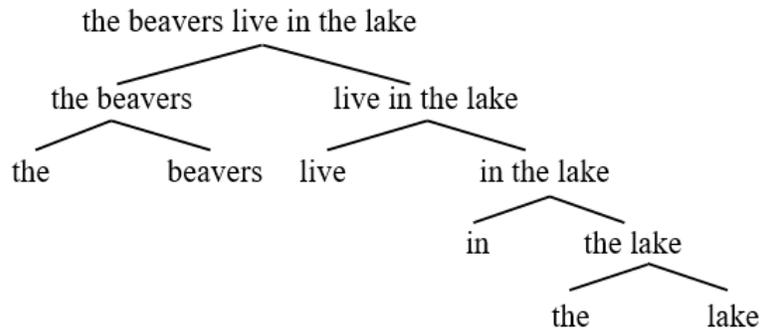


Chapter Eight: Syntax

1. THREE ASPECTS OF SYNTAX

1.1. Grouping

Sentences are not random strings of words; rather, sentences are constructed of smaller units known as **constituents**. For example



Groupings are of different types:

Noun phrase (NP), Verb phrase (VP), Prepositional phrase (PP), Adjective phrase (AdjP), Adverb phrase (AdvP), etc.

1.2. Function

1.2.1. Syntactic function

Syntactic functions (or grammatical relations) concern certain major types of phrases recognized by the grammar:

- **Subject** is the noun phrase immediately under S.
- **Predicate** is the verb phrase immediately under S.
- **Direct object** is the noun phrase immediately under VP.
- **Object of preposition** is the noun phrase immediately under PP.

1.2.2. Part of speech

- **Lexical Categories:** Noun, Verb, Adjective, Adverb, Preposition
- **Functional Categories:** Auxiliary, Determiner, Complementizer, etc.

1.3. Word Order

It refers to the correct word order for a language. For example, in English the correct word order is SVO and word order is expressed by the linear, left-to-right arrangement of words.

2. PHRASE STRUCTURE RULES

Phrase structure rules specify the constituency of syntactic categories like NP, VP, S. Following are some of the phrase structure rules in English.

- $S \rightarrow NP \text{ (Aux) VP}$, e.g. I saw the man; The girl is laughing

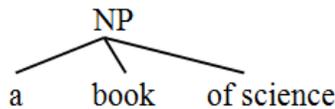
- NP → (Det) (AdjP) N (PP) (S), e.g. the young man in blue jeans; the man who is laughing
- VP → V ({NP, S, AdjP}) (PP), e.g. eat the apple; know you are lying; look angry; study at school
- PP → P NP, e.g. to school
- AdjP → (Deg) Adj (PP), e.g. very serious about this issue
- CP → C S, e.g. (said) that he is a student

3. CONSTITUENTS OF A PHRASE

Each phrasal category consists of three parts; *head*, *complement* and *specifier*.

- **Head** is the central word of a phrase whose lexical category defines the type of a phrase, e.g. N in NP or P in PP.
- **Complement(s)** are the sister constituents of a phrase which come after head.
- **Specifier(s)** are the sister constituents of a phrase which come before head.

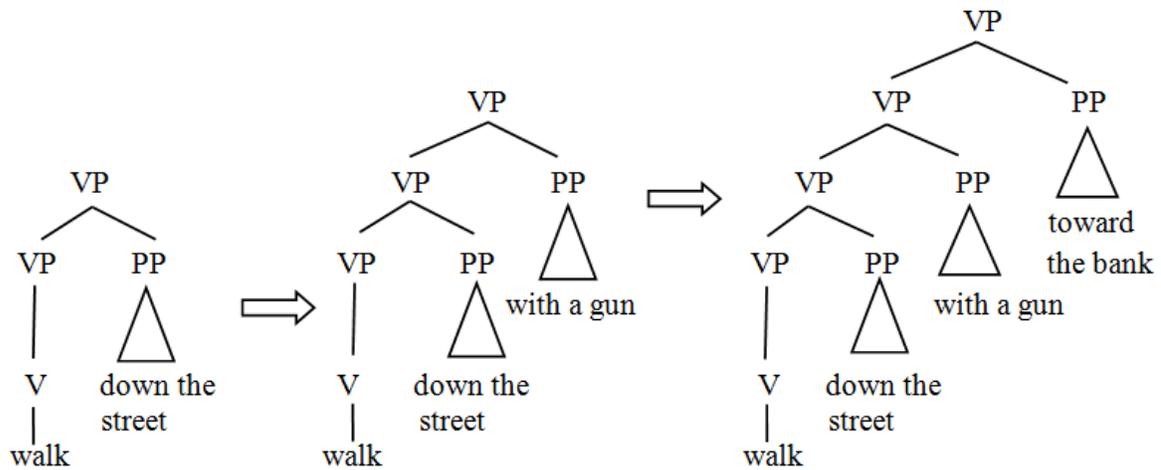
Then, a noun phrase such as *a book of science* would be like:



