Morphemes, roots and affixes

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Previously said

- We think of words as being the most basic, the most fundamental, units through which meaning is represented in language.
- Words are the smallest free-standing forms that represent meaning.
- Any word can be cited as an isolated item.
- It can serve as the headword in a dictionary list. It can be quoted.
- It can be combined with other words to form phrases and sentences.
- In general, the word is the smallest unit of sentence composition and the smallest unit that we are aware of when we consciously try to create sentences.
- However, there are even smaller units that carry the fundamental meanings of a language, and words are made up of these units.
- These units are morphemes.

The properties of morphemes

- Since morphemes are the smallest carriers of meaning, each word must contain at least one morpheme.
- The essential point about morphemes is that they cannot be dissected further into smaller meaningful units: they are the smallest ones.
- The properties which uniquely differentiate morphemes from other linguistic units are these:
- 1) A morpheme is the smallest unit associated with a meaning. E.g. *car, care, carpet, cardigan, caress, cargo, caramel...*
- Do all these words contain the morpheme *car?*

The properties of morphemes

- 2) Morphemes are recyclable units. One of the most important properties of the morpheme is that it can be used again and again to form many words.

E.g. Morpheme *care* can be used to form?

- In examples *cardigan* and *caramel* is *car* a morpheme? One way of finding out would be to test whether the remaining material can be used in other words, i.e. whether it is another morpheme. *–digan* and *–amel* do not meet our first definition of a morpheme, they are not contributors of independent meanings, nor are they recyclable in the way in which the morphemes *care+ful, un+care+ing, care+give+er* are.
- Recyclability can be deceptive, as it was in the case of *carrot, carpet, caress, cargo*.
- Though all morphemes can be used over and over in different combinations, non-morphemic parts of words may accidentally look like familiar morphemes.

The properties of morphemes

- The previous test, namely that what makes a sequence of sounds a morpheme is its ability to convey independent meaning, or add to the meaning of the word, should always apply first.
- In some cases, a combination of tests is required.
- If we try to parse the word *happy*, we can easily isolate *happ-* and *–y* as morphemes. The latter adds to the grammatical meaning of the words by turning it into an adjective. But what about *happ?*
- ON *happ-* e.g. *mishap, happen, hapless, unhappiness*.
- In other words, the recyclability of *hap(p)-* in the language today confirms its status as a morpheme, even without the etymological information.

The properties of morphemes

- Morphemes must not be confused with syllables. A morpheme may be represented by any number of syllables, though typically only one or two, sometimes three or four.
- Syllables have nothing to do with meaning, they are units of pronunciation. In most dictionaries, hyphens are used to indicate where one may split the word into syllables. A syllable is the smallest independently pronounceable unit into which a word can be divided.
- Morphemes may be less than a syllable in length. *Cars* is one syllable, but two morphemes.
- Some of the longest morphemes tend to be names of places or rivers or Native American nations, like *Mississippi, Potawatomi, Cincinnati*. In the indigenous languages of America from which these names were borrowed, the words were polymorphemic, but the information is completely lost to most of native speakers of English.

The properties of morphemes

- The analysis of words into morphemes begins with the isolation of **morphs**. A morph is a physical form representing some **morpheme** in a language. It is a recurrent distinctive sound (phoneme) or sequence of sounds (phonemes).
- We have a similar situation with LEXEME and WORD-FORM.
- Lexeme and morpheme are abstract units, while word-form and morph are their physical (phonological) realisations.

The properties of morphemes

- One and the same morpheme may take phonetically different shapes. (it may be represented by different morphs). Different forms of the same morpheme are called allomorphs (which means *other forms*). This general property of allomorphic variation is called allomorphy.
- Recognizing different allomorphs of the same morpheme is one of the surest ways to extend one's vocabulary and to identify relationships between words.
- Any speaker of English will identify the nouns *cares, caps, classes* as sharing the plural morpheme *–s*, though both the spelling and the pronunciation of the morpheme vary in the three words, i.e. the morpheme has three allomorphs.
- These are the four essential properties of all morphemes: 1) they are packaged with a meaning, 2) they can be recycled, 3) they may be represented by any number of syllables, 4) morphemes may have phonetically different shapes.

Allomorphy

- The distribution of allomorphs is usually subject to phonological conditioning. However, sometimes phonological factors play no role in the selection of allomorphs. Instead, the choice of allomorph may be **grammatically conditioned**, i.e. it may be dependent on the presence of a particular grammatical element.

a.	walk	walked
	kiss	kissed
b.	weep	wept
	sweep	swept
c.	shake	shook
	take	took

In b. and c. the choice of allomorph is grammatically conditioned. The presence of the past tense morpheme determines the choice of the /wep/ and /swep/, /šuk/ and /tuk/ allomorphs.

