

### Some New Old Minimalist Concerns

#### I. The transformational cycle and recursion in the base

- (18)a Syntactic theory of the '50's: no recursion in the base  
 b Singular transformations operate on simple structures  
 c Generalized transformations combine simple structures into complex ones
- (19) Consequently, there is nothing corresponding to deep structure.
- (20) "...only some of the possibilities permitted by this general theory have been realized convincingly with actual linguistic material." [Chomsky (1965)]
- (21)a "...there are no known cases of ordering among generalized embedding transformations..."  
 b "...there are no really convincing cases of singular transformations that must apply to a matrix sentence before a sentence transform is embedded in it..." [Chomsky (1965) following Fillmore (1963)]
- (22) "On the other hand, there are many examples of ordering of singular transformations, and many examples of singular transformations that must apply to a matrix sentence after embedding of a constituent structure in it."
- (23) Simplification to capture these facts: Eliminate generalized transformations; introduce recursion in the base; impose a cyclic ordering constraint on singular transformations.
- (24) Chomsky (1993), reintroducing generalized transformations, claims that "...the questions under discussion [in 1965] do not arise in the far more restrictive current theories."
- (25) This seems not entirely correct, since Chomsky (1993) imposes a version of the cyclic ordering constraint. The appropriate conclusion is evidently that the (1965) argument was in error. The non-occurring derivations can equally well be excluded with or without recursion in the base.

#### II. Economy and simplicity

- (26) "...the criterion of simplicity...that the shorter grammar is simpler, and that among equally short grammars, the simplest is that in which the average length of derivations is least." [Chomsky (1951)]
- (27) "...simplicity is increased by  
 1. reduction of the number of symbols in a statement...  
 2. reduction of the length of derivations..."
- (28) This symbol reduction was fundamental to the evaluation metric of Chomsky (1965) and Chomsky and Halle (1968).

- (29) "...an obvious decision is to consider minimization of the optional part of the grammar to be the major factor in reducing complexity." [Chomsky (1958/1962)]
- (30) A precursor of transformations needing a driving force.
- (31) "...it has been shown that many of the optional singular transformations of Chomsky (1955), Chomsky (1957), Chomsky (1958/1962) must be reformulated as obligatory transformations, whose applicability to a string is determined by presence or absence of a certain marker in the string." [Chomsky (1965)]

### III. Last resort and Full Interpretation

(32) “ ... there  
 is a principle of full interpretation (FI) that requires that every element of PF and LF, taken to be the interface of syntax (in the broad sense) with systems of language use, must receive an appropriate interpretation—must be licensed in the sense indicated. None can simply be disregarded. At the level of PF, each phonetic element must be licensed by some physical interpretation. The word book, for example, has the phonetic representation [buk]. It could not be represented [fburk], where we simply disregard [f] and [r]; that would be possible only if there were particular rules or general principles deleting these elements. Similarly, we cannot have sentences of the form (88), interpreted respectively as "I was in England last year," "John was here yesterday," "John saw Bill," and "everyone was here," simply disregarding the unlicensed bracketed elements the man, walked, who, and every:

- (i) I was in England last year [the man] (88)  
 (ii) John was here yesterday [walked]  
 (iii) [who] John saw Bill  
 (iv) [every] everyone was here

This is not a logically necessary property of all possible languages; for example, FI is not observed in standard notations for quantification theory that permit vacuous quantifiers in well-formed expressions, as in (89i), which is assigned the same interpretation as (89ii):

- (i)  $(\forall x) (2+2 = 4)$  (for all  $x$ ,  $2+2 = 4$ ) (89)  
 (ii)  $2+2 = 4$

But FI is a property of natural language.

Given the very general property FI and an appropriate theory of licensing, it would be redundant – i.e., flat wrong – to include in a grammar of English rules that specifically bar examples of the sort just illustrated—for example, rules that bar (88iii) by requiring that who be followed by a sentence with

a gap of a certain sort: a missing position, an empty category, or in some languages, a resumptive pronoun (as in such marginal English examples as "who did you think that if he gets married, then everyone will be happy".... " Chomsky (1986 p.98-99)

“Licensing conditions at the external interface levels PF and LF establish the relation of language to other faculties of the mind brain. D-Structure conditions specify the manner in which lexical properties are expressed in grammatical structures. That there should be S-Structure conditions is less obvious, but it seems that they may exist ...

There are also certain general ideas that appear to have wide applicability, among them, principles of economy stating that there can be no superfluous symbols in representations (the principle of Full Interpretation, FI) or superfluous steps in derivations ...

The principle FI is assumed as a matter of course in phonology; if a symbol in a representation has no sensorimotor interpretations, the representation does not qualify as a PF representation. This is what we called the "interface condition." The same condition applied to LF also entails that every element of the representation have a (language-independent) interpretation. There can, for example, be no true expletives, or vacuous quantifiers, at the LF level. The principle of economy of derivation requires that computational operations must be driven by some condition on representations, as a "last resort" to overcome a failure to meet such a condition. Interacting with other principles of UG, such economy principles have wide-ranging effects and may, when matters are properly understood, subsume much of what appears to be the specific character of particular principles” Chomsky and Lasnik (1993/1995 pp.27-28)

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