English

Morphology and Syntax

BBI 3203/3212 (Unit 1-6/6)

Shameem Rafik Khan @ Rafik Galea, Ph d
Fakulti Bahasa Moden dan Komunikasi
Universiti Putra Malaysia
43400 UPM Serdang
Selangor Darul Ehsan
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MODUL PEMBELAJARAN : BBI 3203/3212 ENGLISH MORPHOLOGY AND SYNTAX
disediakan dalam bentuk bahan pengajaran dan pembelajaran kendiri di bawah program Pendidikan Jarak Jauh, Universiti Putra Malaysia. Sebarang pertanyaan dan cadangan untuk memperbaiki gaya penyampaian dan isi kandungan modul ini bolehlah disemakkan kepada penulis dengan menggunakan alamat Pusat Pendidikan Luar.

Penulis : SHAMEEM RAFIK KHAN@RAFIK GALEA, Ph.D
Fakulti Bahasa Moden dan Komunikasi
Universiti Putra Malaysia
43400 UPM, Serdang
Selangor Darul Ehsan

Alamat : Unit Modul dan Bahan Kendiri
Pusat Pendidikan Luar
Universiti Putra Malaysia
43400 UPM, Serdang
Selangor Darul Ehsan
Tel: 03-89468830/3-89458904
Fax: 03-89458902

Reka Bentuk Kulit dan Cetak oleh : PENERBIT
Universiti Putra Malaysia
43400 UPM, Serdang
Selangor Darul Ehsan
Tel : 03-89468851/8854
Faks : 03-89416172
Emel : penerbit@putra.upm.edu.my
English Morphology and Syntax

Study Guide

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ABOUT DISTANCE EDUCATION

◊ Distance education is full of challenges and opportunities. The challenge is to commit yourself to a schedule of achievement and to maintain that schedule. The opportunities are many to increase your knowledge and application of the material so that you add value to the various processes in your life, to increase your value to your employer, to develop greater insights into the field for future application, and to prepare you for the continuous changes you will be facing.

◊ In order for you to be successful you will have to be fully committed to your studies and to the program.

◊ You have the advantage of studying at your convenience but you must be very disciplined.

◊ It is important to keep in mind, however, that the total responsibility is in your hands, as you do not have regular weekly class sessions to push you into completing the assignments.

◊ Instructors can be contacted by telephone, e-mail, fax and correspondence for any advice or consultation you feel you need. Remember, you will only get help if you ask for it.
INTRODUCTION TO THIS STUDY GUIDE

◊ The material you read in this booklet is meant to act as a Guide to the prescribed text The required text is Burton-Roberts, N (1997) 2nd Edition ANALYSING SENTENCES An Introduction to English Syntax. Harlow Addison Wesley-Longman The text shall be referred to as NBR in this set of notes

◊ This guide provides a framework of the important points which you should use to lead you in your study Remember it is only a guide to point out some of the important issues This course demands knowledge of the text and this guide

◊ From time to time I will distribute worksheets through your tutors / centres Please check with them.
COURSE PREPARATION AND ASSESSMENT

PREPARATION

An essential part of your learning will be the study and preparation you do for each section of the course by reviewing any introduction to the various units in this STUDY GUIDE and by carefully reading the assigned chapters in the TEXT.

You will noticed that, you will have to maintain a vigorous pace of reading.

ASSESSMENT

Quiz 1  30%
Quiz 2  30%
Final  40%

Total  100%

FINAL EXAMINATION

There will be a one and a half hour comprehensive final examination. This will be held during the period scheduled for exams. The exam will consist of 40 multiple choice questions. Topics tested during the final examination will cover those we have covered throughout the semester.

QUIZZES

Quiz 1 (end of week 6) will cover aspects of Syntax and Quiz 2 (end of week 13/14) will cover aspects of Morphology. These will be given after the completion of each component. You will be informed by your tutors of the exact date. PLEASE MAKE SURE
YOU CHECK FOR DATES OF QUIZZES AS NO REPLACEMENT TESTS WILL BE GIVEN WITHOUT VALID REASONS

There will be three scheduled meetings during the semester and you are strongly advised to attend these sessions.

**Reading Assignments**

Please read all the assigned chapters within the schedule given.

**TEXT NRB**

**WEEK 1**  
Chapter 1 and 2  
Do all the exercises at the end of the chapter

**WEEK 2**  
Chapter 3  
Do all exercises at the end of the chapter

**WEEK 3**  
Chapter 4 and 5  
Do all exercises at the end of the chapter

**WEEK 4**  
Chapter 6 and 7  
Do all exercises at the end of the chapter

**WEEK 5**  
Chapter 8 and 9  
Do all exercises at the end of the chapter

**WEEK 6**  
Chapter 10 and 11  
Do all exercises at the end of the chapter

**WEEK 7**  
REVIEW NOTES and TEXTS with tutors
ABOUT YOU INSTRUCTOR

Dr SHAMEEM RAFIK KHAN @ RAFIK-GALEA

I am a lecturer in the Department of English, Faculty of Modern language Studies at Universiti Putra Malaysia. I obtained a Teaching Certificate from the Language Institute, Kuala Lumpur in the 70’s. I received a Bachelor of Arts degree in Linguistics from the University of Southern Illinois, Carbondale, USA, in 1983, a Master’s degree in TESL from the University of Southern Illinois, Carbondale, USA, in 1985, and a PhD in Applied Linguistics and TESOL from the University of Leicester, UK in 1997. I have taught in secondary schools in Selangor and was a lecturer at UTM from 1985 to March 1990. I joined UPM in April 1990. In UPM I teach Critical Reading in Content Areas, Phonetics and Phonology and Morphology and Syntax. I also teach postgraduate courses besides supervising postgraduate research. My research interests are in the field of Applied Linguistics, Materials development and Discourse/Genre studies.

I can be contacted at the

Department Of English Language
Faculty of Modern Language Studies
Universiti Putra Malaysia
43400 UPM Serdang
Selangor Darul Ehsan

Telephone 03 - 9486101 EXT 2891 (my office)
OR 2835 (Faculty office)

e-mail shameem@fbm.upm.edu.my

You may fax me at 03 - 943 9951
ENGLISH MORPHOLOGY AND SYNTAX

This course is aimed at developing a basic understanding of linguistic notions in morphology and syntax, the relationship between syntax and morphology, methods of morphological and syntactical analyses problems associated with current morphological and syntactic theories.

The more immediate objectives of this component are

1. To provide students with a basic foundation knowledge of syntax and its pedagogical uses.

2. To equip students with the tools for syntactic analysis.

3. To familiarise students with the basic concepts necessary to further pursue further knowledge in the field of syntax.
UNIT 1

ENGLISH SYNTAX

SYNTAX OR SENTENCE STRUCTURE

- IS A STUDY OF THE WAY WORDS ARE STRUCTURED / COMBINED IN A SENTENCE
  LOOKS AT THE WAY WORDS FIT TOGETHER TO FORM SENTENCES OR UTTERANCES

When we study syntax we are primarily concerned with sentence structure.

This means looking at the way words combine together in a language (in this case English) to form sentences.

One way to study syntax is to look at sentences which we already know.

Example 1 I hit the dog

In English this sentence would be considered by native speakers of English to be a syntactically well formed sentence whereas

2 the hit dog I

will not be accepted because it is not syntactically well formed.

This idea of sentences being syntactically well formed will become clearer as we progress (Read NRB Chapter 1).

By analysing or describing sentences such as

1 in terms of the constituent parts we can see the patterns that we follow when they fit together
  (we will come back to this later)

SYNTACTIC CATEGORIES (parts of speech)

Words can function only in certain ways.

For example

The word "he" cannot be used as the subject of a sentence. It can only be part of a predicate.
BUT if we add the suffix -ing to the word he - lying' and then use it as a subject as in Lyng is a bad habit
Then this is permissible on syntactically acceptable

WORDS fit into different functional classes The two most important of these classes (and the only ones that occur in every language) are NOUNS and VERBS

NOUNS are used to refer to or pick out things being discussed. They can be used as subjects or objects in sentences.

VERBS say something about these nouns. That is, they predicate some activity or property of nouns.

Let us look at the following sentences:

1. Snakes bite
   N V

2. Ali sold the manager a car
   N V N N

3. Ali Meng ate until midnight
   N V N

NOUNS may be modified by adjectives (Adj) and VERBS by adverbs (Adv) which also may modify adjectives as well.

4. Ravenuously hungry sharks feed
   Adv Adj N V
   savagely
   Adv

Please note that (5) is not a well-formed sentence though (6) is acceptable. Can you tell me why?

5. *Savagely sharks feed hungrily
6. Savage sharks feed hungrily

Nouns may be further specified by articles (Art), which mark them as either definite or indefinite, and verbs by auxiliary verbs (Aux), which can indicate tense and other verbal relationships. Some of the English articles are the a an this and some and some auxiliaries are can may, have, be, and do.

7. The hungry shark will bite savagely
   Art Adj N Aux V Adv
PRONOUNS (Pro) have been traditionally described as 'words that stand in place of a noun
BUT note that this definition does not always work

Look at examples 8 and 9

8 It is raining
9 It surprises me that you're such a fool

What noun for example could be in sentence 8 and 9 possibly be replacing?

