

> عمـادة التعلم الالكتية الآدني والثـلـي فيصليم عن بعد

اسم المقرِ<br>علم النحو والصرف MORPHOLOGY and SYNTAX

المسوى اللسادس - اللغة الإنجليزية
$\frac{\text { د/ عبدالرحيم جماذ المقرى }}{\text { أستا }}$
aaljamari@kfu.edu.sa

إعداد: ريم العمادي

جميع الحقوق محفوظة لجامعة الملك فيصل 1436 © All Rights Reserved for KFU 2015 ©

## Introductory Lecture

## CONTENT OF THE LECTURE

- Course description
- Course content
- Course objectives
- Course evaluation
- References
- Contact


## 1. BRIEF COURSE DESCRIPTION

This course introduces the basic principles of English morphology and syntax from the perspective of generative linguistics.
It covers the different processes of word formation including affixation and compounding.
The syntax part introduces basic constituent structure as well as some simple syntactic processes illustrating the working of the transformational component in the grammar.

## 2. COURSE CONTENT <br> MORPHOLOGY

- Words and word structure
- Derivation
- Compounding
- Inflection
- Other morphological phenomena
- Morphophonemics

SYNTAX

- Categories and structure
- Complement options
- Move
- Universal Grammar and parametric variation


## 3. COURSE OBJECTIVES

By the end of the course, students should be able to:

- Identify the internal structure of English words.
- Distinguish different types of morphemes: derivation vs. Inflection.
- Identify the constituent parts of a sentence: words, phrases and clauses.
- Provide a syntactic representation of constituent types on the basis of X'-theory.
- Provide a syntactic derivation for some common sentence types.


## 4. Course Evaluation

Total mark is out of 100

1. $30 \%$ of the total mark is assigned to:

$$
\begin{array}{lll}
\checkmark & \text { Your participation in the Blackboard Forum. } & (10 \%) \\
\checkmark & \text { Your main three assignments. } & \text { (10\%) } \\
\checkmark & \text { Your attendance to live and recorded lectures. } & \text { (10\%) }
\end{array}
$$

2. $70 \%$ of the total mark is assigned to the FINAL TEST

The final test consists of a set of multiple choice questions with five options to choose from. The exact date and time of the final test will be announced later.

## 5. References

William O'Grady, John Archibald, and Francis Katamba. Contemporary Linguistics: An Introduction.

## Pearson Education Limited (2011).

## The content of the course is to be found in Chapters 4 and 5.

http://www.amazon.com/Contemporary-Linguistics-William-OGrady/dp/0312555288/ref=sr_1_fkmr0_1?s=books\&ie=UTF8\&qid= 1423734206\&sr=1-1-fkmr0\&keywords=contemporary+linguistics+an+introduction+candle+edition

## Lecture 1

## INTRODUCTION

Words are important: basic units of language, unlike phonemes and syllables, words carry meaning. Unlike sentences, which are forgotten soon after we produce them, words are stored in a speaker's mental dictionary or lexicon. Words are the fundament building blocks of language.
Native speakers of English know thousands of words such as read, language, computer, on, whose meaning and form cannot be predicted.
However, once they know the meaning of phish (obtain sensitive information via email fraudulently), they can recognize and construct words such as: phished, phisher, phishing, and unphishable.
Thus, MORPHOLOGY is that component of the grammar which studies the structure of words to account for the knowledge that native speakers have about their own language.

Native speakers know how to segment a string of sounds into words when they write, for instance, so then: What is a word? How can it be defined?
Linguists define the word as the smallest free form in a language. This means that it can occur alone and in different positions in the sentence as well:
(1) What creatures do children find most fascinating?

## Dinosaurs

(2) Paleontologists study dinosaurs

Dinosaurs are studied by paleontologists

* Dinosaur ( $-s$ ) is extinct. ( -s is NOT a free form)


## MORPHEMES

Like syllables and sentences, words have an internal structure which consists of one or more morphemes.
A Morpheme is the smallest unit of language that carries meaning. For example: Builder is made up of build (construct) and -er (one who builds). Houses is made up of house (dwelling) and -s (more than one).
One-morpheme word is said to be simple and two or more morpheme words are said to be complex.
Ex: hunt, hunt-er, hunt-er-s.

