Syntax Topics

1. Syntax and morphology are the two parts of *grammar*.
    *   *Morphology* deals with the **internal** economy of the word.
    *   *Syntax* deals with the **external** economy of the word.

2. Words are *constituents* of larger groups, called *phrases*, which may aggregate into larger phrases, and eventually into a different kind of constituent, called a *clause*.

3. The difference between a phrase and a clause is that a phrase is focussed on one kind of word: a *noun phrase* (NP) is an elaboration of a noun, a *verb phrase* (VP) of a verb, etc; while a clause is a relation between two kinds of phrase: VP (Predicate) and NPs (Argument(s) of the Predicate).

4. Every *sentence* has at least one clause; many have more. If there are several, only one can be the *main clause*; the rest are *subordinate clauses* of one kind or another.

5. Grammatical *functions* expressed in many languages (called *synthetic* languages) by morphological *inflection* (e.g, tense, mood, voice, etc.) are expressed in English (an *analytic* language) by various syntactic *constructions* and augmentations, often using sets of special words called *auxiliaries*, *particles*, or *function words*. Such words include *prepositions*, *conjunctions*, *quantifiers*, and *articles*; sets of them are called *closed classes*, because they are small and don't borrow new words.

6. The most important kind of word in any sentence is the *matrix predicate*, which in English can be a *predicate adjective* or *predicate noun* (with a form of *be* in front of it to receive the tense). The matrix predicate *governs* the type and existence of any subject, object, complement, or inflection appearing with it.

7. There are a number of different kinds of sentence. Each has its own kind of *syntactic structure* and peculiarities; but each can be related systematically to the others by *syntactic rules*.
    *   Statements, called *declaratives*.
    *   Questions, called *interrogatives*
    *   Orders, called *imperatives*

8. Two special rules of English apply to all that follows:
    *   If there is no auxiliary verb and you need one, use *do*. (**do-Support**)
    *   All forms of *be* are **always** considered to be auxiliaries.]

9. There are several kinds of questions:
    *   *Yes/No questions*, which expect an answer of *yes* or *no*, are formed from statements by the rule of *Subject-Verb Inversion*, which moves the *first auxiliary* to the beginning of the sentence.

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- *WH- **questions***, which expect an answer with specific information, are formed from statements by the following rules (in order):
    1) substitute the proper *WH-**word*** for the NP being questioned, and
    2) **if** the *WH*-word is not already at the beginning of the sentence,
        a)   form a Yes/No question (see above), and
        b)   move the WH-word to the beginning of it. (*WH-**Shift***)
- ***Tag questions***, which are added at the end of statements, reprise the grammatical structure of the statement in the following way:
    1) Copy the first auxiliary to the ***end*** of the statement;
    2) If the statement is affirmative, ***negate*** the copied auxiliary (using a canonical contraction if possible); and vice versa;
    3) Add a pronoun that's ***coreferential*** to the subject of the statement after the (possibly negative) auxiliary.

10. Subordinate clauses must function like some kind of word in a clause; i.e, there are ***Adjective***, ***Noun***, or ***Adverb*** clauses.

11. There are several different kinds of rules that produce all these structures:
    - ***insertion*** rules
    - ***deletion*** rules
    - ***movement*** rules

12. There are structural ***constraints*** on movement rules. Some structures, called ***islands***, impose boundaries to ***extraction*** rules like ***Relative-Clause Formation*** and ***Question-Formation***.

13. ***Adjective clauses*** are of two kinds:
    - ***Relative clauses*** function as adjectives, must be part of an NP, and must contain a NP that is ***co-referential*** with the NP they modify. A ***relative pronoun*** is substituted for this in the relative clause, and moved to the beginning of the clause, if it's not there already.
    - ***NP complement*** clauses also function as adjectives, and must be part of a NP, but they **don't** contain a coreferential NP, and the noun they modify must be a ***picture noun***, like *story*, *report*, or *picture*, that refers to some conceptual entity with a content that can be expressed by a complement clause.

14. ***Adverb clauses***, like adverbs, may appear in many different places in a sentence, but (also like adverbs), may modify ***either*** the verb ***or*** the entire sentence. They are generally marked at the beginning with a ***subordinating conjunction***, like a preposition for a clause, that indicates the kind, degree, and special nature of their relation to the rest of the clause. Some examples of subordinating conjunctions are *because, before, after, if, since, although, while, when, whenever, as soon as,* and *until*. There are **lots** more.