For the purpose of this course and in syntax, pronouns are words like *it me she him self ours
and you* that can be used where we frequently find noun phrases that is as subjects and objects
of sentences

A PREPOSITION (Prep) is a word that combines with a following *noun or pronoun
(called the object of the preposition*) to form a *prepositional phrase*. Thus prepositional phrase
serves like *adjectives and adverbs*, to modify a noun or verb
Some common prepositions are *of with into by for to and under* These points can be
illustrated in the following sentence

10 Mutu went to the supermarket after school
   N   V  Prep   Art   N  Prep   N

CONJUNCTIONS (Conj) are little words like *and but although or nor and neither* that join
sentences or parts of sentences
Let's look at sentence 11 as it demonstrates examples of every type of word discussed here

11 The large dog and the yellow cat chased the brazenly impudent squirrel
   Art   Adj  N  Conj  Art   Adj  N  V   Art  Adv  Adj   N

through the forest but it finally escaped
   Prep  Art  N  Conj  Pro  Adv  V

INFLECTING NOUNS AND VERBS

Nouns and verbs have characteristic *inflected forms* that is the basic noun or verb including an
additional morpheme

Note A morpheme is the minimal units of meaning That is the minimal linguistic
unit which has meaning or grammatical function For example the word *ripens*
NOUNS have two characteristic inflected forms: the plural and the possessive. The plural of the noun cat is cats, and the possessive is cat’s. Rats is the plural of rat, and rat’s the possessive.

PRONOUNS have three characteristic inflected forms: a subject form, an object form, and a possessive form. In addition, we use different pronouns for different persons. If you are speaking and referring to yourself, you use the first person *I me or my*. The second person is the addressee. Everybody (and everything) else is the third person.

### THREE FORMS OF ENGLISH PRONOUNS (LISTED BY PERSON)

<table>
<thead>
<tr>
<th></th>
<th>Subject</th>
<th>Object</th>
<th>Possessive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singular</td>
<td>plural</td>
<td>Singular</td>
</tr>
<tr>
<td>1st</td>
<td>I</td>
<td>we</td>
<td>me</td>
</tr>
<tr>
<td>person</td>
<td></td>
<td></td>
<td>my</td>
</tr>
<tr>
<td>2nd</td>
<td>you</td>
<td>you</td>
<td>you</td>
</tr>
<tr>
<td>person</td>
<td></td>
<td></td>
<td>your</td>
</tr>
<tr>
<td>3rd</td>
<td>he</td>
<td>they</td>
<td>him</td>
</tr>
<tr>
<td>person</td>
<td>she</td>
<td></td>
<td>her</td>
</tr>
<tr>
<td></td>
<td>it</td>
<td></td>
<td>it</td>
</tr>
</tbody>
</table>
VERBS are inflected for tense. There are three basic tenses: present, past, and future. In the present tense, the verb is also inflected for singular vs plural. Look at the two English verbs below. They have been inflected for the three basic tenses:

<table>
<thead>
<tr>
<th>Present</th>
<th>Past</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>a I hit</td>
<td>I hit</td>
<td>I will hit</td>
</tr>
<tr>
<td>he hits</td>
<td>he hit</td>
<td>he will hit</td>
</tr>
<tr>
<td>b I crack</td>
<td>I cracked</td>
<td>I will crack</td>
</tr>
<tr>
<td>he cracks</td>
<td>he cracked</td>
<td>he will crack</td>
</tr>
</tbody>
</table>

VERBS also have progressive and perfect forms. The progressive is used if the action is unfinished at the time referred to. Thus, there is a present progressive: *I was eating* (when you arrived) and a future progressive: *I will be eating* (when you arrive). The perfect is used when the action is complete at the time referred to: present perfect: *I have eaten* past perfect: *I had eaten* and future perfect: *I will have eaten*. Notice that the progressives are all composed of the verb *be* with -ing added to the main verb. The perfects are composed of *have* with -ed (or -en) added to the main verb. The affixed form of the main verb in progressives and perfects is called a participle. The present participle of *eat* is *eating*. The past participle is *eaten*.

AGREEMENT: In English, the verb of a sentence has to agree with the subject in person and number. Study the following sentences:

| a I kiss Maria       | * I kisses Maria |
| b You kiss Maria    | * You kisses Maria |
| c Ali kisses Maria  | * Ali kisses Maria |
| d We kiss Maria     | * We kisses Maria |
| e You(pl) kiss Maria| * You kisses Maria |
| f They kiss Maria   | * They kisses Maria |

THE ROLE OF NOUNS AND VERBS

Nouns and verbs and their combinations function in certain characteristic ways in sentences.

Let's look at the following example:

12 The boys give a bone to the dog
   Art N  V Art N Prep Art N
The boys is the subject of the sentence. The subject of the sentence is usually the actor agent of an action or the experiencer of an event (but not always). A bone is the direct object; that is, in simple words, the patient of the action (the thing the verb gets done to). In sentences like (12) the indirect object; the goal of the action is preceded by to or a for.

In sentence 13 the to is absent, but the order of a bone and the dog has also changed.

13. The boys give the dog a bone.
12. The boys give a bone to the dog.
14. A bone is given to the dog by the boys.
15. *A bone are given to the dog by the boys.
16. The dog is given a bone by the boys.
17. To err is human.
18. John likes to run off.
19. Some of us enjoy toad strangling.

Study the following sentences carefully. Then state what part of speech the bold words belong to.

1. They began a new round of talks.
2. She pointed to a round area in the middle.
3. Please round it off.
4. He went round the corner for a while.
5. She will come round to our point of view.
6. They died that we might be free.
7. He is not that fat.
8. I want that.
SYNTAX  WORD ORDER AND CONSTITUENT STRUCTURE

INTRODUCTION

The sentence is one of the most fundamental units of linguistic organization.

We use sentences all the time but we don’t really think about how they are structured.

If we stop to think for a minute, and then take a close look at the principles by which words are organized into sentences, we would see that they are actually quite complex.

Let us now look at the two basic principles of sentence organization:

1. Linear order
2. Hierarchical structure

1. Linear order

The most obvious principle of sentence organization is linear order.

The words in a sentence must occur in a particular sequence if the sentence is to convey the desired or intended meaning.

Study the following English sentences:

1. Ali glanced at Maria

If we rearrange the words in this sentence, we either come up with nonsense as in (2):

2. Ali Maria at glanced

or with a sentence whose meaning is distinctly different from that of (1):

3. Maria glanced at Ali

What do you notice?

The ordering of the words in (1) is an essential aspect of its organization.

The ways in which words are ordered in a language may be described as the word order rules of that language.
For example, one of the many word order rules of English is that the grammatical subject of a sentence normally precedes the main verb, which in turn normally precedes its direct object. Thus, *she resembles him* is English.

but

*resembles she* *him* are not

An important point to remember: word order rules are language-specific—that is, languages vary in the ways in which they order words.

Let's look at this example.

Because of its characteristic ordering of subjects (S), main verbs (V), and objects (O), English may be categorized as an S-V-O language.

(Other languages such as French and Swahili may be similarly categorized)

However, there are also S-O-V languages (e.g., Turkish, Navajo) in which main verbs normally follow their direct object.

V-S-O (e.g., Welsh, Hebrew) are languages in which main verbs normally precede their subject.

A small number of V-O-S, O-V-S, and O-S-V languages as well.

In addition, there are languages such as Durval, an Australian aboriginal language, in which the normal order of subject, verb, and object is remarkably free.

What can we thus deduce from some of these examples?

**Clearly, there is no set of word order rules which is valid for all languages.**
HIERARCHICAL STRUCTURE
(refers to the groupings of linear order words phrases and sentences etc)

Although linear order is an important principle of sentence organization sentences are more than just ordered sequences of words

They have internal hierarchical structure as well

What does this mean?

Thus means that the individual words in a sentence are organized into natural, semantically coherent groupings, which are themselves organized into larger groupings - the largest grouping of all being the sentence itself These groupings within a sentence are called CONSTITUENTS of that sentence

Now let us look at sentence (4) as an example

(4) Business executives eat at really fancy restaurants

Looking at the sentence can we distinguish a number of meaningful groups of words in sentence (4)

What are they?

Try working this out

We can easily distinguish a number of meaningful groups of words in sentence (4)

business executives and eat at really fancy restaurants

Both have clear meanings of their own and each makes a coherent contribution to the meaning of (4) as a whole

Specifically, business executives is the subject of (4) and

eat at really fancy restaurants is the predicate

Therefore for this reason they are constituents of this sentence
On the other hand, some groups of words in sentence (4) do not naturally form meaningful units. For example:

*executives eat at and eat at really*

Both do not have clear meanings of their own.

We can therefore say that these groups of words are NOT constituents of (4).

There are a number of useful ways of distinguishing constituents from groups of words which are not constituents:

1. Constituents can often be sensibly used alone e.g., as exclamations or as answers to questions -

   *What do business executives do?*
   *Eat at really fancy restaurants*

   This would not be true of nonconstituents if I were to ask “Do fancy restaurants do much business?”, we could not sensibly answer “Well executives eat at”

2. Parenthetical remarks like of course as you know, by the way etc naturally appear between constituents

   *Business executives, as you know, eat at really fancy restaurants*

   But they sound rather unnatural if what precedes or follows is a non-constituent

   *Business executives eat at really, as you know, fancy restaurants*

   [neither *business executives eat at really nor fancy restaurants is a constituent of (4)*]
3 It is often possible to replace a constituent with a single word having the same meaning as that constituent. For example, if someone asked “What do business executives do?”

We could answer either with sentence (4) or with sentence (6) in which the constituent *business executives* is replaced with the single word *they* (which, in this context, would mean the same thing. As *business executives*).

5 They eat at really fancy restaurants

Similarly, if someone asked “Who eats at really fancy restaurants?” we could answer either with (4) or with sentence (6) in which the constituent *eat at really fancy restaurants* is replaced with the single word *do* (which would mean the same thing in this context).

6 Business executives do

But there is no word that could possibly replace the nonconstituent *eat at really* in (4) and mean the same thing no matter what question was asked.

4 Finally, sentences are always constituents. As are the individual words within a sentence.

In sentence (4) for instance *executives eat at really fancy and restaurants*.

You must bear in mind two points regarding constituent structures.

First, given a group of words, we cannot say once and for all whether or not it is a constituent. Rather, we can only say whether or not it is a constituent relative to a particular sentence.

To see this, let us take a look at the following sentences.

7 Ali and Mutu raise chickens

8 Maria punched Ali and Mutu kicked Ravi

In (7) *Ali and Mutu* is a constituent, it functions as a coherent meaningful unit within the sentence, in particular, as its subject.