## FREE and BOUND MORPHEMES

A morpheme can be either free, when it can stand alone, or bound, when it must be attached to another one. Ex: boy vs. -s
A free morpheme in English can be bound in a different language. Ex: head and *fi (in Athapaskan, an Amerindian language). In this language, this morpheme is bound, sefi, meaning my head.
Conversely, a bound morpheme in English can be free in other languages. Ex, play-ed vs thaan leew (eat + past in Thai)

## ALLOMORPHS

Allomorphs are the variant forms of a morpheme.
Example 1: the indefinite article in English has two variants: a when preceding a word that begins with a consonant ( a book) and an when preceding a word that begins with a vowel (an orange).
Example 2: The plural morpheme -s has 3 pronunciations: [s] as in cats, [z] as in dogs, and [əz] as in judges.
Do not confuse spelling changes with allomorphic variation. Ex : e in create and ride is dropped in creative and rid-ing. On the other hand, there is allomorphy in electric / electric-ity and impress / impression, where the pronunciation changes but not the spelling. [k] $\rightarrow$ [s] and [s] $\rightarrow$ [sh]

## ANALYSING WORD STRUCTURE

To identify the internal structure of words, we need not only to identify the component morphemes but also to classify them according to their contribution to the meaning and function of the word.
Roots and affixes: Complex words consist of a root morpheme and one or more affixes.
The root is the core of the word that carries the major meaning component. Typically, roots are lexical categories such as N, V, A, or P. N=Noun, V=Verb, A=Adjective, P=Pronoun
Affixes are NOT lexical and are ALWAYS bound morphemes. For ex, -er in teach-er (V+er $\rightarrow \mathrm{N}$ ) Af=Affix

## Below are examples of the internal structure of some words:

| N | A |  | N |  | v |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| / 1 | / | 1 | / |  |  |  |
| V Af | Af | A |  | Af | A | Af |
| 1 | 1 | I |  | 1 | I | I |
| Teach er | un | kind | book | s | black |  |

AFFIX TYPES: There are 3 types:

1. A prefix is attached to the front of the base. Ex. De-activate, re-play, il-legal
2. A suffix is attached to the end of a base. Ex. Faith-ful, govern-ment, hunt-er
3. An infix, which less common, occurs within another morpheme. For example, in Tagalog, (the language spoken in the Philippines), we find: bili $\Rightarrow$ buy, the past form of which is $b$ -in-ili $\rightarrow$ bought.
BEWARE! -ish in boy-ish-ness is NOT an infix.
Arabic, and other Semitic languages, has interesting illustrations of infixing. Roots in Arabic are consonantal. Various combinations of vowels are added, including in between consonants to mark grammatical contrasts such as: Kataba $\boldsymbol{\Rightarrow}$ wrote, kutiba $\boldsymbol{>}$ has been written, aktub $\boldsymbol{\Rightarrow}$ I write/am writing. One way of representing these facts is by assigning vowels to a different tier, level :


## PROBLEM CASES

English morphology is said to be word-based. Consider the following: re-do, treat-ment. Most complex words are like these two.
Not all languages are like English, Spanish and Japanese; verbal roots are ALWAYS bound and cannot therefore stand alone. Arabic is also like that.
English also has a number of bound roots such as unkempt (unkempt hair) which does not break into un+kempt.
Other words such as inept were borrowed into English from Latin ineptus (unsuited). Today, this word cannot be broken up into *in-ept.
Another class of borrowed words from Latin via French is represented by the following: receive, conceive, perceive, permit, submit and commit. Each potential division of the word does not have a meaning of its own. Re- $\boldsymbol{>}$ 'again' but-ceive $\boldsymbol{>}$ ? Consequently, these words cannot be segmented.

## Lecture 2

## Derivation

## INTRODUCTION

## Some English derivational affixes

- Complex derivations
- Constraints on derivation

Two classes of derivational affixes compounding:

- Properties of compounds
- Endocentric and exocentric compounds

Derivation is an affixation process that forms a word with a meaning and/or category distinct from that of its base. Ex. Sell+er $\Rightarrow$ sell-er, V+er $\Rightarrow N$, NOT to be confused with tall+er $\Rightarrow$ tall-er, A+er $\boldsymbol{\rightarrow}$ A. Here er is inflectional.

