Second year linguistics

Morphology

Introduction

The range of constructions that is studied by grammar is very large, and grammarians have often divided it into sub-fields. The oldest and most widely- used division is that between morphology and syntax.

What is morphology?

Morphology is a branch in grammar. It is the study of the internal structure of words, and of the rules by which words are formed. Therefore, it is the study and the analysis of the structure (morpheme), forms(size) and classes(adj , adv, n, v ..) of a word.

e.g., unhappiness ~~un happy~~ ness

horses horse ~~s~~

talkingtalk ~~ing~~

yesyes

Yes has no internal structure. We could analyse its constituent sounds, /j/, /e/, /s/, but none of these has a meaning in isolation. By contrast, *horse, talk, happy* plainly have a meaning, as do the elements attached to them (the affixes): *un-*carries a negative meaning; --*ness* expresses plural; and *–ing* helps to convey a sense of duration. The smallest meaningful elements into which words can be analysed are known as morphemes; and the way morphemes operate in language provides the subject matter of morthology.

3 We'll ignore the change of *y* to *i*, a convention of English spelling.

Two kinds of morphology

Most linguists acknowledge at least a rough distinction between two kinds of morphology: word formation   vs. inflectional morphology. We'll start with inflectional morphology.

1-**Inflectional morphology** is grammatical morphology. Here are some examples to start, from English:

tenseon verbs (present tense *jumps*, past tense *jumped*)

numberon nouns (singular *cow*, plural *cows*)

a small amount of **person and number agreement** in verbs (*She sings.* vs. *They sing.*)

2-English is actually not a very good language for studying inflectional morphology, because it doesn't have all that much of it (Mandarin is a similar case). But other languages, such as Swahili, Russian, or Turkish, have a great deal, and students of these languages can spend years getting through it all.

What is a Morpheme

It is the smallest syntactic unit.(just as a phoneme is a unit of sound in a language). Morphemes vary in size. The essential criterion is that a morpheme cannot be cut up into smaller syntactic segment.

Morphemes[1] are abstract units realized in actual language by **morphs**, or if there are various ways of realising one morpheme by its **allomorphs.**

Recognition of Morphemes

Speakers of a language have the knowledge to perceive the component morphemes of a word since their mental grammars include a mental lexicon of morphemes and the morphological rules for their combination.

Suppose you didn't know English and were a linguist from the planet Mars wishing to analyze the language. How would you discover the morphemes of English? How would you determine whether a word in that language had one, two, or more morphemes?

The first thing to do would be to ask a native speaker how they say various words.

Assume you are talented in mining and manage to collect the following sets of paradigms of forms:

Adjective   meaning

Ugly   very unattractive

Uglier   more ugly

Ugliest   most ugly

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[1]Morphemes are also referred to as the *minimal linguistic signs*; you may also come across the term ***moneme***, which is the French term for morpheme.

Pretty   nice looking

Prettier   more nice looking

Prettiest   most nice looking

Tall   large in height

Taller   more taller

Tallest   most tall

To determine what the morphemes are in such a list, the first thing a field linguist would do is to see if there are forms that mean the same thing in different words, that is, to look for recurring forms.

- Compare between different forms.

-Look for utterances which are partially the same.

We find:

Ugly occurs in ugly – uglier – ugliest   all the three words include the meaning very unattractive

Er occurs in prettier and taller   adding the meaning more to the adjective to which it is attached

Est occurs in prettiest and tallest   adding the meaning most to the adj to which it is attached

Furthermore, by asking the native speaker additional questions we find that er and est do not occur in isolation with the meanings of more and most

Thus, we conclude   ugly   root morpheme

                          Pretty   root morpheme

                          Tall   root morpheme

Er   bound morpheme (comparative)

Est   bound morpheme (superlative)

As we proceed we find other words that end with-**er**(singer, lover, writer, teacher..)in which the –er ending does not mean "comparative" but when attached to a verb, changes to a noun who 'verbs'(e.g., sing, loves, writes, teaches..). So we conclude that this is a different morpheme even though it is pronounced the same as the comparative. We go on we find words like *number, somber, umber, butter, member* and many others in which the erhas no separate meaning at all-a *somber* is not "one who

sombs and a *member* does not memb- and therefore these words must be monomorphemic.