In (8), however, the very same sequence of words is not a constituent because *Ali* is the direct object of the first clause, and *Mutu* is the subject of the second clause. The sequence *Ali and Mutu* does not make a coherent contribution to the meaning of this sentence.
(Notice that although Ah and Mut can be replaced with they in (7), this is not possible in (8).)

Thus we can appropriately say that a group of words is a constituent only with respect to a particular sentence.

The second thing that must be kept in mind is that constituent structure is hierarchical, that is, one constituent may be part of another.

Let us consider sentence (4) again.

(4) Business executives eat at really fancy restaurants

Among the constituents in this sentence is the sequence really fancy (to understand this note that really fancy can be used by itself).

- How fancy was it?
  really fancy

And that it can be replaced with the single word such.

- Who eats at really fancy restaurants?
  Business executives eat at such restaurants

But really fancy is also part of a larger constituent, namely really fancy restaurants, this in turn is part of a larger constituent at really fancy restaurants, which is itself part of the still larger constituent eat at really fancy restaurants and ultimately of the largest constituent in the sentence namely the sentence itself.

If we underline each of the constituents in (4), the hierarchical nature of its constituent structure becomes obvious.

9 Business executives eat at really fancy restaurants

Underlining is as in (9) one way of representing the hierarchical nature of constituent structure. Another way is with tree diagrams branching structures in which each constituent forms a 'branch.' For example, the tree diagram for sentence (4) is (10)
In this diagram each of the constituents of sentence (4) forms a branch. For example, *business executives* corresponds to the branch labelled (a) *at really fancy restaurants* to the branch labelled (b) and *really fancy* to the branch labelled (c). Observe in addition, that groups of words that are not constituents of sentence (4) do not form branches in this tree diagram. Executives eat at and eat at really for instance clearly are not constituents according to diagram (10). In principle underlining is just as good as tree diagrams for representing constituent structure but because tree diagrams are somewhat easier to read they are usually preferred.
SYNTAX

Word Order and Constituent Structures Continued

CONSTITUENT STRUCTURE AND AMBIGUITY

♦ In any human language we can find individual expressions which have two or more distinct meanings.

♦ For example, the italicized portions of the following sentences of English can be interpreted in more than one way.

1 (a) Ahmad raises *miniature hamsters* and *raccoons*
   (b) We need *more intelligent leaders*

♦ In sentence 1a, *miniature hamsters and raccoons* can mean either "miniature hamsters and *miniature raccoons*" or "miniature hamsters and *raccoons (of any size)*."

♦ This property of having two or more distinct meanings is called *ambiguity.*

♦ An expression with two or more distinct meanings is *ambiguous.*

♦ Often an expression is ambiguous because it has more than one possible constituent structure.

♦ Consider, for example, the expression *miniature hamsters and raccoons* in sentence 1a: it can have either of the following constituent structures:

2

```
  [miniature hamsters and raccoons]
```

3

```
  [miniature hamsters and raccoons]
```

♦ In 2 *hamsters and raccoons* forms a constituent: 2 therefore represents the interpretation in which the adjective *miniature* applies to both the *hamsters* and the *raccoons.*

♦ Sentence 3, on the other hand, *miniature hamsters* forms a constituent: 3 therefore represents the interpretation in which only the *hamsters* are *miniature.*
An expression which is ambiguous because it has more than one possible constituent structure is said to be structurally ambiguous.

The italicized part of sentence 1b is also structurally ambiguous; it can have either of the following constituent structures:

\[
\begin{align*}
4 & \\
& \text{more intelligent leaders}
\end{align*}
\]

\[
\begin{align*}
5 & \\
& \text{more intelligent leaders}
\end{align*}
\]

In 4, intelligent leaders is a constituent; for this reason, 4 represents the interpretation "a greater quantity of intelligent leaders".

In 5, however, more intelligent forms a constituent; 5 therefore represents the meaning "leaders who are more intelligent".

Although structural ambiguity is a more common kind of ambiguity, it is not the only kind.

Individual words are sometimes ambiguous (for example, crane can refer either to a kind of bird or to a large construction device) because words like crane have no internal constituent structure; they clearly can’t be structurally ambiguous. (Instead, they are sometimes said to be lexically ambiguous.)

A third sort of ambiguity is exemplified by sentence 6.

Sentence 6 can mean either "Ali has applied paint to furniture" or "Ali has furniture that is painted." This ambiguity is not structural.

Sentence 7 is the correct constituent structure for 6, regardless of which meaning is intended.
(Under either interpretation of 6 painted furniture forms a constituent and can therefore be used alone)

What has Ali done?
Painted furniture
What does Ali have?
- Painted furniture

Ambiguities like the above example can be further discussed
SYNTACTIC CATEGORIES

- A very important fact about constituent structure is that there are different types of constituents with very different uses.

- We refer to these different types of constituents as *syntactic categories*.

- One of the most important syntactic categories is the category of *noun phrases*. Let's look at the following examples:

  8
  
  Mutu
  postmen
  most dogs
  many Malaysians
  a huge lovable bear
  a student from Sudan
  the table in the corner
  the people that we interviewed
  Ali and his cat

- A noun phrase can be used as the subject of the sentence as in (9a) as the direct object as in (9b) as the indirect object as in (9c) and in many other ways as well.

  9
  a/ *Most cats* enjoy fish
  b/ Ali likes *most cats*
  c/ Maram gave *most cats* their tatunus shots this morning

- In some cases a single word can count as noun phrase all by itself this is true for instance of names (e.g. Ali) plural nouns (e.g. postmen) nouns referring to substances (e.g. water, dirt) and pronouns (e.g. I, she, them).

- It should also be noted that many noun phrases begin with expressions like the following.

  10
  
  The  Most  At least five
  A  All  My
  Every  Few  Maram's
  Many  Several
  Some  Three

- These are called *determiners* they combine with a single noun or with a noun modified by other sorts of expressions to produce a noun phrase the president, many Malaysians, two new dresses, a student from Sudan, etc.
Another extremely important syntactic category is the category of verb phrases. Take a look at the following expressions:

11

- snore
- like Mariam
- give a prize to Mutu
- believe that dogs are smart
- want to leave
- sleep soundly
- can lift 100 pounds
- is wearing goggles
- go home and have a rest

A verb phrase can be used as the predicate of a sentence as in the examples in 12 below:

12

a/ Mutu and Ali like Mariam
b/ Meng Chong wants to leave

Certain verbs such as snore, swing, talk, and die can form a verb phrase all by themselves. Verbs of this sort are called intransitive verbs.

Certain other verbs form a verb phrase by combining with a noun phrase. Such verbs are called transitive verbs. The noun phrase with which a transitive verb combines is its direct object as can be seen in the following examples:

13

- like Mariam
- chase cars
- annoy three big soldiers
- develop every role of film

Other verbs combine with other sorts of expressions to form a verb phrase. Verbs like give and owe combine with two noun phrases (a direct object and an indirect object) as in:

give a prize to Mutu and owe Mutu's brother several thousand dollars Verbs like try and manage combine with a verb phrase marked with to as in want to leave and manage to finish the pizza and so on.

Certain verb phrases consist of a helping verb (e.g., can, should, might, will, be, have) plus a smaller verb phrase. can lift a hundred pounds, should wear goggles, might want to leave.

When the helping verb is have, the verb which follows it is in its past participle form. Mutu has chopped the onions. Ali has found the wallet.

When the helping verb is be, the verb which follows it may be in its past participle form (if the sentence has a passive meaning) or in its present participle form as can be seen from the examples below.
14  

a/  The onions were chopped by Mutu  
b/  The wallet was found by Ali  (passive sentence)  
c/  Mutu is chopping the onions  
d/  Ali is finding the wallet

◆ Another important syntactic category is the category of adjective phrases of which the following are examples:

   15  smart  
      very fat  
      as crazy as Ahmad  
      more intelligent than Manam  
      certain to win

◆ Adjective phrases are often used to modify nouns and thus often appear as constituents of noun phrases  a very fat individual  someone as crazy as Ahmad  

◆ Adverbial phrases such as those in 16 are often used to modify verbs and adjectives and thus appear as constituents of verb phrases and adjective phrases as in 17

Examples

16  soundly  
   fiercely  
   as fluent as Ahmad  
   almost certainly

17  sleep soundly  
   speak French as fluently as  
   Ahmad  
   Fiercely loyal  
   Almost certainly able to walk  
   (adjective phrase)

◆ Another important syntactic category is that of prepositional phrases. Prepositional phrases always consist of a preposition (e.g. to, form, with, for in at on, under about through) plus a noun phrase:

18  to the movies  
   from China  
   with Mutu and Ali  
   for nothing

◆ A prepositional phrase can be a constituent of a wide range of expressions as shown in the following examples
19 go to the movies (verb phrase)
a student from Sudan (noun phrase)
angry with Mutu and Ali (adjective phrase)
separately from the others (adverbial phrase)

♦ Perhaps the most important syntactic category of all is the category of sentences. Sentences are often used by themselves. Take a look at these sentences:

20 a/ It is raining
   I like chilli sauce

♦ But a sentence may also appear as a constituent of another expression. For example, each of the following expressions has a sentence as a constituent:

21 the fact that it is raining
   a student who met Soo Ling last
   Thursday (noun phrase)

   Discover that it is raining
   Know who met Soo Ling last
   Thursday (verb phrase)

   Glad that it is raining (adjective phrase)

♦ In addition, certain adverbial phrases consist of a sentence preceded by a subordinating conjunction (e.g., if, though, when, after, because). If it is raining, though it is raining, and so on.

♦ Any sentence which is a constituent of an expression of another category is an embedded sentence.

♦ One other syntactic category that should be mentioned is the category of coordinating conjunctions.

♦ These are words like and or or but which are used to connect two or more expressions of the same category. As the following examples suggest, and can be used to connect expressions of virtually any category.