Fig. 1

| Derivation |
| :---: |
| $\frac{\mathrm{D}}{\mathrm{N}}$ |
| / 1 |
| V Af |
| 1 I |
| Teach er |


| $\frac{3}{2}$ Inflection |  |
| :---: | :---: |
| A |  |
| A | I |
| I | I |
| tall | er |

Once formed, derived words become independent lexical items and receive their own entry in a speaker's mental dictionary. With time, words acquire new meanings. Ex. Profession means 'career' rather than 'the act of professing'.

## SOME ENGLISH DERIVATIONAL AFFIXES

Examples of derivational suffixes: fix-able, refus-al, claim-ant, teach-er, shoot-ing, impress-ive, treat-ment, king-dom, faith-ful, presidet-ial, arab-ian, optimist-ic, hospital-ise, brain-less, poison-ous, tall-ish, active-ate, black-en, stupid-ity, slow-ly, happi-ness.

## COMPLEX DERIVATIONS

Some words require multiple levels of word structure as in Fig. 2 below:
Fig.2: A multilayered internal structure


This word illustrates a multilayered internal structure with the attachment of an affix to an appropriate base.

## COMPETING ANALYSIS

In some cases, the internal structure of a word is ambiguous between two competing analyses.
Ex. Unhappiness Fig. a. N



## CONSTRAINTS ON DERIVATION

Derivation is often subject to special constraints and restrictions.
For example, the suffix -ant can attach to bases of Latin origin such as combat-ant, assist-ant, but not those of English origin such as *help-ant, *fight-ant.
A derivational affix may attach only to a base with particular phonological properties.
For example, the -en combines with adjectives to create verbs.
Ex. Whiten, soften, madden, quicken, liven, but not *abstracten, *bluen, *greenen, *angryen, *slowen. This suffix can only combine with a monosyllabic base ending in an obstruent (stop, fricative or affricate).

## TWO CLASSES OF DERIVATIONAL AFFIXES

Class 1:
They trigger changes in the consonant or vowel segment of the base and may affect stress placement.

$$
\begin{array}{ll}
\text { Ex. } & \text {-ity san-ity } \\
& \text {-y democrac-y } \\
& \text {-ive product-ive } \\
& \text {-ise public-ise }
\end{array}
$$

[ei] changes to [i], from sane to sanity.
[t] changes to [s] and stress shifts from 'democrat to de'mocracy stress shifts from pr'oduct to pro'ductive. shift from [k] to [s] from public to publicise .

## Class 2:

a) These tend to be phonologically neutral, not affecting the segmental makeup of the base.

Ex. Prompt-ness, hair-less, hope-ful, quiet-ly, self-ish, defend-er.
b) These usually cannot intervene between the root and a class 1 affix.

Ex. Divis-ive-ness, fear-less-ness, but not *fear-less-ity.

## COMPOUNDING

Compounding is a process of word formation in English which consists in combining existing words to create complex words.

The resulting compound may be a Noun or a Verb or an Adjective. Ex. :


Note that the rightmost word determines the category of the compound. Thus, Greenhouse is a noun because it ends with the noun house. Spoon-feed is a verb because it ends with the verb feed. The morpheme that determines the category of the entire word is called HEAD.

Compounds can combine with other words to create even larger compounds. Ex.
(3)

b.


## Notice how compounding interacts with derivation in (3c)

## PROPERTIES OF COMPOUNDS

English orthography is not consistent in representing compounds. They can be written as single words, or separated by a hyphen, or simply separate words.
As for pronunciation, some facts MUST be noted: Adj-Noun compounds are characterized by more prominence/stress of the first compound: "greenhouse $\Rightarrow$ "a glass enclosed garden" vs. green house "a house painted green", `blackboard $\Rightarrow$ "a chalkboard "vs. black board ( a board painted in black).
Tense and plural markers cannot affect the first element in the compound. Ex. * the player dropped kick the ball vs the player drop kicked the ball.

