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This handout contains most of Greenberg's word-order universals, along with comments about possible explanations. The comments *look handwritten.* As we can see, word order is subject both to strictly syntactic (structural) constraints and to semantic and pragmatic ones.

Universal 1. In declarative sentences with nominal subject and object, the dominant order is almost always one in which the subject precedes the object.

SVO, SOV, VSO are the most common orders. The reasons for this may be thematic or pragmatic. On the thematic side, subjects are usually Agents and objects are usually Patients, and Agents are more "important" than Patients since it is the Agent's action that results in something happening to the Patient. It therefore makes sense for the Agent to be mentioned before the Patient. In terms of pragmatics, we are usually more interested in the subject, both because it is the Agent and because it is more likely to be human. Subjects are frequently also topics, and topics generally come at the beginning of a sentence.

Universal 2. In languages with prepositions, the genitive almost always follows the governing noun, while in languages with postpositions it almost always precedes.

So usually either $[_{PP}$ P NP] and $[_{NP}$ N NP$_{gen}$] or $[_{PP}$ NP P] and $[_{NP}$ NP$_{gen}$ N]. This looks like head-dependent order, but in structural terms this particular correlation is strange, at least for configurational languages, because the object of a preposition is a complement while the "genitive" is usually taken to be subjectlike (in terms of $\bar{X}$ theory, a specifier). It is also possible that genitives do not form a uniform structural category cross-linguistically: they may be subjects (specifiers) in some languages, complements in others, and adjuncts in others.

Universal 3. Languages with dominant VSO order are always prepositional.

If a language is [V NP NP] (or whatever other structure a VSO language may have), it is $[_{PP}$ P NP]. This is a straightforward correlation of head-complement order. But for SVO languages, which would be expected to pattern the same, this is less true.

Universal 4. With overwhelmingly greater than chance frequency, languages with normal SOV order are postpositional.

If a language has $[_{VP}$ NP V] it usually has $[_{PP}$ NP P]. Another straightforward head-complement (in fact, head-object) correlation.

Universal 5. If a language has dominant SOV order and the genitive follows the governing noun, then the adjective likewise follows the noun.

Not clear

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Universal 6. All languages with dominant VSO order have SVO as an alternative or the only alternative basic order.

This suggests that VSO order is in some sense a variant of SVO order. The standard theoretical analysis of VSO order involves starting with SVO order moving the verb out of the VP to a position in front of the subject. This universal suggests that this analysis is correct.

Universal 7. If in a language with dominant SOV order, there is no alternative basic order, or only OSV as the alternative, then all adverbial modifiers of the verb likewise precede the verb.

If V is final, it is final!!!

Universal 9. With well more than chance frequency, when question particles or affixes are specified in position by reference to the sentence as a whole, if initial such elements are found in prepositional languages, and, if final, in postpositional languages.

If we use the symbol "Q" for a question particle (like Hebrew הַאִם), we can say that a language either has [Q IP] and [P NP] or it has [IP Q] and [NP P]. If the question marker ("Q") is a complementizer, this suggests a close relation between the categories C and P.

Universal 11. Inversion of statement order so that verb precedes subject occurs only in languages where the question [*wh*] word or phrase is normally initial. This same inversion occurs in yes-no questions only if it also occurs in interrogative word [*wh*] questions.

This suggests a structural relationship between the position to which the verb is inverted and the initial position that wh elements occupy. Currently accepted theories of constituent structure hypothesize such a relationship.

Universal 12. If a language has dominant order VSO in declarative sentences, it always puts interrogative [*wh*] words or phrases first in interrogative word [*wh*] questions; if it has dominant order SOV in declarative sentences, there is never such an invariant rule.

An initial position for wh elements makes functional sense, since it means that the hearer knows at the beginning that (s)he is listening to a question. Similarly, an early position for the verb is functionally useful. Apparently, languages that don't bother with this type of functionality in one case don't bother with it in the other case either.

Universal 13. If the nominal object always precedes the verb, then verb forms [clauses] subordinate to the main verb also precede it.

If [$_{VP}$ NP V] obligatorily, then [$_{VP}$ CP V]. Dependent-head order in the VP.

Universal 14. In conditional statements, the conditional clause precedes the conclusion as the normal order in all languages.

Regardless of other stuff, the order is always "if P then Q". This looks semantic/pragmatic.

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Universal 15. In expressions of volition and purpose, a subordinate verbal form always follows the main verb as the normal order except in those languages in which the nominal object always precedes the verb.

Aside from the "Universal 13" languages, subordinate clauses like to be late in the sentence. This is often explained as being due to the "heaviness" of subordinate clauses. This heaviness factor can only be overcome, apparently, in strongly head-final languages (Universal 13). This positioning of subordinate clauses is apparently strongest in expressions of volition and purpose.

Universal 16. In languages with dominant order VSO, an inflected auxiliary always precedes the main verb. In languages with dominant order SOV, an inflected auxiliary always follows the main verb.

Auxiliaries position like heads. Most syntactic analyses of auxiliaries say that they are heads.

Universal 17. With overwhelmingly more than chance frequency, languages with dominant order VSO have the adjective after the noun.

If a language has the sentential head verb at the beginning, it has the head noun at the beginning (at least with respect to adjectives).

Universal 18. When the descriptive adjective precedes the noun, the demonstrative and the numeral, with overwhelmingly more than chance frequency, do likewise. [But there is no direct correlation between demonstrative and numeral, or when the adjective follows.]

If $[AP\ NP_{head}]$, then $[DEM\ N_{head}]$ and $[NUM\ N_{head}]$. Otherwise, no correlation. It is unclear what to make of this.

Universal 19. When the general rule is that the descriptive adjective follows, there may be a minority of adjectives which usually precede, but when the general rule is that descriptive adjectives precede, there are no exceptions.

AP-N seems to be preferred over N-AP, maybe for semantic/pragmatic reasons.

Universal 21. If some or all adverbs follow the adjective they modify, then the language is one in which the qualifying adjective follows the noun and the verb precedes its nominal object as the dominant order.

$[_{AP}\ AP_{head}\ ADV]$ is related to $[_{NP}\ NP_{head}\ AP]$ and $[_{VP}\ V_{head}\ NP]$. The relation between adverbs in APs and APs in NPs is clear. How they are related to V-NP is less clear, but all involve the head preceding dependents.

Universal 24. If the relative expression [i.e. relative clause] precedes the noun either as the only construction or as an alternate construction, either the language is postpositional, or the adjective precedes the noun, or both.

$[_{NP}\ CP\ NP_{head}]$ is related to $[_{NP}\ AP\ NP_{head}]$ or $[_{PP}\ NP\ P_{head}]$. In all of these, the head follows a dependent.