Day 10
Cesar Koirala
Morphology

- The system of categories and rules involved in word formation and interpretation is called **morphology**.
Morphology

- How do you learn/store the words like tree, bed, write?
- How do you learn/store the words like unwanted, fastest, cats?
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The words in the second group and countless other words can be constructed and comprehended by the application of some general rules.
Morphology

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- How do you learn/store the words like unwanted, fastest, cats?

The words in the second group and countless other words can be constructed and comprehended by the application of some general rules.

This system of categories and rules involved in word formation and interpretation is called **morphology**.
Interaction of Morphology and Phonology

- There are many interactions between phonological forms and morphological structures (which we shall discuss in the later chapters).
- Hence, it is very important to know about basic morphology in order to understand Morphophonemic processes.
Basic Concepts - The Morpheme

- The smallest linguistic unit of meaning or function.
The Morpheme

- The smallest linguistic unit of meaning or function.

  cat + s
The Morpheme

- The smallest linguistic unit of meaning or function.

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    cat + s
```

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“A feline”        “Plural”
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Morphemes and Words

- Morphology creates words by combining morphemes in a systematic way
Morphemes and words

- Morphemes make up words
  - Some words contain only 1 morpheme:
    - For example ‘big’ ‘run’ ‘lung’ ‘blue’
    - These are monomorphemic words
  - Other words contain more than one morpheme:
    - For example ‘un+happy’ ‘un+twist+ed’ ‘quick+ness’
    - These are polymorphemic words
Summary of morpheme types

Morphemes

Free
- Roots

Bound
- Affixes
  - Derivational
  - Inflectional
    - Prefix
    - Suffix
    - Infix
    - circumfix
- Roots
In terms of how they affect the properties of the things they attach to, there are 2 types of affix:

- Derivational
- Inflectional
Derivational:

• Can change the core meaning, word category
• Can change the category (N, V, Adj etc...) of the thing to which the attach.
• Create a whole new word
• E.g. electric > electric+ity; comfort> comfort+able; lug> lugg+age etc...
Inflectional

- Do not change the meaning of words
- Do not change the word category (N, Adj. V, etc...)
- Mark a particular grammatical environment or relationship
Only 9 of them, all are suffixes

- 3rd.sg.present
- possessive
- plural
- comparative
- superlative
- past tense
- progressive
- pastive marker

- s
- s
- s
- er
- est
- ed
- ing
- ed/-en
Summary of morpheme types

- Morphemes
  - Free
  - Bound
  - Roots

Affixes
- Derivational
- Inflectional

Prefix
Suffix
Infix
Circumfix
Affixation and other morphological processes

Types of affixes classified by where they attach to a root

- prefixes: inedible ineligible intolerant
- suffixes: drinkable likeable doable
- circumfixes
- infixes
Circumfixes

Samoan

finau  "to quarrel"
fe- / -a?i  "reciprocal"
Circumfixes

Samoan

fefinaua?i "to quarrel with each other"
Infixes

Bontoc (Philippines)

- fikas: "strong" -um- "to be"
- kilad: "red"
- fusul: "enemy"
- pusi: "poor"
Infixes

Bontoc (Philippines)

- fumikas: “to be strong”
- kilad: “red”
- fusul: “enemy”
- pusi: “poor”
Practice Problems...

- Page 176: Exercise 2 (a,c,e,i,h)
Practice Problems...

- Page 176: Exercise 2 (a,c,e,i,h)

- (a). cat: free
  -s: bound inflectional suffix
Practice Problems...

- Page 176: Exercise 2 (a,c,e,i,h)
  
  (a). cat: free  
  -s: bound inflectional suffix
  
  (c). re-: bound derivational prefix  
  join: free
Practice Problems...

• Page 176: Exercise 2 (a,c,e,i,h)

• (a). cat: free
  -s: bound inflectional suffix

• (c). re-: bound derivational prefix
  join: free

• (e). mild: free