## ENDOCENTRIC AND EXOCENTRIC COMPOUNDS

In most cases, a compound denotes a sub-type of the meaning/concept denoted by the head/rightmost element in the compound.
Ex.:
steamboat $\Rightarrow$ a boat powered by steam.
airfield $\rightarrow$ a field where airplanes land.
fire drill $\rightarrow$ practice in case of fire.
Such compounds are said to be endocentric.
In a smaller number of cases, the meaning of the compound does not follow from the meaning of its compounds.
Ex.
redhead $\rightarrow$ a person with red hair.
redneck $\rightarrow$ a person, not a neck.
Such compounds are said to be exocentric.
Exocentric compounds allow the suffixation of $-s$ to irregular plurals, the endocentric ones do NOT.
Ex.
Endocentric:
wisdom teeth, policemen, oak leaves.
Exocentric:
bigfoots (mythical creatures), watchmans (a type of portable TV).

## Lecture3 <br> INFLECTION

## What is INFLECTION?

It is a change or modification in the form of a word to mark grammatical. For examples, languages contrast plural and singular nouns by the addition of a plural affix such as -s in English as in book ~ book-s. (The base form to which an inflectional affix is added is also called a stem.

## INFLECTION IN ENGLISH

With only 8 inflectional affixes, English is not a highly inflected language.
English inflectional affixes:

- Nouns: Plural -s as in books ; Possessive (genitive) -s as in John's book.
- Adjectives: Comparative -er $\rightarrow$ the smaller one, Superlative -est $\rightarrow$ the smallest one.
- Verbs: 3Person simg. Non-past $-s \rightarrow$ He reads well. Prog. -ing $\rightarrow$ He is working. past tense -ed $\rightarrow$ He worked; past participle -en/ed $\rightarrow$ He has eaten/worked.


## INFLECTION VERSUS DERIVATION

4 criteria are often used to distinguish between inflection and derivation affixes.

## (1) Category change:

Inflection does not change the grammatical category of the meaning of its host.

| N | V |
| :---: | :---: |
| / | 11 |
| N Af | $V$ Af |
| 1 | I |
| Book s | work ed |

Derivational affixes do change the category and meaning of their host.

| A | N | v | N |  |
| :---: | :---: | :---: | :---: | :---: |
| / 1 | / 1 | 11 |  |  |
| N Af | $v$ Af | N Af | N | Af |
| 1 I | 1 | I | I | I |
| Heart less | work en | hospital ise | king | dom |

(1) Order: A derivational affix (DA) must combine with the base before an inflectional affix (IA); i.e., Inflection applies to the output of derivation.

(2) Productivity:

IAs have few exceptions, comparatively. DAs typically apply to restricted classes of bases. Ex. modernize vs *new-ise ; legal-ise vs * lawful-ise ; Confine -ment; align-ment; treat-ment; * arrest-ment; * straighten-ment, etc.

## (3) Semantic transparency :

IAs contribute transparent and consistent meaning to their host.
Ex. books, trees, cats or walked, played, talked, etc.
DAs do not contribute consistent meaning.
Often it is not possible to predict the word's meaning from its parts.
Ex. Actor is someone who acts but a professor is not so who professes. Government can mean institution as in government's program but it can also mean act of governing as in government by the people.

## OTHER INFLECTIONAL PHENOMENA

CASE: It is a change a word's form to mark change in its grammatical function ( subject, direct object, indirect object, and so on ). English does not mark case on noun, but it does on pronouns; ex, he vs him, he met him vs * him met he.

Standard Arabic marks Case on nouns: (nominative, accusative, and genitive )
Akala Omar-u t-tuffaahat-a fi l-maktab-i
Ate Omar-nom apple-acc in the-office-gen
'Omar ate the apple in the office. '
AGREEMENT: Occurs when a word is inflected to match certain grammatical properties of another word (t-taTaabuq). In English, it is limited to the third person singular of the simple present; ex, He work-s very hard.

