Typology I: Solution to Homework for Lecture 5

(All of these could be exam questions.)

1. **What are implicational universals?**
   A linguistic universal is a property that all languages or an overwhelming majority of the world's languages have in common. An implicational universal is a universal of the form "if a language has property A, it will also have property B". Both A and B can be complex statements consisting of several propositions, using connectives of propositional logic such as "and", "or", and "not".

2. **What does it mean for a universal to be statistical?**
   A statistical universal is a universal that holds not for all languages, but has a strong tendency to hold, as evidenced e.g. by a clear majority in a diverse set of languages. The use of the term "statistical" can be misleading, as for some this would imply statistical significance in the mathematical sense. Giving the small size of the samples used in typology, only few universals are valid according to this stricter criterion.

3. **What are the two main types of languages that arise from correlating word order properties?**
   A major typological divide arising from word order properties is the one between head-initial and head-final languages. In head-initial languages, the head is placed at the left side of most constituents (e.g. adpositions are prepositions, the object comes after the verb), whereas in head-final languages, the situation is reverse (postpositions, object before the verb). While there are only very few languages which are exclusively head-initial or head-final accross all phrase types, every language has a general tendency towards preferring one of the two headedness types.

4. **List at least 5 characteristic word order properties which are contrastive for the two types of word order correlations.**

	head-initial	head-final
S,V,O order	VSO or SVO	SOV
adpositions	prepositions (PRP N)	postpositions (N PSP)
"genitive"	follows head noun (N G)	precedes head noun (G N)
question particle	QPRT S	S QPRT
affixes	prefixes	suffixes

5. **If you know that language X always puts the verb first, which order do you expect for subject and object? How typologically common is the resulting pattern?**
   Even before considering of the position of the verb, it is much more common (96 % of the world's languages) for the subject occur before the object. The resulting pattern (VSO) is the third most common sentence structure type, which does occur in many families, but by far not as often as the two alternatives SVO and SOV, which are about equally common.

6. **Assume you are a field linguist who has started to analyse a hitherto undocumented language. You have already managed to determine the following properties:**

   - Adjectives come after the noun.
   - The language has a dual category that is expressed by a suffix.
   - Determiners come before the noun.

   Check the catalogue of universals to see whether this knowledge can help you in determining the position of numerals in the language.
   One of Greenberg's universals predicts Num N given A N, but we have N A, so this universal does not apply here. Another universal tells us two things, however: given D N, we can expect D Num N if we have Num N, and given N A, we can expect N A Num if we have N Num. Unfortunately, based on our catalogue, we cannot decide whether Num N or N Num is the most probable position for the numerals. The second property mentions a suffix, telling us that the language is slightly more likely to be head-final, but depending on the construction used, both Num and N could be the head of the respective phrase. To sum up our findings, we should start looking out for the numerals in two positions: between determiners and nouns (D Num N), and after the adjective (N A Num). If we do not find the numerals in one of these positions, we have found a language which is typologically quite interesting.

7. **The literal translation of a typical sentence in language Y into English is "sees the man the animals". Give the most probable word order in Y for the English sentence "I did that a year ago", paying attention to each word and justifying your answer.**
   Based on the example sentence, we can infer that the basic word order type of Y most probably is VSO, which should also be the case in the other sentence. While "ago" is a postposition in English, languages of type VSO are always prepositional, so we would expect it to correspond to a preposition in Y. Apart from the position of the adverbial, these considerations already fully determine the expected word order in Y, which should literally translate to "did I that ago a year".