Morphs and Allomorphs
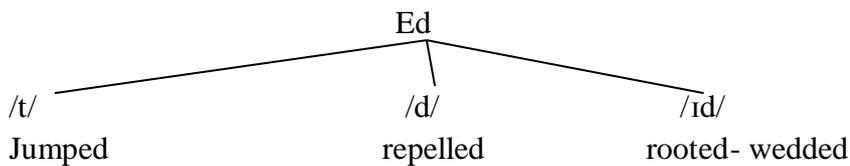
Any language has a register of morphemes.
Sometimes the morpheme has one phonological form

e.g., landlyland /lænd/ + ly/lɪ/
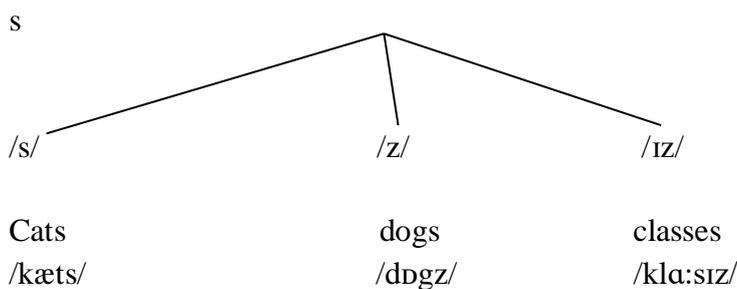
friendly   friend /frend/ + ly/lɪ/

The physical realizations of morphemes are called **morphs, allomorphs or variants**. While morphemes remain ideal abstract units, the corresponding morphs may show some variation. These variations sound and look differently:

For example, the English past tense morpheme that we spell *-ed*has various morphs. It is realized as [t] after the voiceless [p] of *jump* (cf. *jumped*), as [d] after the voiced [l] of *repel* (cf. *repelled*), and as [ɪd] after the voiceless [t] of *root* or the voiced [d] of *wed* (cf. *rooted* and *wedded*).

```
                        Ed
        _____/|_____
       /t/              /d/              /ɪd/
      Jumped          repelled       rooted- wedded
```

The appearance of one morph over another in this case is determined by voicing and the place of articulation of the final consonant of the verb stem.

Let's take another example, in English the plural morpheme is often shown in writing by adding**-s** to the end of a word. Sometimes this morpheme is pronounced /z/ ,/s/ or /ɪz/

```
    s
                       ____/|_____
       /s/              /z/              /ɪz/

      Cats            dogs             classes
      /kæts/          /dɒgz/           /klɑːsɪz/
```

/s/, /z/ and /ɪz/ all have the same grammatical function in these examples, they all show plural; they are all allomorphs of the plural morpheme **s.**

In morphological transcription, morphs are commonly put in-between braces. The plural
morph in "cats" thus becomes {cat}+{s} in morphological transcription.

Phonological and lexical Conditioning

Phonological Conditioning

The sounds /s/,/z/ and /iz/ are all phonologically conditioned allomorphs of the English plural morpheme that is each allomorph occurs in predictable set of environment.

/z/ occurs after most voiced phoneme as in dogs, lamps, bees.

/s/ occurs after most voiceless phonemes as in cats or giraffes.

/iz/ occurs after sibilants(s,ts..) as in horses, fishes.

Phonologically conditioned allomorphy

Lexical Conditioning

Consider the following examples:

Sheep ⟹ sheepsheep+ plural (zero morpheme)

Oxen ⟹ oxox+ plural

Children ⟹ childchild+ plural

Goose ⟹ geese   geese+plural

Men ⟹ manman+plural

morphologically conditioned allomorphy

Although these words function as plural in the same way as cat, horses and so on, they are not marked as plurals in the same way such lexically conditioned plurals don't follow any specific rule. Each one has to be learned separately.