22 Ah Chong and his dog (noun phrases)
go home and have a rest (verb phrases)

   faster than a speeding bullet and more powerful than a locomotive (adjective phrases)
quickly and very easily (adverbial phrases)

over the river and through the forests (prepositional phrases)

It is raining and it may sleet (sentences)

Note that any expression resulting from the connection of two or more smaller expressions belongs to the same category as they do. That is because Ah Chong and his dog are noun phrases so is Ah Chong and his dog because go home and have a rest are verb phrases, so is go home and have a rest and so on.
SYNTAX
LABELLED TREE DIAGRAMS

We have looked at constituent structure and how such a structure can be represented by means of
tree diagrams such as the following  (see NBR Chapter 1 pages 7-18)

```
1  the  ranger  lashed  the  buffalo
```

- Example 1 indicates what groups of words are constituents in the sentence the ranger lashed
  the buffalo  it does not however indicate the syntactic categories to which the constituents
  belong

- This problem can be overcome if we mark each constituent in a tree structure like (1) with
  the appropriate category label  the result of this procedure is a labelled tree diagram such as
  example 2

- Let's take a look at example 2  Take note of the syntactic categories used

```
S
  /--------
 NP       VP
 /----
 Det  N   Det  N
 The  ranger  lashed  the  buffalo
```

- The following abbreviations are used here
  S = Sentence  NP= Noun Phrase  Det= Determiner  N= Noun  VP= Verb Phrase
  TV= Transitive verb

- By using labelled trees we can account for certain non-structural sorts of ambiguity
Let's look at this familiar sentence

2 Ali has painted furniture

As we know this sentence is ambiguous in a non structural way it has the structure as shown below in example (3) whether it means "Ali has painted furniture" or "Ali has furniture that is painted"

Example 3

Notice however that the constituents in example (3) can be labelled in two different ways

First we can label has as a helping verb (HV) and painted furniture as a verb phrase (in which painted is a transitive verb)

4

Example (4) corresponds to the meaning "Ali has applied paint to furniture"

On the other hand we can label has as a transitive verb and painted furniture as a noun phrase as in example 5 (in which painted is an adjective phrase)

Example 5
• Example 5 represents the meaning "Ali has furniture that has been painted"

• Observe that example 4 and 5 are identical if the category labels are ignored thus sentence (3) is ambiguous because its constituents can be categorised in two different ways but not because of any structural ambiguity.

SUMMARY

• We have covered and discussed a number of important syntactic concepts.

• We have seen that linear order is an important principle of sentence organisation, but that sentences have hierarchical organisation as well that the fundamental unit of hierarchical organisation is the constituent.

• We have also seen that there are several different categories of constituents.

• Finally you have learnt that we can develop a graphic means of representing sentence structure labelled tree diagrams which reflect the constituent structure of a sentence and indicate the syntactic category to which each constituent belongs.
PRACTICE ACTIVITIES

Study the following sentences. Then label them appropriately.

1. This boy likes cats
2. Amnah cried
3. Ali chased Mat
4. He chased her
5. The dog wants a bone
6. A dog chased that girl
7. He left her
8. This girl likes that boy
9. The cat
10. That man is a teacher
11. We are students
12. Ali coughed
13. Ahmad broke the window
14. Rabbits love carrots
15. She solved the mystery
Unit 38

SYNTAX PHRASE STRUCTURE RULES

- Part of every language user's knowledge of his/her language is the knowledge of how constituents are put together and categorised in that language (you have now become more aware of the constituents of the English language).

- This special sort of knowledge can be represented as a set of rules called PHRASE STRUCTURE RULES.

- In the next few lectures we are going to consider the nature of such rules and discuss several important properties which make them useful for describing the syntactic competence of language users.

PHRASE STRUCTURE RULES

- As a speaker of English you (may) know how to put together constituents of each syntactic category of English (This knowledge is largely unconscious you may not be able to explain how to form complex constituents in English, but your linguistic behaviour still shows that you know how to do it).

- You know for example:

  1. that a sentence (S) of English can be formed by joining a noun phrase (NP) with a verb phrase (VP)

  2. that a noun phrase may be formed by joining a determiner (Det) with a noun (N) and

  3. That a verb phrase may consist of a transitive verb (TV) followed by a direct object

Study the following examples carefully

1 \[ S = \]

   NP + VP

   Ali
   Everyone
   The man
   A book

   Snored
   fled the floods
   smoked a cigar
   lay on the floor

2 \[ NP = \]

   Det + N

   The
   A
   Every
   My

   Minister
   Book
   Student
   Pen
3. We can represent these 3 pieces of knowledge in a more descriptive manner with the following 3 phrase structure rules (or PS rules):

1. S → NP VP
2. NP → Det N
3. VP → TV NP

- The arrows in these rules can be read as 'may consist of'. Thus rule 1 is just a concise way of saying 'a sentence may consist of a noun phrase followed by a verb phrase'. Similarly, rule 2 just says 'a noun phrase may consist of a determiner followed by a noun'. BUT how about rule 3?

- Rules 1 3 specify three ways in which constituents can be combined to form larger, more complex constituents. Some constituents however do not do not result from the combination of smaller constituents. Instead, they consist of a single word.

- For example, a noun phrase may just consist of a proper name (e.g., Alt Kelantan), a plural noun (e.g., elephants, leaves) or a noun referring to a substance (e.g., clay, petrol). Similarly, a verb phrase may just consist of an intransitive verb such as sneeze, die, vanish, or elapse. These sorts of knowledge can also be represented with PS rules.

- Example:
  4. NP → Alt Kelantan, elephants, leaves, clay, petrol
  5. VP → sneeze, die, vanish, elapse

- In these rules, the commas mean 'or'. Rule 4 therefore says that a noun phrase may consist solely of the word 'Alt' or of the word 'Kelantan' or of 'elephants' or 'leaves' or 'clay' or 'petrol'. Similarly, rule 5 says that the verb phrase may consist solely of the verb 'sneeze' or 'die' or 'vanish' or 'elapse'. (In each of these rules, the list of words to the right of the arrow is obviously incomplete - in principle, every English word which may form a noun phrase by itself should be listed in (4), and every English transitive verb should be listed in (5).

- Thus, there are two different types of PS rules: those which, like (1 3), specify the structure of complex constituents (constituents which themselves consist of two or more constituents).
and those which like (4) and (5) specify words which may serve as constituents of a given syntactic category.

GENERATIVITY

• Because PS rules represent our knowledge of how constituents are constructed and categorised we can also regard them as instructions for “building” labelled tree diagrams (which, after all, indicate the structure and categorisation of constituents within a sentence.) Now to be able to see this consider the following very simple set of PS rules (1)
  • 1  A  S → NP VP
  •  B  VP → TV NP
  •  C  NP → elephants wolves durians sugar cane
  •  D  TV → enjoy eat dislike

• Using these rules we can build tree diagrams for a number of sentences. Rule (1a) tells us how to build the labelled tree in (2)

2
S
NP

VP

• (2) says exactly the same thing as (1a) that a sentence may consist of a noun phrase followed by a verb phrase. Rules (1b-1d) allow us to add on to the tree in (2) Rule (1b) says that a verb phrase may consist of a transitive verb followed by a noun phrase (1b) therefore allows us to convert the tree in (2) into the tree in (3)

3
S
NP

VP

TV

NP

• Rule (1c) allows a noun phrase to consist of elephants wolves durians or sugar cane (1c) therefore allows us to add elephants under the first NP label in (3) and to add sugar cane under the second one. Similarly rule (1d) entitles us to insert the verb enjoy under the TV label in (3). The end result of these additions to (3) is the tree in (4)
(4) is of course the labelled tree diagram corresponding to the sentence *Elephants enjoy sugar cane*. Because rules (1a) (1d) are by themselves adequate for building the tree in (4) we can say that they generate this tree in a related sense we can also say that they generate the sentence *Elephants enjoy sugar cane* (i.e. the sentence of which (4) is the diagram) Consider for a moment what are some other sentences generated by (1a) (1d)?

- Notice that there are many sentences which rules (1a) (1d) cannot generate on their own for example sentence (5) cannot be generated by these rules

(5) Most Malaysians enjoy these programmes

- In order to generate this additional sentence we must add the following three rules to those in (1)

(6) a NP $\rightarrow$ Det N  
 b Det $\rightarrow$ most these  
 c N $\rightarrow$ Malaysians programmes

- Rule (6a) allows us to convert the tree in (3) into that in (7)

(7) S  
 NP  
 Det N  
 VP  
 TV N  
 NP Det N

- Rule (6b) permits us to insert *most* under the first Det label in (7) and *these* under the second one rule (6c) lets us put *Malaysians* under the first N label in (7) and *programmes* under the second one and rule (1d) entitles us to place the verb *enjoy* under the TV label in (7) The result of these additions is (8) the labelled tree diagram for sentence (5)
**Thus the set rules in (1) and (6) generates sentence (5)**

**Although the set rules in (1) and (6) generates a fair number of sentences it is obvious that there are many sentences which it too fails to generate. Nevertheless, by adding new PS rules to those in (1) and (6) we will be able to generate more and more English sentences if we add new rules, we will eventually be able to generate every sentence in the English language. A set of PS rules which is capable of generating every sentence of some language is said to be a **generative** set of rules**

**INFINITY AND RECURSION**

**Suppose we wanted to come up with a generative set of PS rules for English (i.e., a set of PS rules capable of generating every sentence in the English language). How many sentences would this set of rules have to be capable of generating? That is, how many sentences are there in the English language?**

**If we stop to think for a moment, it can be said that there are in fact an **infinite number** of sentences in English (or in any human language). To see this, consider the following sentence.**

(9) Siti walked to Ahmad’s house

**We can add on to this sentence in a number of ways to form an infinite number of new sentences. One way to add on to sentence (9) is to use a coordinating conjunction like and or or. For example, we can use and to connect one or more new noun phrases to the subject of (9).**

Ali and Siti walked to Ahmad’s house
Muti, Ali, and Siti walked to Ahmad’s house
Sue Muti, Ali, and Siti walked to Ahmad’s house
• In principle there is no limit to the number of new noun phrases that we could connect to the subject of (9) in this way if we wanted to. Similarly we can use and to connect one or more new verb phrases to the predicate of (9).

