Psych156A/ Ling150
Spring 2012
Review Questions: Phrases

(1) Terms/concepts to know: phrases, optional phrases, repeated phrases, moved phrases, experimental condition, control condition, identifying categories, identifying phrases

(2) Describe one way you could tell that the phrase "the girl who danced with the goblin king in the crystal ballroom" is a noun phrase. Make sure to be specific.

(3) Why do optional phrases in a language alter the transitional probabilities between phrases in general?

(4) Is it reasonable for Thompson & Newport (2007) to use adults in their experiment, which is meant to explain how children identify phrases in language? Explain both why this may be reasonable and why this may be unreasonable.

(5) Given the experiments by Hudson Kam & Newport (2005) and (2009), how do adults differ from children in making generalizations from inconsistent data?

(6) Under what circumstances are subjects in the Thompson & Newport (2007) experiment supposed to think that two categories (ex: category A and category B) form a phrase in the artificial language if these subjects can track transitional probability?

(7) In the Thompson & Newport (2007) experiment, were the transitional probabilities between phrases in the experimental conditions higher or lower than the transitional probabilities within phrases? What about for the control conditions?

(8) In the Thompson and Newport (2007) experiment, did the control subjects ever do as well as the experimental condition subjects at being able to *categorize* the novel words into abstract categories (like A, B, C, etc.)?

(9) How do we know that experimental condition subjects in the Thompson & Newport (2007) experiment were better able to group categories into their correct phrases than the control condition subjects?

(10) Did experimental condition subjects in Thompson & Newport (2007) always perform much better than control condition subjects when identifying *phrases* of the artificial language?

(11) What happened when Thompson & Newport (2007) exposed experimental condition subjects to an artificial language that had three properties at the same time (optional, repeated, and moved phrases)? Did they do better or worse than when the artificial language only had one property?

(12) Thompson & Newport (2007) thought that transitional probabilities can help learners identify phrases in a language. Is this hypothesis hurt by the fact that control subjects did as well as experimental subjects at *categorizing* words in the artificial language?

(13) Here are some data about the transitional probabilities between different grammatical categories in Guin:

Known categories: A, B, C

The transitional probability of the sequence AB is 0.20.
The transitional probability of sequence BC is 1.0.
The transitional probability of sequence AC is 0.80.

Answer the following questions, based on these data:
(a) Would the kind of transitional probability learner that Thompson & Newport (2007) believe in be likely to think that AC is a phrase? Why or why not?

(b) Would the kind of transitional probability learner that Thompson & Newport (2007) believe in be likely to think that BC is a phrase? Why or why not?

(c) Would the kind of transitional probability learner that Thompson & Newport (2007) believe in be likely to think that AB is a phrase? Why or why not?

Thought question: Is ABC likely to be a phrase in Guin? Why or why not? (Hint: How do optional categories change transitional probabilities? Can you think of any categories in English that might have these transitional probabilities?)