4. RECURSION

Creativity occurs through:

- **Expansion of phrases within themselves**



- **Coordination** which occurs by using *and*, *or*, *but*, e.g.
 [The book] *and* [pencil] are on the table.
 The book is [on the chair] *or* [in my bag].
 I [love cats] *but* [hate dogs].
- **Embedding**
 - Relative clause (RC)
 Betty works in a restaurant **which is near a school**.
 Betty works in a restaurant **which is near a school** *which was managed by a man*.

Betty works in a restaurant **which is near a school** *which was managed by a man who is retired now*.

- Complementizer phrase (CP = S'): complementizer (abbreviated as COMP or C)

I know **that Joe arrives by midnight**.

Betty believes *that I know* **that Joe arrives by midnight**.

They think that Betty believes *that I know* **that Joe arrives by midnight**.

5. CONSTITUENCY TESTS

Constituency tests are based on the principle that only entire constituents may be manipulated by syntactic operations.

- **Movement**, e.g.
 - Sandy found the puppy [in the garden] → [In the garden], Sandy found the puppy.
 - Sandy found [the puppy]. → [The puppy] was found by Sandy.
- **Clefting**: “It + to be + + that/wh-word clause”, e.g.
 - Betty bought [a pair of gloves]. → It is [a pair of gloves] that Betty bought.
 - Mathew lives [in a mansion]. → It is [in a mansion] where Mathew lives.
- **Pseudo-clefting**: “... + to be + that/wh-word clause”, or “that/wh-word clause + to be + ...”, e.g.
 - Billy planned [a trip to Bulgaria]. → [A trip to Bulgaria] is what Billy planned.
 - Billy planned [a trip to Bulgaria]. → What Billy planned is [a trip to Bulgaria].
- **Replacement**, e.g.
 - [That boy in striped coat] is my teacher. → He is my teacher.
 - She doesn't like this [article on linguistics] or that one.
 - Sue married [the teacher of linguistics]. → Sue married whom.
 - Fatima [loved the kitten] intensely but Betty did so half-heartedly.
 - I will [resign my post] tomorrow and he will do so on Monday.
 - John used to be very [envious of Sally] but now he is much less so.
 - The man sat [on the chair]. → The man sat there.
 - I'll meet you [at ten]. → I'll meet you then.
- **Stand alone**, e.g.
 - Betty borrowed a book from the library.
 - What did Betty borrow from the library? [a book]
 - What did Betty do? [borrowed a book from the library]
- **Coordination**, e.g.
 - Bob [peeled the potatoes]. → Bob [peeled the potatoes] and [shucked the corn].
 - Can I go [through the tunnel]? → Can I go [through the tunnel] or [over the road]?

6. C-SELECTION

The information about ‘complement types’ selected by particular verbs and other lexical items is called **c-selection** (*c* stands for category or categorical). Subcategorization takes place between the head of a phrase – the Noun in an NP, the Adjective in an AP, and so on – and its complement(s). Following are some examples of c-selection by different parts of speech:

cry, V, [—]	<i>cry</i> is a verb and is followed by no category, e.g. <i>She cried.</i>
put, V, [— NP PP]	<i>put</i> is a verb and must be followed by an NP and PP category within the VP, e.g. <i>She put the book on the desk.</i>

It is possible to use the concept of selection to re-define the different types of verbs (i.e., transitive, linking, and intransitive) which were introduced in traditional grammar:

Transitive verbs select an NP, e.g. Fatima saw the flying machine.

Linking verbs select an AP, e.g. Betty seems happy.

Intransitive verbs select no categories, e.g. Betty slept.

7. TRANSFORMATIONAL RULES

Transformations are syntactic rules, or principles, that convert the source, deep structures into actual, surface structures.

- Note: Functions of TRs
- Note: Obligatory TR vs. optional TR

The three levels of adequacy include:

- **Observational adequacy** → determining which are the well-formed expressions in a language, and which are not.
- **Descriptively adequate** → articulating the grammar that competent speakers of a language have internalized, i.e. it provides a principled account for native speakers’ intuitions about the structure of these.
- **Explanatory adequacy** → explaining the nature or essence of that competence.

7.1. Topicalization TR

This rule occurs when an object to which attention is drawn generally becomes the topic of the sentence or conversation:

I love dogs very much → *Dogs I love very much*

7.2. Dative Movement TR

The recipient nouns of some languages are termed *dative*. This movement occurs when datives lose their prepositions and move before the patients. For example, in *Can you give a book to her?* the dative noun *her* is moved before the patient, that is, *book* and has lost its preposition.