Siti walked to Ahmad’s house and delivered the letter.
Siti walked to Ahmad’s house delivered the letter and ran home.
Siti walked to Ahmad’s house delivered the letter ran home and drank a glass of juice.

• No matter how many new verb phrases we connect to the predicate of (9) we will never reach a point at which another one cannot be added. Likewise we can connect any number of new prepositional phrases to to Ahmad’s house in (9).

Siti walked to Ahmad’s house to the post office to the bookshop and to the new Burger King.

• And we can connect any number of new sentences to (9) itself.

Siti walked to Ahmad’s house Ali drove to the post office Mutu stopped at the bookshop and Sue checked out the new Burger King.

• Thus one reason why there are an infinite number of English sentences is that it is possible to use conjunctions like and and or to connect an indefinitely large number of expressions of a given syntactic category.

• Another way to add on to sentence (9) is to join other sentences to it by means of embedding.

• An embedded sentence is one which is a constituent of an expression of another category. Embedding is thus the use of a sentence as a constituent of an expression of another category.

• We can embed sentence (9) in a number of ways. We need only consider one of these here. Certain verbs such as know, believe, suppose, suspect, imagine, claim, and deny join with a sentence (sometimes preceded by that) to form a verb phrase.

• Thus we can embed sentence (9) by joining it to a verb of this sort. In each of the following sentences (9) is embedded within the italicised verb phrase.
(10) I know that Siti walked to Ahmad's house

(11) The judge believes that Siti walked to Ahmad's house

(12) No one denied that Siti walked to Ahmad's house

- These sentences can in turn be embedded in still larger sentences (10) for example is itself embedded within the italicised verb phrase of sentence (13)

(13) Sue suspects that I know that Siti walked to Ahmad's house

- Sentence (13) can be embedded in yet a larger sentence and so on

- There is in principle no limit to the number of embeddings that can be use in building up a single sentence. Thus a second reason why there are an infinite number of sentences in English is that it is possible for a sentence to contain an indefinitely large number of embeddings. (There are other reasons for the existence of an infinite number of English sentences but we will not go into these here.)

- Since there are an infinite number of sentences in English, consider again the problem of coming up with a generative set of PS rules for English

- Do we need an infinite number of PS rules in order to generate the infinitely many sentences of English? Or is there a finite set of PS rules for English that is generative (i.e. that generates each of the infinitely many English sentences)?

- As it turns out, it is apparently possible to generate all English sentences with a finite number of PS rules. This is so because of two special properties of PS rules

- First a PS rule may be written so as to allow an expression to consist of an indefinitely large number of constituents. An example of such a PS rule is rule (14)

(14) \( \text{NP} \rightarrow \text{NP} \text{ and } \text{NP} \)

- Here 'NP*' is an abbreviation it stands for one or more instances of 'NP'. Thus (14) says 'a noun phrase may consist of one or more noun phrases followed by and followed by a noun phrase.' For this reason, example (14) generates an infinite number of labelled tree diagrams. The three smallest trees that example (14) generates are those in example (15)
• In general (14) allows an indefinitely large number of NPs to precede and in the trees which it generates. In connection with PS rules (16), (14) generates the noun phrases in (17) as well as an infinite number of longer ones.

16 NP → Ali Sue Ahmad Siti

17 a Ahmad and Siti
    b Ali Ahmad and Siti
    c Sue Ali Ahmad and Siti

• A second property of PS rules which makes it possible for a finite number of such rules to generate an infinite number of sentences is the property of recursion.

• To understand this property consider the set of PS rules in (18).

18 a S → NP VP
    b VP → Vs that S
    c NP → Ali Sue Ahmad Linda
          Siti Mutu
    d VP → snored, sneezed
    e Vs → knew, believed, supposed,
           suspected, imagined,
           claimed, denied

• (Here 'Vs represents the category of verbs which combine with a sentence preceded by that to form a verb phrase.)

• Rule (18a) generates the tree diagram in (19).

19 S
   /\
  /   \
NP  VP
Rule (18b) allows us to extend (19) as in (20)

```
20  
S  
  NP  VP  
    /  \  
   Vs that S
```

• Notice that rule (18a) can now be used again to extend the lower 'S' of the tree in (20) as in (21)

```
21  
S  
  NP  VP  
    /  \  
   Vs that S  
    NP  VP  
      /  \  
     Vs that S
```

• As a consequence of substitution conversion, rule (18b) can be used again, to provide further structure for the lower VP in (21) as in the following tree

```
22  
S  
  NP  VP  
    /  \  
   Vs that S  
    NP  VP  
      /  \  
     Vs that S
```
• As you can see, there is nothing to prevent us from using (18a) and (18b) over and over again to extend the tree in (22) to an indefinite length.

• Thus the ability of certain sets of rules to be used over and over again to generate a tree of indefinite length is called recursion. A set of PS rules with the property of recursion is called a recursive set of rules.

• Because (18a) and (18b) form a recursive set of rules, (18a) and (18e) generate an infinite number of sentences. They generate sentences like that diagrammed in (23), which contains no embedded sentences.

• But we must remember that they also generate sentences containing one or more embeddings, including the sentence diagrammed in (24), which contains two embedded sentences.

• Rules (18a) - (18e) are in principle capable of generating sentences with an indefinitely large number of embeddings and thus may generate infinitely many sentences.

• Because a PS rule may, like example (14), generate expressions consisting of an indefinitely large number of constituents and because some PS rules form recursive sets of rules, it is possible for a finite set of PS rules which generates every sentence in the English language. Of course, the number of PS rules that would be necessary to do this would be quite large but not so large, however, as to prevent a normal child from learning them all.
SUMMARY

- We have discussed *phrase structure rules* which embody a language user's knowledge of how constituents are put together and categorised in his/her language.
- There are two different types of PS rules: those which specify the structure of complex constituents and those which specify words which may be constituents of a given category.
SYNTAX TRANSFORMATIONS

In my earlier lectures you saw how syntactic patterns of a language can be described by phrase structure rules. But not all sentence patterns can be described efficiently by such rules alone. Instead, some sentences are best analysed as the result of using two kinds of rules: phrase-structure rules plus a new kind of rule called a transformation.

For example, the sentences in (1) illustrate an English transformation called Question Formation:

(a) What can Mutu accomplish?
(b) Who will Johana introduce to Ali?
(c) What has Sheila tripped over?

The corresponding sentences in which the Question Formation Transformation has not been used are (2)(a)(2)(c) respectively.

(2)
(a) Mutu can accomplish what?
(b) Johana will introduce who to Ali?
(c) She has tripped over what?

These sentences are produced by phrase structure rules. They are simply questioned versions of sentences like

(3)
(a) Mutu can accomplish a great deal
(b) Johana will introduce the man to Ali
(c) Sheila has tripped over the dog

Notice that what in (2) (a) stands in the same position as the sentence as a great deal in (3) (a).

Likewise, who in (2), (b) is the same position as the man in (3), (c). Because of this correspondence, we know that who and what are noun phrases just as the man and the dog are.

In general, transformations change sentences created by phrase structure rules into sentences with equivalent meanings but different structures.
This is accomplished by adding or deleting words or rearranging word order. Thus the transformation required for constructing sentences like those in (1) from those in (2) can be described as follows:

**Question Formation**

1. Place the first verb of the sentence to the left of the subject noun phrase (the first noun phrase in the sentence).

2. Find a question word (what, who, etc.) called wh-words and move this word to the beginning of the sentence.

Part (i) of the Question Form transformation tells us that (2) (a) *Mitu can accomplish what?* can be converted into *Can Mitu accomplish what?*

Part (ii) of the transformation further converts this into *What can Mary accomplish?* (i)(a)

(Stop at this point to see that this transformation correctly converts (2)(b) into (1)(b) and converts (2)(c) into (1)(c).

What is the result of applying this transformation to the sentence *Mary put the flowers where?*

In other words, the syntactic structure of a sentence like *What can Mitu accomplish?* is described in two steps: the structure rules of English form the basic sentence *Mitu can accomplish what?* then the Question Formation transformation arranges the first sentence from this.

**Linguists** refer to the form of a sentence produced by phrase-structure rules alone as the Deep Structure of a sentence and the form that the sentence has after one or more transformations has applied as the Surface Structure of the sentence. For example, the sentence which has the Surface Structure (a) has the Deep Structure (2a). The same goes for (1b) and (2b) or (1c) and (2c). Of course, the sentence (2a) is also a grammatical English sentence as it stands and if we are describing (2a) by itself, we might say that its Deep Structure is the same as its Surface Structure since no transformation was used to form it.

**Why do linguists adopt this complicated two-step analysis of the sentences like those in (1)?** That is why couldn’t we just as well describe sentences like these directly by phrase-structure rules alone without making use of transformations at all? The answer essentially is that it really turns out to be more complicated and less systematic to try to use phrase-structure rules alone to see this, it is necessary to reconsider declarative sentences like those introduced in (3) above. If we compare a sentence like *at can Mary accomplish?* with the corresponding declarative *Mary can accomplish a great deal* it becomes evident that *accomplish* is followed...
by a noun phrase in the declarative but not in the question. Similarly trip over has a noun phrase following it in Sheila has tripped over the dog but not in the question at has Sheila tripped over? And the declarative John can introduce the man to Bill has two noun phrases following introduce while the question Who can John introduce to Bill? has only one.

- These extra noun phrases moreover are required in grammatical declarative sentences since the sentences would be ungrammatical if these noun phrases were omitted as (4) shows.

