (11) a. Tous les enfants ont vu ce film  
all the children have seen that movie  
b. Les enfants ont tous vu ce film  
the children have all seen that movie

Now, **answer questions A and B below**:

- A. Under the assumption that words such as “all” in English and “tous” in French have to be part of the NP they are modifying, what problem do these data raise for the formulation of the subject placement parameter as we discussed it in class? (*Hint*: Is it possible to draw a tree for the (b) sentences in (10-11) given our current formulation of the subject placement parameter?) (10 points)
- B. If the data do pose a problem for the subject placement parameter, can you suggest a reformulation of the parameter, so that we can account for these extra facts? Remember, though, that your reformulation of the subject placement parameter still needs to account for how English and French are different from Welsh. (10 points)

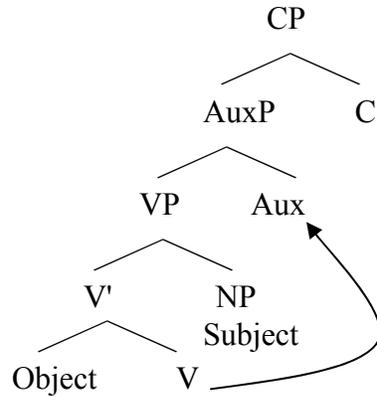
#### **Exercise #5**

Nadëb is an OSV language, as shown by the following example:

- (12) Samũũy yi qa-wùh  
howler-monkey people eat  
“People eat howler-monkeys.”

At one point in class discussion, we thought we had an account for the existence of this basic word order in human language. As you might still remember, we managed to derive Nadëb from Hixkarayana by low subject placement coupled with verb attraction (i.e., moving V up to Aux), as shown in the following diagram:

(13)



But as Emily noted in class, once we discarded the original analysis for Hixkarayana (for good reasons), that account for Nadëb is now gone. So, we need a new explanation for why OSV languages exist, even if so rarely.

Here's what you're supposed to do. First, forget everything we said about Nadëb in class regarding its parameter settings, including its head directionality. Start from scratch, from the head directionality parameter down to any parameters or rules of grammar that we talked about. Suppose also there is no more data from the language than the simple sentence we have above. Now, assuming all this, propose an account for Nadëb that does two things: (a) accounts for the surface OSV order, and (b) accounts for the extreme rarity of this language type. (10 points)

**Good luck!**