

Due Thursday 10/3

[All questions pertain to the analyses and discussions in *Syntactic Structures* (SS), with the rules as corrected and extended in class where necessary.]

1. In tree form, present a PM (or derived PM) to which the Auxiliary Transformation T20 ('Affix Hopping') could apply, and present one to which T20 could not apply and indicate how it fails. For the PM that "fits" the rule, display a member of the set-theoretic PM which establishes the PM's eligibility to undergo the rule. **3 points**
2. Present an argument that *be* must never be a V. That is, show that something would go empirically wrong if *be* were introduced by a rule such as $V \rightarrow be$. (Is the problem *overgeneration*, *undergeneration*, or *both*? Discuss. BE EXPLICIT. Give actual examples to illustrate your position.) [Note that I am not asking whether the *Syntactic Structures* rules as they're stated introduce *be* under V. I know that you know that they don't. Rather, I am asking why the rules couldn't be changed so as to (sometimes) make *be* a V, **when it seems to be the "main verb" of the sentence.**] If be is not introduced under V, how might it be introduced? And what is wrong with the way Chomsky seems to suggest on p. 67 of *Syntactic Structures*? ($VP \rightarrow be$ Predicate) **3 points**
3. Show precisely why Negation T16 is ordered before Affix Hopping T20. What would go wrong if Affix Hopping (as stated in *Syntactic Structures*) were ordered before Negation (as stated in *Syntactic Structures*)? What would go wrong if these two rules were unordered (i.e., freely ordered) with respect to each other? Be explicit. Under each circumstance, would there be *overgeneration*, *undergeneration*, or *both*? Give actual examples to illustrate your position. **3 points**
4. The present plural morpheme for regular verbs (in fact all verbs and 'verb-like things' except be) is phonetically null. Demonstrate empirically that there really is a morpheme introduced under C in these cases, rather than nothing at all. That is, show some incorrect prediction that would be made otherwise. (If there were no morpheme at all, would there be *overgeneration*, *undergeneration*, or *both*? Be explicit. Give actual examples to illustrate your position.) **3 points**
5. For each of the following examples, (a) state the minimal change in the grammar (by some criterion you articulate) that would allow it to be generated, and show how the example can be generated with that change. [In doing this you will, in effect, be showing precisely how the grammar rules out the examples.] (b) What are some other consequences of your suggested change? Illustrate and discuss these consequences. **6 points**
 - a. *Does John be leaving [cf. Is John leaving]
 - b. *John past win the race [cf. John won the race]
 - c. *Solved Susan the problem [cf. Did Susan solve the problem]
 - d. *Mary likesn't Bill [cf. Mary doesn't like Bill]
- 6.a With reference to specific examples, discuss some specific formal property of a rule (or set of rules) that would require negative evidence (i.e., the information that a particular example is ill-formed) in order to be learned. Be as explicit as possible, and show precisely why negative evidence is needed in the case you discuss.
- b Show how the property in (a) could be eliminated in favor of a device (or devices) not requiring negative evidence, such that the new device still handles the original facts. Be explicit. **4 points**