(4)
*Mary can accomplish
*John will introduce to Bill
*Sheila has tripped over

In fact any declarative sentence formed on the pattern of those in (4) will be ungrammatical unless the 'extra' noun phrase is present. Because this is a general principle about grammatical declarative sentences in English we will want to be sure that our phrase structure rules always produce a noun phrase following the verb accomplish. Likewise the phrase-structure rules must guarantee that a noun phrase and a prepositional phrase follow the verb introduce.

- But the question sentence like What can Mary accomplish? would be an exception to this general principle if we tried to describe questions by phrase structure rules alone. In this sentence and the others in (1) the 'extra' noun phrase following the verb is missing, yet the sentences are grammatical. However, the sentences in (1) are not exceptions to this principle if we hypothesize that these sentences are formed by the Question Formation Transformation. In the deep structure produced by the phrase structure rules (before the Transformation is applied) they obey the principles required for producing grammatical sentences involving accomplish trip over and introduce because what is the 'extra' noun phrase placed after the verb by the phrase structure rules. Only after the transformation has applied is there a noun phrase "missing" after the verb.

- To summarize this discussion, we have in effect observed that every question sentence of English beginning with what who, etc. lacks exactly one noun phrase to the right of the verb that would be present in the corresponding declarative sentence (or question where the WH-word does not begin the sentence as in (2)). The Question Transformation analysis of such sentences describes the situation exactly correctly since it stipulates that a noun phrase is moved to the beginning of the sentence as the sentence is transformed. This kind of fact about syntax is just what cannot easily be described by phrase-structure rules alone.

Having discussed one transformation in detail, we now present two additional examples of transformations in English. We will not explain the reasons for hypothesizing these transformations as we did for Question Formation because in some cases these reasons are more complicated to describe.
The Passive

(5)
a John ate an apple (Deep Structure before transformation) b An apple was eaten by John (Surface Structure after transformation)

Passive Transformation Move the subject noun phrase (the noun phrase that begins the sentence) to the end of the sentence insert the preposition by just before it and move the object noun phrase (the noun phrase just after the main verb) to the beginning of the sentence.
Syntax

Verb-Particle Shift

(6)
a. The surgeon sewed up the wound (Deep Structure before transformation)

b. The surgeon sewed the wound up (Surface Structure after transformation)

Verb-Particle Shift Transformation Move the particle (the preposition-like word immediately to the right of the verb) after the first noun phrase following the verb

EXERCISES
1. Examples (a) and (b) are definitely not grammatical questions in English

(a) * What has an hour elapsed?
(b) * What will John disappear?

The fact is related to another fact about the verbs elapse and disappear namely that these verbs cannot be followed by a noun phrase in declarative sentences comparison of (c) (d) with (e) (f) confirms this

(c) An hour has elapsed
(d) John will disappear
(e) An hour has elapsed the clock
(f) John will disappear the rabbit

Given this second observation, an explanation of why (a) and (b) are ungrammatical is provided by our hypothesis that all questions of English are produced through the Question Transformation What is that explanation? Why would it be difficult to explain the ungrammaticality of (a) and (b) if we do not use a Question Transformation to form questions?

2. Assume that each set of sentences in A and B below are related by a transformation A represents the deep structure and B represents the surface structure Describe the transformation that converts the A sentences into the B sentences

A

(1)
a. John gave the apple to Mary

B

a. John gave Mary the apple

41
b The pitcher threw the ball to the catcher

b The pitcher threw the catcher the ball

c The salesman sold a car to the manager

c The salesman sold the manager a car
UNIT 5

MORPHOLOGY

THE MINIMAL UNITS OF MEANING MORPHEMES

A morpheme is the minimal linguistic unit which has a meaning or grammatical function.

Although many people think of words as the basic meaningful elements of a language, many words can be broken down into still smaller units called morphemes.

In English, for example, the word ripens consists of three morphemes, plus en plus s.

-En's a morpheme which changes adjectives into verbs, e.g. pine.

-E is a verb, added to the end of a verb, changing it to a verb.

Ripens is still a verb. The morpheme -s indicates that the subject of the verb is third person singular and that the action is either past or future. (In these grammatical terms, you should consult a grammar text for an explanation.)

Those morphemes which can stand alone as words are said to be free morphemes.

Ripe and artichoke.

Those which are always attached to some other morpheme are said to be bound, e.g. -en, -s, -un, -pre-

Notice that the term morpheme has been defined as 'a minimal unit of meaning or grammatical function'.
These are called derivational morphemes.

Morphemes change neither part of speech nor meaning but only refine and give extra information about the already existing meaning of a word.

Thus *cat* and *cats* are both nouns and have the same meaning (refer to the same thing).

But *cats* with the plural morpheme *s* contains the additional information that there are more than one of these things.

Notice that the same information could be conveyed by including a number before the word - the plural *'s* marker then would not be needed at all.

These morphemes which serve a purely grammatical function never creating a different word, but only a different form of the same word are called inflectional morphemes.

Both derivational and inflectional morphemes are bound forms and are called affixes.

When they are attached to other morphemes they change the meaning of the grammatical class on of the word in some way as just seen.

When added to the beginning of a word or morpheme they are called prefixes.

When added to the end of a word or morpheme they are called suffixes.

For example *premeditatedly* has two prefixes (one added to the front of the other) and two suffixes (one added to the end of the other) all attached to the word *meditate*.

In English, the derivational morphemes are either prefixes or suffixes but the inflectional morphemes are all suffixes. There are only eight of them in English.
The Inflectional Suffixes of English

<table>
<thead>
<tr>
<th>Base</th>
<th>Suffix</th>
<th>Function</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wait</td>
<td>s</td>
<td>3rd p sg present</td>
<td>She waits there at noon</td>
</tr>
<tr>
<td>Wait</td>
<td>ed</td>
<td>past tense</td>
<td>She waited there yesterday</td>
</tr>
<tr>
<td>Wait</td>
<td>-ing</td>
<td>progressive</td>
<td>She is waiting there right now</td>
</tr>
<tr>
<td>Eat</td>
<td>-en</td>
<td>past participle</td>
<td>Abu has eaten all the bananas</td>
</tr>
<tr>
<td>Chair</td>
<td>-s</td>
<td>plural marker</td>
<td>The chairs are set around the table</td>
</tr>
<tr>
<td>Chair</td>
<td>s</td>
<td>possessive</td>
<td>The chair's leg is tattered</td>
</tr>
<tr>
<td>Fast</td>
<td>-er</td>
<td>comparative adj or adv</td>
<td>A fast runner</td>
</tr>
<tr>
<td>Fast</td>
<td>-est</td>
<td>superlative adj or adv</td>
<td>May is the fastest runner of all</td>
</tr>
</tbody>
</table>

Below are listed four characteristics which separate inflectional and derivational affixes.

Inflectional Morphemes

1. Do not change meaning or part of speech, e.g. big and bigger are both adjectives.

2. Typically indicate syntactic or semantic relations between different words in a sentence, e.g. the present tense morpheme -s in wants shows agreement with the subject of the verb (both are third person singular).

3. Typically occur with all members of some large class of morphemes, e.g. the plural morpheme -s occurs with most nouns.
4 Typically occur at the margins of words e.g. the plural morphemes -s always come last in a word as in babysitters or rationalizations

Dervational Morphemes

1 Change meaning or part of speech. e.g. -ment forms nouns such as judgement from verbs such as judge.

2 Typically indicate semantic relations within the word, e.g. the morpheme -ful in painful has no particular connection with any other morpheme beyond the word painful.

3 Typically occur with only some members of a class of morphemes, e.g. the suffix -hood occurs with just a few nouns such as brother, neighbour and knight but not with most others e.g. friend, daughter, candle etc.

4 Typically occur before inflectional suffixes e.g. other the derivational suffix -y comes before the inflectional -er.

☐ There is one more distinction between types of morphemes which can be important to make.

☐ Morphemes are separate content that is they are separate and independent deniable meaning or indicate a change in meaning when added to a word.

☐ Others serve only to provide information about grammatical function by relating certain words in a sentence to each other (see 2 under inflectional morphemes in your notes).

☐ The former are called content morphemes the latter are called function morphemes.

☐ In English, all roots and derivational affixes are content morphemes while inflectional affixes and such "function words" as prepositions, articles, pronouns and conjunctions are function morphemes.

☐ Many people confuse morphemes with syllables. A few examples will show that the numbers of morphemes and syllables in a word are independent of each other.

☐ Rape is one morpheme which happens to consist of a single syllable -s however is not even a syllable though it is a morpheme. Ripens is a two syllable word composed
of three morphemes while syllable is a three syllable word composed of only one morpheme

- Morphemes are pairings of sounds with meanings

- Some morphemes have one sound as their phonetic representation. e.g. in lucky or [e] in asexual. Some morphemes consist of one syllable e.g. [in] in unable or [p r] in preview.

- Other morphemes are polysyllabic (have more than one syllable) e.g. language banana Mississippi and the suffix -ry in sanity.

- Sometimes different morphemes have the same phonetic representations as in ear (for hearing) and ear (of corn).

- The same is true of affixes. E.g. the plural possessive and third person singular suffixes can all sound alike. There is a morpheme in that means "not" e.g. more or is noterable and another in that means "in" e.g. wake or reside.

- This same -esues or [-s] is only part of the morpheme in [twars] and

- to the same way. "The " [i t] " is not a part of the word mist without any special morphemic content of its own.

- Some morphemes have more than one phonetic representation depending on which sounds precede or follow them but all meaning the same thing and serving the same purpose.

- For example, the phonetic representation of the plural morphemes is either [s] cats 1 z g or [z] churches.

- Each of these three different phonetic shapes is said to be an allomorph of the same morpheme.

- The plural, possessive and third person singular morphemes all have three allomorphs apiece.

Can you think of other morphemes which have more than one phonetic representation?
The Hierarchical Structure of Words

There are two important facts about the ways in which affixes join with other expressions:

First, the expressions with which a given affix may combine normally belong to the same part of speech.