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15. *Noun clauses* are called *Complements*, and must be the subject or object of some *matrix predicate*; which governs such things as whether it can be a subject or an object ,and which of the three *complementizers* (constructions that mark the beginning of complements in English as being subordinate) can be used with it:

    - **for...to,** the *infinitive* complementizer;
    - *POSS...-ing,* the *gerund* complementizer;
    - **that S,** the *finite* (i.e, inflected) *clause* complementizer.

    Each of these can function as subject **or** as object, and in addition, it's possible to form a fourth type of complement that doesn't actually use a complementizer:

    - *Embedded questions*.

16. Subject Complements do not occur often as subjects in English, because English prefers the first verb early in the sentence; if possible, the second constituent (i.e, word or short phrase) in the sentence. A variety of rules conspire to produce English sentences with this structure:

    - *Extraposition* is a rule which moves subject complements to the end of the sentence, leaving a dummy *it* pronoun behind to hold the subject position. Extraposition is governed by the matrix predicate.

    - *Subject-Raising* (*Raising* for short) is a rule which replaces an infinitive complement with just the **subject** of that complement, moving the remainder of the infinitive to the end of the sentence. Raising may occur with **either** subject or object complements; it raises the subject of the complement clause, but the Raised NP of a Subject Complement becomes the Subject of the matrix clause, while Raised NP of an Object Complement becomes the new Object of the matrix clause. In either case, Raising is governed by the matrix predicate.

    - **Tough-***Movement* is a rule which replaces an infinitive subject complement with just the **object** of that complement, moving the remainder of the infinitive to the end of the sentence. *Tough*-Movement is governed by the matrix predicate.

    - Several types of *Subject-Verb Inversion* (like the process that occurs in Yes/No Questions) occur when modificational phrases like adverbs (especially negative ones like *never*) occur at the beginning of the sentence. Subject-Verb Inversion is usually governed by the adverb being preposed.

17. *Equivalent Noun Phrase Deletion* (*Equi-NP Deletion*, or just *Equi* for short) is a rule which deletes the subject of a non-finite **object** complement (infinitive or gerund) under coreference with a noun in the matrix clause (either the Subject, in simple transitive matrix clauses, or the [Indirect] Object in bitransitive matrix clauses). Sentences with Equi resemble those with Raising; and like Raising, Equi is governed by the matrix predicate. It is easy to confuse Equi with Raising, since they produce similar structures; but they work with different predicates and produce different kinds of sentence.

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18. The internal structure of the VP is notably more complex than that of the NP. Besides the possibility of multiply embedded VP's with auxiliary verbs, and of object complements, there are also ***phrasal verbs***, which are themselves complex constituents consisting of a verb and a ***particle***. The rule of ***Particle Shift*** moves the particle to the end of the direct object NP; it is **obligatory** for Pronoun objects, and optional elsewhere.

19. Some verbs (**always** verbs of transfer) are ***bitransitive***, and may have **two** objects: the Direct Object (representing the object transferred) and an ***indirect object*** (representing the receiver of the transfer), which usually takes the preposition *to* in English. The rule of ***Dative Movement*** (also called ***Goal Advancement***) exchanges the order of the direct and the indirect objects, placing the indirect object (without *to*) first.

20. Many other verbs may take a ***Benefactive*** construction, with *for*, that indicates the person benefiting from the action described by the VP. Just in case that person winds up **possessing** the Direct Object as a part of the benefit (a frequent-enough outcome to warrant a provision in the grammar), the benefactive phrase may be treated as if it were an indirect object for the purpose of Dative Movement.

21. ***Passive*** constructions have the effect of changing a transitive clause into an intransitive one (more rarely of changing a bitransitive clause into a transitive one). This is accomplished by changing the grammatical relations among the various NP arguments. The Direct Object of the transitive clause becomes the Subject of the passive clause, displacing the original agent Subject (which is optionally expressed – usually at the end of the sentence – in a prepositional phrase with *by*). The Verb Phrase is changed to reflect this shift, by adding an auxiliary *be* and changing the verb form to Past Participle.

    There is no formal difference between the meaning of a Passive and its corresponding Active sentence; the alternation allows a shift in the ***Figure-Ground Relation*** between Agent and Patient, de-emphasizing the importance of the Agent, which isn't even expressed in the majority of cases.

22. ***Pronouns*** (a closed class) are far more common than nouns (an open class), and are used to keep track of ***Reference***, i.e, what entities are participating in the sentence. Special kinds of pronouns, like ***Reflexives*** (*himself, yourselves*), ***Reciprocals*** (*each other*), ***Demonstratives*** (*this, those*), ***Interrogatives and Relatives*** (*which, who, whether*), ***Indefinites*** (*whatever, one*), etc., have special uses and follow special syntactic rules.