

## Sixth Lecture - Adjectives and Linking Verbs

### Adjectives

- Articles are not the only optional elements that can occur in noun phrases. Consider the noun phrases in these sentences:

The tiresome monkey saw a leopard.

Severe storms battered Florida.

An unscrupulous jeweler sold defective watches.

- The words *tiresome*, *severe*, *unscrupulous*, and *defective*, are all adjectives (Adj). In traditional grammar this category is defined as follows: An adjective is a word that describes or modifies a noun. All the following combinations of articles, adjectives, and nouns can occur in English noun phrases:

NP ----> N

NP ----> Art N

NP ----> Adj N

NP ----> Art Adj N

- By using parentheses, we can write a single rule for noun phrases that will account for all structures:

NP ----> (Art) (Adj) N

This rule allows our grammar to generate sentences such as the following:

An unscrupulous jeweler sold defective watches

- The rule above is still not perfect, because sometimes more than one adjective can occur in a noun phrase:

the old gray mare

expensive new red sneakers

- One solution would be to add additional optional adjectives to our NP rule. The following rule allow one, two, three adjectives in a noun phrase:

NP----> (Art) (Adj) (Adj) (Adj) N

- You can easily think of a noun phrase with more than three adjectives:

the old old old old philosopher.

- Theoretically, there is no limit to the number of adjectives that can modify a single noun. From now on, let's write such rule as the following:

NP ----> (Art) (Adj)+ N

The above rule can generate sentences such as these:

An officer rewarded the adventurous soldier.

The gaudy purple shirt embarrassed Amanda.

## Linking Verbs

- According to the traditional definition of a verb ("a word that expresses action or being"), not all verbs are action verbs. The others, verbs that "express being," are mostly forms of the verb *be*. These forms of *be* (such as *am, is, are, was, and were*), act as the verbal equivalents of an equal sign "=": They tell us that one thing is equivalent to another.

Mansour is an honorable man.

The Cowboys were the winners.

Tom was persistent.

Such verbs are distinguished from both transitive and intransitive verbs.

They are usually called "Linking Verbs" ( $V_L$ ). They are also known as *copulas*. Like a transitive verb, a linking verb can be followed by a noun phrase. Unlike other verbs, however, a linking verb can also be followed by an adjective.

$VP \longrightarrow V_L \text{ NP}$

$VP \longrightarrow V_L \text{ Adj}$

Frank was an architect.

The shoes are uncomfortable.

- Recall that a noun phrase that follows a transitive verb is called the direct object. In traditional grammar, a noun phrase that follows a linking verb, such as an architect, is sometimes called a *predicate nominative*. An adjective that follows a linking verb, such as uncomfortable, is sometimes called *predicate adjective*. Together, predicate nominatives and predicate adjectives are called *subjective complements* in traditional grammar, because they are said to complete or explain the subject.

- In addition to forms of the verb *be*, a few other verbs are also linking verbs as the following:

An unknown lawyer became the next governor.

Ferdinand seems intelligent.

- Both *became* and *seems* are linking verbs because they also function much like verbal equal signs. Notice that you can substitute a form of *be* for these verbs and get roughly equivalent sentences.

An unknown lawyer was the next governor.

Ferdinand is intelligent.

- Several verbs related to the five senses ( look, appears, sound, smell, taste, feel) and a handful of other verbs (remain, grow, get, act) sometimes act as linking verbs and sometimes act as transitive verbs, depending on how they are used:

Carolina felt the sandpaper. ( transitive: felt is an action)

Carolina felt angry. ( linking: she was angry)

Marcus smelled the flowers. ( transitive: smelled is an action)

The flowers smelled sweet. ( linking: they were sweet)

Others left, Sarah remained. ( intransitive: remained is something she did)

Sarah remained the treasurer. ( linking: she was the treasurer)

Now we can write a single rule for all of the above:

$VP \longrightarrow V_L \{ NP \text{ or } Adj \}$

## Exercises

1. Underline the verb in each of the following sentences, and identify it as a **transitive verb**, an **intransitive verb**, or a **linking verb**. For each linking verb, state whether it is followed by a noun phrase or by an adjective.