For example, the suffix -able attaches freely to verbs, but not for example to adjectives or nouns. Thus, we can add this suffix to the verbs adjust, compare, and debate.

But not to the adjectives asleep, lovely, happy, and strong nor to the nouns anger, morning, student, or success.

Second, the expressions resulting from the addition of a given affix to some word or morpheme also normally belong to the same part of speech.

For example, the expression resulting from the addition of -able to a verb are always adjectives, thus adjustable, breakable, comparable, and debatable are all adjectives.

An important consequence of these two facts is that in the formation of a word the affixes aren’t just strung together all at once; instead they are put together step by step.

That is, the internal structure of words is hierarchical.

To see this, consider the adjective reusable (as in plastic bottles are reusable).

This adjective consists of three morphemes: the free morpheme use and the derivational affixes re- and -able. As was noted above, -able is a suffix which joins with a verb to form an adjective.

<table>
<thead>
<tr>
<th>Verb</th>
<th>-able</th>
<th>Adjective</th>
</tr>
</thead>
<tbody>
<tr>
<td>adjust</td>
<td></td>
<td>adjustable</td>
</tr>
<tr>
<td>break</td>
<td></td>
<td>breakable</td>
</tr>
<tr>
<td>compare</td>
<td></td>
<td>comparable</td>
</tr>
<tr>
<td>debate</td>
<td></td>
<td>debatable</td>
</tr>
<tr>
<td>lock</td>
<td></td>
<td>lockable</td>
</tr>
<tr>
<td>use</td>
<td></td>
<td>usable</td>
</tr>
</tbody>
</table>
The prefix re- on the other hand joins with a verb to form a new verb

\[(1) \text{re-} + \text{Verb} = \text{Verb} \]

- adjust
- appear
- consider
- construct
- decorate
- use

\text{readjust}
\text{reappear}
\text{reconsider}
\text{reconstruct}
\text{redecorate}
\text{reuse}

These facts allow us to see that the word \textit{reusable} is formed in two steps: first, the prefix \textit{re-} joins with the verb \textit{use} to form the verb \textit{reuse} as in (1); second, the suffix \textit{-able} attaches to the verb \textit{reuse} to form the adjective \textit{reusable} just as it attaches to the verb \textit{adjust} to form the adjective \textit{adjustable} in (1).

These steps in the formation of \textit{reusable} can be schematically represented by means of a tree structure:

```
\text{Adj}ect
  \text{re}
  \text{verb}
  \text{-able}
```

Notice that \textit{reusable} cannot be regarded as the result of adding the prefix \textit{re-} to the word \textit{useable}.

A little consideration reveals why this is so. Since \textit{use} is a verb, \textit{-able} may attach to it to form the adjective \textit{useable} as in (1), but because \textit{useable} is an adjective, \textit{re-} cannot join with it. Since \textit{re-} only joins with verbs.

Thus, our understanding of how the affixes \textit{re-} and \textit{-able} combine with other morphemes allows us to conclude that the verb \textit{reuse} but not the adjective \textit{useable} is a step in the formation of the adjective \textit{reusable}.

Interestingly, some words are ambiguous (i.e. have more than one meaning) because their internal structure may be analysed in more than one way.
Consider for example the word unlockable; this could mean either 'not able to be locked' or 'able to be unlocked'. If we consider the bound morphemes in this word very carefully, we can see why this ambiguity arises.

In English, there are not one but two prefixes un- the first combines with an adjective to form a new adjective and simply means 'not'.

\[ \text{(iii) un} \quad \text{adj} - \quad + \quad \text{adj} \]

- able: unable ('not able')
- aware: unaware ('not aware')
- happy: unhappy ('not happy')
- intelligent: unintelligent ('not intelligent')
- lucky: unlucky ('not lucky')

The second un- combines with a verb to form a new verb and means 'to do the reverse of'.

\[ \text{(iv) un} \quad \text{v} - \quad + \quad \text{v} \]

- do: undo ('the reverse of doing')
- dress: undress ('the reverse of dressing')
- load: unload ('the reverse of loading')
- loc. to: unlock ('the reverse of locking')
- tie: untie ('the reverse of tying')

Because of these two different sorts of un- in English, unlockable may be analysed in two different ways.

First, the suffix -able may join with the verb lock to form the adjective lockable as in (1) un- may then join with this adjective to form the new adjective unlockable.

This way of forming unlockable is schematized in the following tree structure:

```
Adjective
(\text{Un -I}) \quad \text{Adjective}
| \quad \text{Verb}
| \quad -able
| \quad lock
```
Since un- just means 'not' this tree structure represents the meaning 'not able to be locked'.

The second way of forming unlockable is as follows. The prefix un- joins with the verb lock to form the verb unlock as in (IV) the suffix -able then joins with this verb to form the adjective unlockable.

This manner of forming unlockable is represented by the following tree:

```
  Adjective
     `-able
       
      Verb
        
     Un-2

          lock
```

Since un- means 'to do the reverse of' as in the verb unlock to do the reverse of locking this tree represents the meaning 'able to be unlocked'.

Self Assessment Questions

1. Consider each of the following suffixes from the examples given, determine (i) the part of speech of the expression with which the suffix combines, (ii) the part of speech of the expressions formed by the addition of the suffix, and (iii) the approximate meaning of the suffix.

   a. -ify clarify intensify purify solidity rarefy
   b. -ty rigidity stupidity hostility intensity responsibility
   c. -ize union ze terrorize hospitalize crystallize magnetize
   d. -ive repressive active disruptive abusive explosive
   e. -ion invention injection narration expression pollution
   f. -less hopeless penniless useless heartless mindless
UNIT 6

MORPHOLOGY
SOME MORPHOLOGICAL PROCESSES OF LANGUAGES

Languages use several different kinds of processes in morphology. While English provides an interesting case, other languages use quite different processes.

COMPOUNDING
A compound is a word formed by the combination of two independent words. The parts of a compound can be free morphemes, derived words, or other compounds in nearly any combination.

<table>
<thead>
<tr>
<th>Girlfriend</th>
<th>Air conditioner</th>
<th>Lifeguard chief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackbird</td>
<td>Looking glass</td>
<td>Aircraft carrier</td>
</tr>
<tr>
<td>Lifeguard</td>
<td>Working girl</td>
<td>Life insurance salesperson</td>
</tr>
<tr>
<td>Aircraft</td>
<td>Watchmaker</td>
<td></td>
</tr>
<tr>
<td>Textbook</td>
<td>Self-determination</td>
<td></td>
</tr>
</tbody>
</table>

We can tell by compound, free words, and individual phrases by the difference between the stress placed in words and phrases. Compounds like words in the same year as phrases have primary stress on the first word only while individual words in phrases have independent primary stresses (primary stress is indicated by a).

<table>
<thead>
<tr>
<th>COMPOUNDS</th>
<th>Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackbird</td>
<td>Blackbird</td>
</tr>
<tr>
<td>Makeup</td>
<td>Make up</td>
</tr>
</tbody>
</table>

Other compounds can have phrasal stress patterns but only if they can possibly be phrases. These might also have stress on the first word only like other compounds. These differences are often but not always, reflected in writing conventions such as writing the compound as one word or using hyphens to connect the parts.

<table>
<thead>
<tr>
<th>Easy-going</th>
<th>Easy-going</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mán-made</td>
<td>Mán-made</td>
</tr>
<tr>
<td>Homemade</td>
<td>Homemade</td>
</tr>
</tbody>
</table>

The syntactic category of a word created by compounding depends to some extent on the categories of its parts. In general, two words of identical
Categories will make a compound of the same category. Also the second part of a compound seems to dominate when the categories of the parts differ.

<table>
<thead>
<tr>
<th>Noun-noun</th>
<th>Adjective-adjective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birdcage</td>
<td>Deaf-mate</td>
</tr>
<tr>
<td>Houseboat</td>
<td>Easy-going</td>
</tr>
<tr>
<td>Playground</td>
<td>Highborn</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>X-noun</th>
<th>X-adjective</th>
<th>X-Verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>blackbird</td>
<td>Stone deaf</td>
<td>Outrun</td>
</tr>
<tr>
<td>backwater</td>
<td>Colourblind</td>
<td>Spooned</td>
</tr>
<tr>
<td></td>
<td>Knee-deep</td>
<td>Undergo</td>
</tr>
<tr>
<td></td>
<td>Downcast</td>
<td></td>
</tr>
</tbody>
</table>

The meaning of a compound depends on the meanings of its parts but almost any kind of meaning connection can be involved between parts. For example an aircraft is a craft made for use in the air but an air conditioner is a conditioner of air. Similarly an airbrush is a brush, which uses air. Can you spot the differences in the connections of these compounds?

**Affixation**

Most of the morphological work in English is performed by suffixes. That is sound morphemes (usual, short) that are added to free morphemes. There are basically three kinds of affixes prefixes (added at the beginning of free morphemes or other prefixes), suffixes (added to the end of free morphemes or other suffixes) and infixes (inserted into a morpheme). English has many prefixes - re-, anti-, dis-, and so on - and many suffixes - ment, -ly, -ed, -s, -s, and so on, but it has no affixes. (However the n of stand is a remnant of a very ancient affix that was used to form certain types of verbs).

Tagalog, one of the major languages of the Philippines, uses infixes quite extensively. For example, the infix -am- is used to form many verb forms:

[sulat] write [sumalat] 'to write'
[bil] buy [bumah] 'to buy'
[kuha] take [kumaha] 'to take'
                               get to get

Tagalog also has an -an- infix, which is used to form a kind of passive verb. Many other languages of the Philippines have an -ar- infix, which is used in many words for plants and trees. Sundanese, a language spoken in Indonesia, has an -ar- infix. This infix indicates that the subject of a verb is plural.
REDUPLICATION

In reduplication either all of a morpheme is doubled (total reduplication) or part of it is (partial reduplication). In English, total reduplication occurs only sporadically and it usually indicates intensity.