## PROCESSES RELATED TO INFLECTION

## Internal Change:

A process that substitutes a non-morphemic segment to mark a grammatical contrast.
Ex. sink $\sim$ sank (ablaut); goose ~ geese (umlaut). The change explained historically is as follows:
a. Old English form : /go:s/
d. Loss of the plural suffix / gœ:s/
b. Old plural form: /go:s-i/
e. Other change /ge:s/ then /gi:s/
c. umlaut / gœ:s-i/

Note that internal change is NOT infixing. There is no base form \{sg\}, \{sk\}. Infixing and internal change show that morphology is not always concatenative, meaning that affixation does not always apply sequentially.

Suppletion: it occurs when a morpheme is replaced by another which is extremely different to mark a grammatical contrast. Ex. Go ${ }^{\text { } ~}$ went and was ~ were.

Sometimes it is difficult to distinguish between suppletion and Internal Change. Ex. Think ~ thought, seek $\sim$ sought. Often, it is treated as an extreme form of internal change or as partial suppletion.

Reduplication: it involves the repetition of the base form or some part of it.
Ex. In Turkish, $i j i \Rightarrow$ well, while $i j i i j i \Rightarrow$ very well (full doubling of the base form).
In Tagalog, takbo $\Rightarrow$ run, while tatakbo $\Rightarrow$ will run (partial doubling of the base).
Tone placement : Tone is used in some languages to mark grammatical contrast. Ex, In Mini-Bili, a language spoken in the Congo, we find the following contrasts: zí $\Rightarrow$ ate, while zì $\Rightarrow$ will eat.

Conversion: Often considered to be a type of derivation, it involves a change in meaning and category. It is also called zero derivation. Ex., the poor, the rich, the sublime, ( Noun ~ Adjective), up the price ( preposition ~ verb ), dirty ( verb to Adj), run (verb ~ noun), butter ( noun ~ to verb).

Conversion in two syllable words is often marked by a shift in stress. Ex., `implant (N) ~ im `plant, `import ~ im `port, `present ~ pre`sent.

Clipping: A process whereby a polysyllabic word is shortened by deleting one or more syllables. Ex., Names, Ron $\sim$ Ronald, Liz ~Elisabeth. In casual speech, prof $\sim$ professor, phys-ed $\sim$ physical education. Other forms are much more widely spread: ad, lab, demo, etc. Recently, we find internet-inspired creations such as blog (website log of events).

Blends: They are words that are formed by blending non-morphemic parts of two already existing words. Ex., brunch = breakfast +lunch, smoke = smoke + smog, infomercial = information +commercial, ginormous = gigantic + enormous, bit = binary digit, modem = modulator + demodulator, etc.

Backformation: Creates a new word by removing part of an existing word. Ex., Resurrection $\boldsymbol{>}$ resurrect, donation $\Rightarrow$ donate, enthusiasm $\Rightarrow$ enthuse, etc. Ex of new recent such creations are: liaison $\Rightarrow$ liaise, allegation $\Rightarrow$ allegate, administration $\Rightarrow$ administrate, aggression $\boldsymbol{\Rightarrow}$ aggress.

Acronyms: They are formed by keeping the initial letters of some or all the words in a phrase and pronouncing them as ONE word. Ex., UNICEF $\Rightarrow$ United Nations International Children's Emergency Fund, NATO $\boldsymbol{\rightarrow}$ North Atlantic Treaty Organisation, etc.

Word coinage: Common for names of products. Ex., Kodak, Teflon.

## MORPHOPHONEMICS

```
التركيب الصوتّي للوحدات (الصرفية
```


## Morphemes and their allomorphs

Is every morpheme pronounced the same in all contexts? The answer is NO. Many morphemes have two or more pronunciations, called allomorphs. The choice between them is determined by the phonological context.

## Examples 1 : The plural in English

How is the plural morpheme in English formed?
Answer, by adding -s to the singular form. Consider: cats, dogs, horses. As is well known, English spelling does not reflect pronunciation.
This suffix has three allomorphs: [s] as in cats, lamps, [z] as in dogs, days, and [iz] or [əz] as in horses or judges. The pronunciation is predictable on the basis of the phonological context :

- Sibilants ( hissing sounds) such as horse, rose, bush, church, judge, call for [iz]
- Otherwise, when preceded by a voiceless consonant, [s] is used as in cat, rock, cup.
- Otherwise, when preceded by a voiced consonant, [z] is used as in dogs, days, birds.