Mom grew impatient.

Dad grew a moustache.

The baby grew.

Abdullah sounded confident.

Honesty seemed the best policy.

Mar tasted the soup.

Khalifah tower looks marvelous.

Wayne got a headache.

2. Draw a tree diagram for three of the above sentences.

## Seventh Lecture -Prepositions

### Prepositions

So far, our grammar-making is moving along nicely, and the model grammar that we have discovered can now generate many different kinds of sentences. Still, it cannot generate all of them, and you have probably spotted some of its inadequacies. Consider the following sentences:

John scrambled over the barricade.

The smugglers sneaked the contraband past the guards.

The genetic researchers crossed a tiger with a lion.

Each of these phrases has the intuitive feel of a unit, and each consists of a noun phrase preceded by a word such as *over, past, or with*. We will call words of this kind **PREPOSITIONS (P)** because they are placed before noun phrases. The word *over* is a preposition, and the entire constituent over the barricade can be called a **PREPOSITIONAL PHRASE (PP)**. A prepositional phrase consists of a preposition followed by a noun phrase.

PP ----> P NP

In the examples above, the prepositional phrases occur at the end of sentences. But... **Is the prepositional phrase part of the verb phrase, or is it a separate major constituent of the sentence?** These two options for writing phrase-structure rules involving prepositional phrases are shown in the following rules: ( John scrambled over the barricade)

S ----> NP VP  
VP ----> V (NP) (PP)

Or:

S ----> NP VP (PP)  
VP ----> V (NP)

Both options work in the sense that both can generate the desired sentence, but **Does one tree better reflect our intuitions about the structure of the sentence?**

One reason to prefer the first option/rule, which has the prepositional phrase as a constituent of the verb phrase, has to do with meaning: *Over the barricade* should be considered part of the verb phrase, because it **'modifies' or 'completes'** the verb *scrambled*. That is, it describes where the scrambling took place. Accordingly, we will adopt the first rule and reject the second one and that is:

S ----> NP VP  
VP ----> V (NP) (PP)

Beth jumped from the table.  
Larry opened the oyster with a knife.

## Prepositional Phrases within Noun Phrases

Each of the prepositional phrases we have so far considered has occurred within a verb phrase. These prepositional phrases can be said to 'modify' the verbs they follow in that they provide information telling when, where, how, or why the action took place.

Now consider the following sentences:

The house *on the hill* overlooked the valley.

The cover *of the book* attracted attention.

The old man *with the harmonica* knew the words to the songs.

None of the italicized prepositional phrases seems to be modifying a verb. Instead, each identifies the noun that it follows and so can be said to modify that noun. For example, *on the hill* tells us which house overlooked the valley. Therefore, we can revise our noun-phrase rule accordingly:

NP → (Art) (Adj)+ N (PP)

The old man with the harmonica knew the words to the song.

We have now seen prepositional phrases that modify verbs and others that modify nouns. You may wonder if there is a way to determine which is which. The phrase's position in the sentence is not necessarily an indicator. Consider the following examples:

Joe hit the ball with the bat.

Joe admired the woman with the hat.

It is necessary to consider meaning of a prepositional phrase and the purpose it serves in the sentence in order to identify which element it modifies. For example, *with the bat* tells us how Joe did the hitting. Consequently, it modifies the verb *hit* and is a constituent of a verb phrase. In the second example, *with the hat* does not tell us how Joe did the admiring (he didn't admire her with a hat). Instead it tells us which woman we are talking about. It modifies the noun *woman* and is a constituent of a noun phrase.

Joe hit the ball with the bat.  
Joe admired the woman with the hat.

## Exercises

1. Draw tree diagrams for these sentences:

Joe cleaned the grease from the axel.  
Saud flew across Tibet.  
The contents of the box puzzled Cassandra.

2. Underline the prepositional phrases in the following sentences. For each prepositional phrase, state whether it is a constituent of a verb phrase or a of a noun phrase.

Mahmoud steered the boat through rough seas.  
Lulu met a woman from Lithuania.

*Good Luck*