  -er: bound inflectional suffix
Practice Problems...

- Page 176: Exercise 2 (a,c,e,i,h)
  
  - (a). cat: free  
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  - (c). re-: bound derivational prefix  
    join: free
  
  - (e). mild: free  
    -er: bound inflectional suffix
  
  - (i). greed: free  
    -y: bound derivational suffix
Practice Problems...

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- (a). cat: free
  -s: bound inflectional suffix

- (c). re-: bound derivational prefix
  join: free

- (e). mild: free
  -er: bound inflectional suffix

- (i). greed: free
  -y: bound derivational suffix

- (h). bi- bound derivational affix
  cycle free
    OR
  bicycle free
Summary of morpheme types

Morphemes

Free

Roots

Bound

Affixes

Derivational

Inflectional

Prefix  Suffix  Infix  circumfix
Morphological Processes

- **Basic Idea:**
  - We store morphemes in the brain
  - Morphemes are combined or changed via morphological processes
  - The output of morphological processes is words
Types of morphological processes

- Affixation
- Compounding
- Reduplication
- Alternations
- Suppletion
Affixation

- Attachment of an affix to a base(root).

1. Prefix
2. Suffix
3. Infix
4. Circumfix
Affixation

- Attachment of an affix to a base(root).

1. Prefix (e.g. inactive)
2. Suffix
3. Infix
4. Circumfix
Affixation

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1. Prefix (e.g. inactive)
2. Suffix (e.g. drinkable)
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1. Prefix (e.g. inactive)
2. Suffix (e.g. drinkable)
3. Infix (e.g. Bontoc (Philippines): fumikas = fikas ‘strong’ + um ‘to be’)
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- Attachment of an affix to a base (root).

1. Prefix (e.g. inactive)
2. Suffix (e.g. drinkable)
3. Infix (e.g. Bontoc (Philippines): fumikas = fikas ‘strong’ + um ‘to be’)
4. Circumfix (e.g. Samoan: fefinau’a?i = finau ‘to quarrel’ + fe- / a?i ‘reciprocal’)
Compounding

- Combining two independent words to form a new word:
  - Girlfriend, textbook, air-conditioner
Reduplication

- Process of forming a word by repeating either an entire word or part of the word
  - Total/full reduplication
  - Partial reduplication
Reduplication

- Process of forming a word by repeating either an entire word or part of the word
  - **Total/full reduplication**
    - Indonesian (uses full reduplication for forming plurals of nouns):
      - rumah ‘house’ ⇒ rumah-rumah ‘houses’
  - **Partial reduplication**
    - Tagalog (uses partial reduplication for forming future tense of verbs):
      - bili ‘buy’ ⇒ bibili ‘will buy’
      - pasok ‘enter’ ⇒ papasok ‘will enter’
Alternations

- Morpheme internal modifications that make new words or morphological distinctions

- Hebrew: (Derivational alternations between nouns and verbs)

<table>
<thead>
<tr>
<th>Verbs</th>
<th>Nouns</th>
</tr>
</thead>
<tbody>
<tr>
<td>[limed]</td>
<td>[limud]</td>
</tr>
<tr>
<td>‘he taught’</td>
<td>‘lesson’</td>
</tr>
<tr>
<td>[sijem]</td>
<td>[sijum]</td>
</tr>
<tr>
<td>‘he finished’</td>
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• English has limited alternations that are somewhat idiosyncratic:
  - Sink [s\text{ɪŋk}] vs. sank [s\text{æŋk}] vs. sunk [s\text{ʌŋk}]
  - Ring vs. rang vs. rung
Suppletion

- A morphological process between forms of a word where wherein one form cannot be phonologically or morphologically derived from the other
- ‘go’ vs. ‘went’
- ‘is’ vs. ‘was’
Types of morphological processes

- Affixation
- Compounding
- Reduplication
- Alternations
- Suppletion
• Page 178 (11)

a. bind – alternation
Practice problems

- Page 178 (11)

a. bind – alternation  f. cover – affixation
b. toe, nail – compounding  g. ma – reduplication
c. Sarah – affixation  h. mouse – alternation
d. be – suppletion  i. lady, bug – compounding
e. domestic – affixation  j. ring – alternation
Practice Problem

- Page 179 (15 (i))
This is an example of reduplication. In each case, the second and third consonant of the root word are repeated to form the derived word.