Example 2: How is the past morpheme -ed realized phonologically? [t], [əd], and [id] or [əd] Is Allomorphy a matter of phonological conditioning only? Yes, as in the cases above, but NO for others.
Consider the word lie. It ends in a vowel, a voiced sound and therefore forms its plural lies with [z]. However, if we replace [z] with [s], we get an actual word lice, the plural of louse.

Grammar also accounts for allomorphy in English.
Consider cliff and laugh. Both form their plural with [s], cliffs and laughs, but wife and loaf do not, *wifes, *loafs are ill-formed. Their plural is wives and loaves.
Similar words that change their voiceless consonants $f, s$, th to voiced counterparts $v, z, d h$ are : knife ~ knives, life ~ lives, path ~ paths.
Notice that the change is restricted to the plural morpheme: "my wife's car" does NOT undergo any change.

## Lecture 4

## MORPHOLOGY PRACTICE

## EXERCISE 1: Circle the correct answer in the following multiple choice questions:

1. Morphology is the level of grammar concerned with the $\qquad$
a. Structure of words
b. Stricture of words
c. Status of words
d. Structure of worlds
2. The association between most words and their meanings is purely $\qquad$
a. Controversial
b. Conditional
c. Central
d. Conventional
3. When we derive one word from another, we
a. Change its class, for example, from Verb to Noun
b. Change its tense, for example, from Past to Present
c. Both of the above
d. None of the above
4. Roots are $\qquad$
a. NOT always free
b. Always free
c. Both of the above
d. None of the above
5. A compound is a word that contains $\qquad$
a. One prefix and one word
b. One suffix and one word
c. Two root morphemes and one word
d. Two free standing forms
6. $\qquad$ is a morpheme that makes the most significant contribution to a word's meaning.
a. The phoneme
b. The derivational morpheme
c. The inflectional morpheme
d. The root
7. $\qquad$ is some kind of resemblance between the sound of a word and what it denotes/means.
a. Idiom
b. Proverbs
c. Onomatopoeia
d. None of the above
8. Suppletion occurs when a word is represented by two or more $\qquad$ roots.
a. Different
b. Similar
c. Both $a$ and $b$
d. None of the above
9. Choose the group of words that result from derivation
a. Cry, cries, cried, crying
b. Kind, unkind, kindness, kindly
c. Tooth, teeth
d. None of the above

EXERCISE 2: Divide the following words into morphemes and morphs.
Examples: (i) truth morphemes: \{true\} \{th\}
(ii) barefoot morphemes: \{bare\} \{foot $\}$
(1)
a. research $\{r e\}\{$ search $\}$
b. butterfly \{butter\} \{fly\}
c. holiday \{holi\} \{day\}
d. morpheme \{morph\}\{eme\}
e. phonology \{phono\} \{logy\}

EXERCISE 3: Some words in (2) contain suffixes. Identify the suffixes by circling them.
(2)
a. happiness
b. freedom
c. flowers
e. brother
e. blackboard

EXECISE 3: Some words in (3) contain prefixes. Identify the prefixes by circling them.
(3)
a. unable
b. discourage
c. establish
d. receive
e. strawberry

EXERCISE 4: For each word below, indicate whether the word is morphologically simple (S) or complex (C), or includes an inflectional affix (IA), or includes a derivational affix (DA) by circling the relevant answer. $S=>$ simple, $C=>$ Complex, $I A=>$ infl. Affix, DA=> Deriv. Aff.
(4)

| a. rider | S | C | IA | DA |
| :--- | :--- | :--- | :--- | :--- |
| b. colder | S | C | IA | $\underline{D A}$ |
| c. silver | S | C | IA | DA |
| d. lens | S | C | IA | DA |
| e. legs | S | $\underline{C}$ | $\underline{I A}$ | DA |

EXERCISE 5: (i) Identify the root in the words below by underlining it; (ii) State the syntactic category it belongs to. Example: friendly: friend (Noun)
(5)
a. lamps lamp (Noun)
b. kindness kind (Adjective)
c. hinted hint (Noun)
d. players pray (Verb)
e. grandfathers grandfather (Noun)