Allomorphy

- In other cases, the choice of the allomorph may be **lexically conditioned**, i.e. use of a particular allomorph may be obligatory if a certain word is present. We can see this in the realisation of plural in English.
- Normally the plural morpheme is realised by a phonologically conditioned allomorph whose distribution is:
- a. ***/-iz/*** if a noun ends in an alveolar or alveo-palatal sibilant 's, z, š,ž,č,dž', e.g. *lances, mazes, fishes, badges, beaches*.
- b. ***/-s/*** if a noun ends in a non-strident voiceless consonant 'p, t, k, f, th', e.g. *cups, leeks, carts, laughs, moths*.
- c. ***/-z/*** elsewhere (all vowels and 'b,d,g,m,n,l,r,w,j'), e.g. *bards, mugs, rooms, keys, shoes*.

There are cases where, for no apparent reason, the regular rule inexplicably fails to apply. The plural of *ox* is not **oxes* but *oxen*, although words that rhyme with ox take the expected /iz/ plural allomorph (e.g. *foxes, boxes)*. <u>The choice of the allomorph –*en* is lexically conditioned. It is dependent on the presence of the specific noun *ox*.</u>

Types of morphemes

- Not all morphemes are equally central to the formation of a word.
- They are of two types: **roots** and **affixes**.
- A root is the irreducible core of a word, with absolutely nothing else attached to it. It is the part that must always be present.
- Every word has at least one root and they are at the centre of word-derivational processes. They carry the basic meaning from which the rest of the sense of the word can be derived.
- Morphemes such as *chair, green, ballet, father, cardigan, America, Mississippi* are roots, and they all happen to be **free forms**, i.e. independent words.
- On the other hand, there are roots like *seg* in *segment*, *gen* in *genetics*, *brev* in *brevity*... which cannot stand alone as words. They are called **bound root morphemes**, or bound bases, as distinct from **free root morphemes** or free bases.
- Most of bound roots found in English today are of classical origin, some of them are of Germanic origin.

Types of morphemes

- What happened with these bound roots?
- To be completed, bound bases require that another morpheme be attached to them. This additional morpheme may be either another root or an affix.
- If it is another root, the result is a compound. They all contain two roots.
- Affixes carry very little of the core meaning of a word. Mainly affixes have the effect of slightly modifying the meaning of the **stem** – a stem is either a root or a root plus an affix, or more than one root with or without affixes – to which more affixes can be attached.
- This process of adding affixes is known as affixation and it is one of the two most fundamental processes in word formation. The other one is compounding.
- The **stem** is that part of a word that is in existence before any *inflectional* affixes (e.g. markers of singular and plural number in nouns, tense in verbs, etc.) have been added.
- E.g. *cats* = cat+s, *workers*= worker+s

Affixes

- A **base** is any unit whatsoever to which affixes of any kind can be added. In other words**, all roots are bases**.
- Bases are called stems **only** in the context of inflectional morphology.
- All morphemes which are not roots are affixes. Affixes differ from roots in three ways:

1) They do not form words by themselves – they have to be added on to a stem.
2) Their meaning, in many instances, is not as clear and specific as is the meaning of roots, and many of them are almost completely meaningless.
3) Compared with the total number of roots, which is very large, the number of affixes is relatively small (a few hundred at most).

In English, all the productive affixes are either attached at the end of the stem – suffixes, or at the front of the stem – prefixes.

Common prefixes

- Co+occur ‘occur together’
- Mid+night ‘middle of the night’
- Mis+treat ‘treat badly’
- Re+turn ‘turn back’
- Un+filled ‘not filled’
- Peri+meter ‘measure around’

Common suffixes

- Act+ion ‘state of acting’
- Act+or ‘person who acts’
- Act+ive ‘pertaining to being in action’
- Child+ish ‘like a child’
- Child+hood ‘state of being a child’
- Child+less ‘without a child’

Functions of affixes

- Affixes have two quite different functions. The first is to participate in the formation of new words. The affixes which do this are called derivational affixes.
- The other type of affix, which does not participate in word formation at all, is called inflectional. The most typical inflectional affixes, in most languages, serve to indicate which word is the subject of the sentence or which word is the object of the verb.
- Since inflectional affixes are nothing more than markers of sentence structure and organisation, they are not involved in the derivation of new words and hence of no further interest in the present context.

Affixes – some remarks

- Affixes in one language may correspond to separate lexemes in another. If both inflectional and derivational suffixes occur attached to a given base, derivational suffixes follow more closely the base, e.g. *childishly*.
- In many languages prefixes may be either derivational or inflectional. In English, prefixes are derivational.

Other types of affixes

- CIRCUMFIX – if a prefix and a suffix act together to realise one morpheme and do not occur separately, e.g. in German *gefilmt, gefragt*.
- INFIX – it is an affix added in the word, for example, after the first consonant, as in Tagalog, *sulat* 'write', *sumulat* 'wrote', *sinulat* 'was written'.
- INTERFIX – a kind if infix, it is placed between the two elements of a compound, e.g. in German: *Jahr-es-zeit, Geburt-s-tag*. These interfixes do not seem to realise any morpheme.
- SUPRAFIX – realised by different stress in a word: e.g. *'discount, dis'count; 'import-im'port, 'insult-in'sult...*
- ZERO MORPHS – There is no transparent morph to mark a regular grammatical distinction, e.g. *deer-deer, fish-fish, sheep-sheep...*