Practice Problem

- Page 185 (34)
Practice Problem

- Page 185 (34)

[kali] house                                                   [no] my
[pelo] dog                                                      [mo] your
[kwahmili] cornfield                                             [i] his
[mes] (plural marker)
Practice Problem

Page 185 (34)

[kali] house
[pelo] dog
[kwahmili] cornfield
[mes] (plural marker)

b. 'his dog'
Practice Problem

Page 185 (34)

[kali] house
[pelo] dog
[kwahmili] cornfield
[mes] (plural marker)

b. 'his dog'

c. [ikwahmilimes]
Procedure of performing morphological analysis

1. Isolate and compare the forms that are partially similar
Procedure of performing morphological analysis

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   e.g [nokali]  ‘my house’
   [nokalimes]  ‘my houses’
   [mokali]  ‘your house’
   [ikali]  ‘his house’
2. If a single phonetic form has two distinct meanings (functions), it must be analyzed as representing two different morphemes.
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- Does [no] have two distinct meanings?
  [nokali] ‘my house’
  [nokalimes] ‘my houses’
2. If a single phonetic form has two distinct meanings (function), it must be analyzed as representing two different morphemes.

- Does [no] have two distinct meanings?
  [nokali] ‘my house’
  [nokalimes] ‘my houses’

- How about the morpheme spelled [er] in the following words?
  [worker]
  [faster]
Procedure of performing morphological analysis

3. If the same function and meaning are associated with different phonetic forms, these different forms all represent the same morphemes (They are allomorphs of the morpheme).
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- Imbalance  [Imbæləns]
- Inability  [Inəbləri]
- Incomplete  [Iŋkəmplət]
- Irresponsible  [Irəspənsɪbl]
- Illegible  [Ilədʒɪbl]
3. If the same function and meaning are associated with different phonetic forms, these different forms all represent the same morphemes (They are allomorphs of the morpheme).

- Imbalance: [Imbæləns]
- Inability: [InəbIləri]
- Incomplete: [Inkəmplɪt]
- Irresponsible: [IrɪspənsIbl]
- Illegible: [IldʒIbl]
3. If the same function and meaning are associated with different phonetic forms, these different forms all represent the same morphemes (They are allomorphs of the morpheme).

- Imbalance \([\text{Imb}\text{æl}\text{əns}]\)
- Inability \([\text{In}\text{əb}\text{Il}\text{əri}]\)
- Incomplete \([\text{Iŋk}\text{əmpl}\text{it}]\)
- Irresponsible \([\text{Ir}\text{IspansIbl}]\)
- Illegible \([\text{IlɛdʒIbl}]\)

We call \([\text{Im}]\), \([\text{In}]\), \([\text{Ir}]\), \([\text{Il}]\), \([\text{Iŋ}]\) allomorphs of the same morpheme.
Procedure of performing morphological analysis

- The choice of a particular form of a morpheme is predictable on the basis of the phonetic environment.

- **Imbalance**  \([\text{Imbæləns}]\) -> \([\text{Im}]\) before labials
- **Incomplete**  \([\text{Iŋkəmplənt}]\) -> \([\text{Iŋ}]\) before velars
- **Irresponsible**  \([\text{IrIspənsIbl}]\) -> \([\text{Ir}]\) before \([\text{r}]\)
- **Illegible**  \([\text{IlɛdʒIbl}]\) -> \([\text{Il}]\) before \([\text{l}]\)
- **Inability**  \([\text{InəbIərᵊi}]\) -> \([\text{In}]\) elsewhere
Practice Problem

- Page 184 (31)
Practice Problem

• Page 184 (31)

a. [kaamaj] son             [no] my              [pom] their
   [ki] house                  [po] his                 [m]/[um] (plural marker)
   [taana] blanket           [ʔo] your (sg.)   [huukapi] pipe
   [peew] wife                [ʔom] your (pl.)   [tʃam] our
a. [kaamaj] son       [no] my       [pom] their
    [ki] house       [po] his       [m]/[um] (plural marker)
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b. Yes, the allomorphs are phonologically conditioned.
a. [kaamaj] son [no] my [pom] their
[ki] house [po] his [m]/[um] (plural marker)
[taana] blanket [ʔo] your (sg.) [huukapi] pipe
[peew] wife [ʔom] your (pl.) [tʃam] our

b. Yes, the allomorphs are phonologically conditioned.

c. [um] after a consonant; [m] after a vowel