That's a big, big dog! (big is drawn out)

(Young children will frequently reduplicate words or parts of words)

Indonesian/ Malay uses total reduplication to form the plurals of nouns:

rumah (house) rumah rumah (houses)
ibu (mother) ibu ibu (mothers)
laat (lives) laat laat (lives)

Tagalog uses partial reduplication in the future:

balik (will return) balik balik (will return)
maan (will eat) maan maan (will eat)
pasok (will enter) pasok pasok (will enter)

In conjunction with the prefix man (where it often changes the initial consonant of a following morpheme to a nasal) Tagalog reduplication to derive words from occupations:

bali / man+bali+bali / mamili (a buyer)
sulat / man+sulat+sulat / mamulat (a writer)
MORPHEME INTERNAL CHANGES

Besides adding an affix to a morpheme (affixation) or copying all or part of the morpheme (reduplication) to make a morphological distinction, it is also possible to make morpheme internal modifications. We have a few examples of this in English.

1.) Although the usual pattern of plural formation is to add an inflectional morpheme, some English plurals make an internal modification: *man* *but* *men* *woman* *but* *women* *goose* *but* *geese* and so on.

2.) The usual pattern of past and past participle formation is to add an affix, but some verbs also show an internal change: *break* *broke* *broken* *bite* *bit* *bitten* and so on. Still others show only the internal changes: *ring* *rang* *run* *sang* *sang* and so on.

SUPPLETION

Languages that employ morphological processes to form words will normally have a regular productive way of doing so according to one or more of the processes discussed above. They might also have some smaller classes of words that are irregular because they mark the same morphological distinction by another of these processes.

Sometimes however, the same distinction can be represented by two different words which don’t have any systematic difference in form—they are exceptions to all of the processes. This completely irregular situation is called *suppletion* (or a suppletive distinction) and usually only occurs in a few words of a language.

This situation arises historically as two different words with similar meanings come to be interpreted as two forms of the same word.

In English, for example, the regular past tense is formed by the ending realized by the allomorphs *-t / -d* / *-ed* / *-ad*. Most English verbs and new made-up words in English such as *scroosh* or *blat* will have this past tense form:

- Walk /walk/ → walked /wɔkt/
- Scroosh /skruʃ/ → scrooshed /skruʃd/  
- Blat /blat/ → blatted /bliːtəd/

There are also some smaller classes of very common words in English that form the past tense by an internal vowel change:

- Sing /sɪŋ/ → sang /sæŋ/
Run /rən/ ran /ræn/

But a small number of individual verbs in English have suppletive past tenses.

I am /æm/  I was /wɔz/
I go /gəʊ/  I went /wənt/

There is no similarity at all between the present and past tense forms.

There are also some irregular plurals of nouns ending in /-at/ that involve other internal changes:

ju:nlat/ sentence  'juːnlat/ 'sentences
/fikat/  'thoughts  /fikat/ 'thoughts'

However, the plural of /mæ n/ woman is /mæ nə/ clearly a case of suppletion since there are no forms like /mæ nə r/ or /mæ nə h/, anything of the sort. The plural is one of the few verbs with.

People frequently assume that languages are pretty much the same in terms of what each language marks morphologically.

For example, English speakers often assume that all languages mark the plurals of nouns with an ending or that the subject and the verb agree in person and number in other languages. This is simply not true.

For example, Tagalog does not usually mark the plural of nouns (in most cases the number is clear from the context). When it is necessary to be specific, a separate word mga is used to indicate plural.

[an bataʔ] 'the child'
[an mga bataʔ] 'the children'

When a number is specifically mentioned, no plural marker appears in Tagalog, though the plural marker is obligatory in English (Three dogs is ungrammatical).

[da lawa] 'two' [dalawang bataʔ] 'two children'
[luna] 'five' [limang bataʔ] 'three children'
There is also no subject-verb agreement in Tagalog. For example in English I eat but he eats. In Tagalog, the same form of the verb would be used, no matter what the person/number of the subject: tumakain ako 'eat now I' = 'I eat' tumakain siya 'eat now he' = 'he eats' (now).

Other languages also make distinctions that we don't. While English has only singular versus plural, some languages have a dual when just two are involved. Consider Sanskrit:Juho 'I sacrifice', juhavas 'we (two) sacrifice' and juhumas 'we (pl) sacrifice'.

Some languages also have two kinds of first-person plural pronouns that is English we. Notice that English we in we are going for example may include everyone in the group the speaker is addressing (we every one of us) or it may include some hearers (me and him, but not you). Many languages distinguish these two. Tagalog has tayo (inclusive) but kamo (exclusive).

Cormanche makes a number of distinctions that English doesn't. In addition to a singular/plural distinction in / 'you sg -rukwa-you (two)' tuma 'you (pl)', and an 'inclusive/exclusive distinction -tsaa', we (incl) y nan 'we excl'.

Cormanche also makes a distinction between visible/invisible and near/far. Thus if you are referring to a thing that is within your view you use -mek it (visible).

If the thing is invisible to you ' ?u ? u (invisible) is used. A near object is designated with - ?i (proximate) but a far object with - ?o (remote). (Note only the subject forms of these pronouns have been given).

The lesson to be learned here is that you cannot assume that another language will make distinctions in the same way that English does. For example while every language has some method of indicating number, not all languages do so in the same way or under the same circumstances.

As we've seen, English uses an affix, Tagalog uses a separate word and Indonesian/Malay reduplicates the word to show plural. Nor can you assume that the distinctions English makes are the only ones worth making. Languages must be examined carefully on the grounds of their own internal structures.
UNIT 7

MORPHOLOGY
ENGLISH WORD FORMATION

While many words in English have been inherited from older stages of the language, many more words have come into it by other means.

Indeed, we are always adopting new words into English.

Below are described some of the methods and general word-formation processes by which this is done.

Acronyms

These words are formed by taking the initial sounds (or letters) of the words of a phrase and uniting them into a combination which is itself pronounceable as a separate word.

Thus NATO is an acronym for North Atlantic Treaty Organization.

Amplification through "simulated emission of radiation" and radar for radio detection and ranging.

Back Formation

Back formation makes use of a process called analogy to derive new words in a rather backward manner. For example, we have words like revision and supervise and supervise is formed by regular derivation from revise and ion.

When television was invented, the verb tele-see was back-formed on the basis of analogy with revision and revise, that is,

\[ \text{revision} \rightarrow \text{television} \]

To one another example, the verb donate was formed on the basis of pairs like creation - create.

English borrowed donation from French and back formed donate.

\[ \text{creation} \rightarrow \text{create} \] \[ \text{donation} \rightarrow \text{x} \]
Blending

A blend is a combination of the parts of two words usually the beginning of one word and the end of another; *smog* from *smoke and fog*, *brunch* from *breakfast and lunch* and (chortle from *snuggle and snore*) (Lewis Carroll invented this blend and his poem "Jabberwocky" contains several other examples of interesting blends.)

Borrowing

Foreign words are always being "borrowed" into other languages especially to accompany ideas, inventions, products, and so on.

Examples of borrowings into English.

- *Memorandum* from Latin
- *Port* from Latin *portus* "harbour"
- *Pen* — *Penne* "feather quill" from old French
- *Meter* from Greek (measurement)
- *Omelette* from French
- *Conversation* from French
- *Khaki* "bungalow" from India

Clipping

Frequently we shorten words without paying attention to the derivational morphology of the word (or related words).

Exam has been clipped from *examination dorm from dormitory* and either *tax* or *cab* from *taxi cab* (is also a clipping from *taximeter cabriolet*)

Coinage

Words may also be created without using any of the methods described above and without employing any other word or word parts already in existence that is, they may be created out of thin air.

Such brand names as *Xerox, Kodak, and Exxon* were made up without reference to any other word as were the common words *pooch* and *snob*.
Compounding

- Two or more existing words are put together to form a new word *blackboard* expressway, and *airconditioner*.

- Can you think of other examples of English compounds?

Derivation

- As you know, English has a number of derivational morphemes which we use to derive words.

- There are other prefixes (added to the beginning of a stem) or suffixes (added to the end of a stem).

- Some common prefixes in English are *re-* (again), *de-* (the opposite), *un-* (not), *pre-* (before), *post-* (after), *ante-*, *ante-* (before), *sub-* (under), and common suffixes -ly, -ness, -ed, -en, -ation, -ful, -ible, -ness, -ful.

Functional Shift

- A *new* or *novel* use creates a *shift* in the *function* of a word by *changing* its *use* in another *context*.

  - *Laugh* (verb) and *laugh* (noun) are used as nouns as well as verbs. While *position*, *process*, *contrast* are nouns from which verbs have been formed.

Morphological misanalysis (false etymology)

- Sometimes people hear a word and misanalyze it either because they "hear" a familiar word or morpheme in the word or for other unknown reasons.

- These misanalyses can introduce words or morphemes.

- For example, the suffix *-burger* results from misanalyzing *hamburger* as *ham plus burger*. (Hamburger is a clipping from *Hamburger Steak*.) -Burger has since been added to other types of foods *cheeseburger*, *pizzaburger*, *salmonburger* and *steakburger*.
Another example concerns the creation (a)holic from a peculiar analysis of alcoholic. This suffix can be found in words like workaholic and sugarholic. It is not clear whether such misanalyses arise from actual misunderstanding or from intentional or creative extension of the morphological possibilities of the language.

Proper names

Many places, inventions, activities, etc., are named for persons somehow connected with them. For instance Washington, D.C. (for George Washington), and District of Columbia (for Christopher Columbus), German Kaiser and Russian tsar (for Julius Caesar), and ohm and watt (for George Simon Ohm and James Watt).

Self Assessment Questions

1. What is the difference between back formation and derivation? (Answer found at the beginning of this unit)

2. The process of creating a new word by shifting the part of speech to another case without changing the form of the word is known as ? (see last page of this unit for answer)