

# Getting Started with Morphology

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• Linguistics for Juniors<sup>1</sup> •

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## 1 What is Morphology?

Morphology is the study of word formation and word structure.

- The term ‘morphology’ comes from the Greek root *morphē*, meaning ‘form’, plus *-ology*, an affix that represents the study of something.
- The basic unit of analysis in morphological study is a **morpheme**, defined as ‘the most minimal unit of language that contains meaning and/or grammatical function.’

(1) *morphology*  $\Rightarrow$  *morph-* + *-olog(y)*

### Basic Terminology

- The base morpheme of a word is called the **root** e.g., *morph-*.
- Any morphological form, whether simple or complex, that another affix can combine with, is called a **stem** e.g., *morphology*.
- Morphemes that can occur independently as words are called **free morphemes** (‘cat’, ‘dog’, ‘open’, ‘close’, etc.); those that must attach to another element are called **bound morphemes** (‘re-’, ‘-ed’, ‘un-’, ‘-tion’, etc.).
- Bound morphemes that attach to stems are known as **affixes**. There are different types:
  - **prefixes**, which precede the stem e.g., *un-happy* in English
  - **suffixes**, which follow the stem e.g., *kedi-ler* in Turkish
  - **infixes**, which are inserted inside the stem e.g., *gi-ni-ba* ‘ruined’ in Tagalog
  - **circumfixes**, which surround the stem e.g., *ge-sag-t* ‘said’ in German
- Affixes can also be classified based on their function:
  - **inflectional affixes**, which express grammatical information such as tense, number or gender but do not change the core meaning or lexical category of the word e.g., *cat*  $\rightarrow$  *cat-s*, *walk*  $\rightarrow$  *walk-ed*
  - **derivational affixes**, which create new words and often change the meaning and/or lexical category of the base. e.g., *happy*  $\rightarrow$  *un-happy*, *teach*  $\rightarrow$  *teach-er*

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**Practice** Answer the following questions.

1. How many morphemes are in the English word *open*? How about *reopen*? *reopened*?
2. What is the ‘root’ of the word *reopened*?
3. What is the ‘stem’ that *-ed* combines with, in the word *reopened*?
4. What are the ‘free’ and ‘bound’ morphemes in the word *reopened*?
5. Does the word *reopened* include prefixes, suffixes, or both?

**What do we know when we know a word?**

- their syntactic category i.e., is it a noun, a verb, an adjective, an adverb or a preposition?
- their sound i.e., how they are pronounced
- their meaning i.e., what they represent in our minds

These three components are independent. For example:

- **same sound, different meaning:** *bank* (financial institution) vs. *bank* (side of a river)
- **same sound, different category:** *run* (verb) vs. *a run* (noun)
- **different sound, similar meaning:** *sofa* vs. *couch*

Sound, meaning, and syntactic category are distinct pieces of linguistic knowledge.

## 2 Words have structure

Morphemes do not combine randomly. Words have internal structure, and the order in which morphemes combine affects meaning.

**Word Formation** • Words are built layer by layer, and each affix contributes to the meaning.

- (2) a. piglets = pig + *-let* + *-s*  
b. bookcases = book + *case* + *-s*

We assume that the plural suffix *-s* in (2) attaches to:

- **piglet**, not directly to *pig*, because *piglets* means “more than one small pig”, not “small versions of pigs”
- **bookcase**, not directly to *book*, because *bookcases* means “more than one bookcase”, not “cases of books”

This shows that word formation happens in layers. These layers reflect the order in which morphemes combine during word formation.

**Hierarchical Structure** • Morphemes combine hierarchically, not just in a flat sequence.

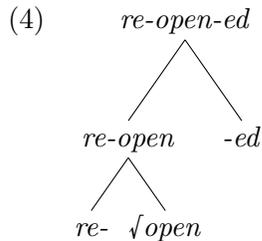
- (3)
- a. open
  - b. opened = open + *-ed*
  - c. reopen = *re-* + open
  - d. reopened = ?

How is *reopened* formed? There are two logical possibilities:

- i. open + *-ed* → opened, then *re-* + opened
- ii. *re-* + open → reopen, then reopen + *-ed*

Only the second option correctly reflects how English builds meaning and tense. Therefore, the past tense suffix *-ed* attaches to the larger unit *reopen*, not directly to *open*.

**Trees** • Linguists use **tree diagrams** to represent words that have internal structure. Tree diagrams make hierarchical structure visible.



**Structural Ambiguity** • Sometimes, a word can have more than one possible internal structure.

- (5) unhappier
- un-happier = “not more happy”
  - unhappy-er = “more unhappy”

The different meanings come from different internal structures. Each possible structure corresponds to a different tree diagram.

**Practice** Draw tree structures for the following words in English.

1. kindness
2. unlockable
3. disorganized
4. incomprehensibilities