Can you give a book to her? → *Can you give her a book?*

7.3. Extraposition TR

This rule moves an embedded complement sentence to the end of the full sentence in which it is embedded:

That the elves dug those craters surprised the scientists → *It surprised the scientists that the elves dug those craters.*

7.4. Move Aux (or Aux inversion) TR

This rule moves auxiliary verb to a position before subject:

Sara is driving → *Is Sara driving?*

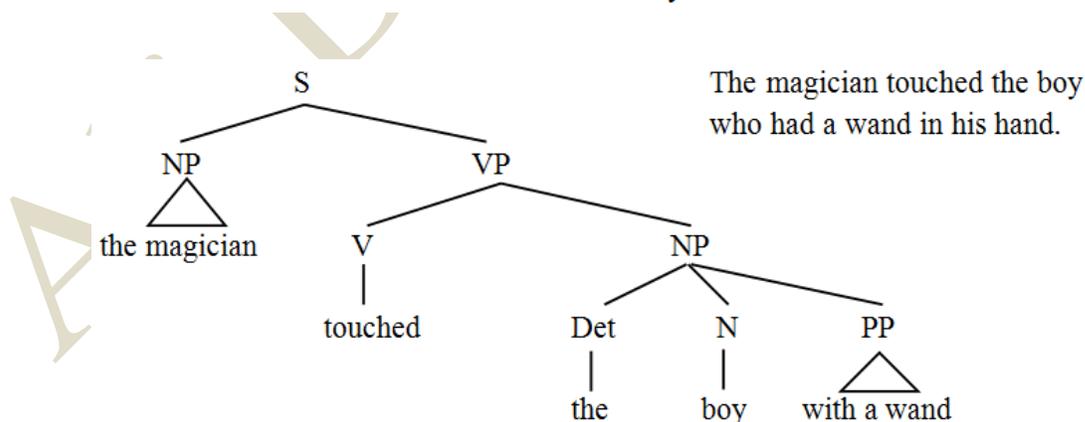
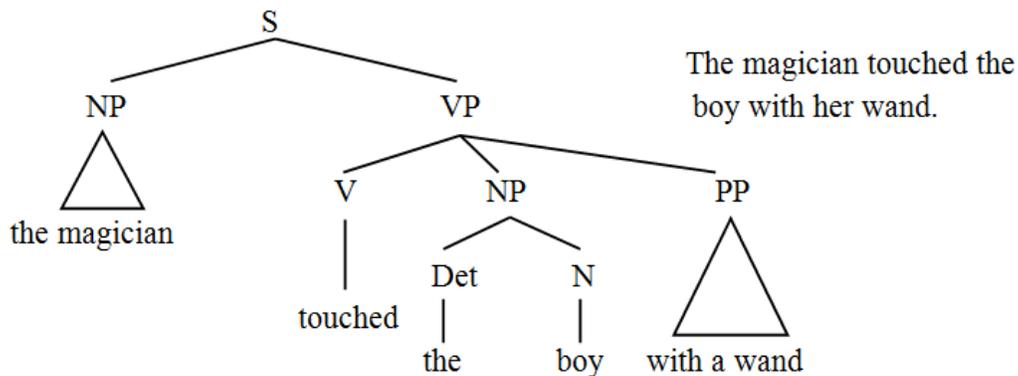
7.5. Passive TR

This rule converts the active form into the passive, thereby rearranging the order and relationships of the noun phrase:

The cat chased the mouse → *The mouse was chased by the cat*

7.6. PP Preposing TR

This rule moves any PP to the beginning of a sentence, as long as it is immediately under the VP.



7.7. Reflexivization TR

Produce deep structure containing all combinations of subject and object in their non-reflexive form, then a reflexivization TR converts all object pronouns that refer to the same person. Below you see two examples:

<i>I hurt me</i> → <i>I hurt myself</i>	I hurt us
I hurt you	I hurt you
I hurt him/her	I hurt them

7.8. Imperative TR

This rule applies to the following structures and deletes YOU along with WILL:

You will shut the window → Shut the window

8. UG PRINCIPLES AND PARAMETERS

It is claimed that every speaker knows a set of **principles** which apply to all languages and also a set of **parameters** that can vary from one language to another, but within certain limits.

- One of the primary ‘principles’ of language is **structure dependency**. It states the application of TRs on structures require a knowledge of the structural relationships of the words.
- One of the primary ‘parameter’ of language is **head parameter**. The head of a constituent could appear either in the beginning or end of a phrase. Accordingly, English is a head-language while Farsi is head-last.