These words are syntactically equivalent to cats, horses.., because they fit in the same place in the sentence:

The workers are making a lot of noise.

Cats

Sheep

Oxen

Other Problems of Morphemes Division

Different problem of morpheme division is presented by words such as:

Cranberry   hamburger   raspberry

-At first, they appear to consist of two morphemes: cran-berry   rasp-berry

-At second, it is difficult to justify cran and rasp as independent morphemes(because we find cran only with berry not anywhere else). These elements occur only in these words. So, slitting up words seems unjustifiable.

Linguists differ as to the solution they adopt the majority possibly regard cranberry as two morphemes in order to bring it in line with words such as blackberry.

Cran thus is regarded as a unique morpheme that is one which occurs only once.

A different problem arises with words such as hamburger, most people regard it as devisable into two morphemes. But where does the division come?

Some people would suggest hamburg+er   on the basis of cheeseburger
or beefburger

Remembering that the hamburger was named   the division should obviouslybe
ham+burger

After Hamburg its town of origin

Nowadays burger seems to be treated as a suffix. It has been related to other word.

Most people forgot the German origin of this food, and historical consideration should never be taken into account in a descriptive analysis.

Classification of morpheme

Morphemes can be classified according to meaning or to the place and manner of occurrence

1- According to meaning

Morphemes could be classified into two different types: lexical and grammatical morphemes

Lexical morphemes are free morphemes that have independent dictionary meaning of their own. That is, it is possible to look up these words and find their meaning. In English language, lexical morphemes include **nouns** (man, place, teacher, occasion, etc.), **verbs** (bring, come, take, give, etc), **adjectives** (happy, slow, bright, etc), **adverbs**, (slowly, happily, quickly, etc.).

Grammatical/functional morphemes are those free morphemes that do not have independent dictionary meaning of their own. That is, for these kinds of morpheme, it is quite difficult to say exactly the meaning of such words when one looks them up in a dictionary. These words are merely used to join the lexical words together in structure.

Examples of grammatical/functional morphemes in English include **pronouns** (he, she it), **determiner** (a, the, some, that), **preposition** (on, at, in) and **conjunction** (and, or, but).

2- According to place and manner of occurrence

Morphemes could be classified into two different types: free morphemes and bound morphemes

Free morphemes are those morphemes that can occur in isolation without having to be attached to some other grammatical unit, they occur freely. All free morphemes are words that stand on their own. Free morphemes function as lexical or grammatical morphemes (it can occur alone or independently like boy girl..)

Bound morphemes are not complete words and cannot occur in isolation. They must be attached to other grammatical units. On their own, their meaning cannot be realised.

For example the plural markers and tense markers like other grammatical categories can occur only in conjunction with another morpheme. Thus, these grammatical categories or grammatical categories do not have independent occurrence.

Roots or stem

Root is a morpheme which is the basic part of a word and which may, in many languages**,** occur on its own (man, hold..). Roots may be joined to other roots. E.g., house hold. And or take affixes (e.g., manly) or combining forms. (biorhythm)

Stem is that part of a word to which an inflectional affix is or can be added.

Stem can be:

a- A simple stem consisting of one morpheme root. E.g., work

b- A root plus a derivational affix. E.g., work + er =worker

c- Two or more roots. E.g., work + shop =work shop

Thus we can have

Work + s

Worker +s

Workshop +s

! You can think of a hyphen(-) as the imaginary glue with which a morpheme attaches to stem.

Affixes

Affix a letter or a sound, or group of letters which are added to a word, and which changes the meaning or function of the word

Affixes are bound forms that can be added:

To the beginning of a word word	*to the end of a word*	*within a*
(A prefix)(A suffix)	(An infix)	
e.g., in English un- which usually um which	e.g.,-ness which changes	e.g., in Tagalog, -
changes the meaning of a word verb is in the past to its opposite	an adj into a noun	shows that a tense:
e.g., kind ⇨unkind write	kind ⟹ kindness	sulat to

s**um**ulat   wrote

Affix

Prefix   infix   suffix

◼▢   ▢◼▢   ▢◼
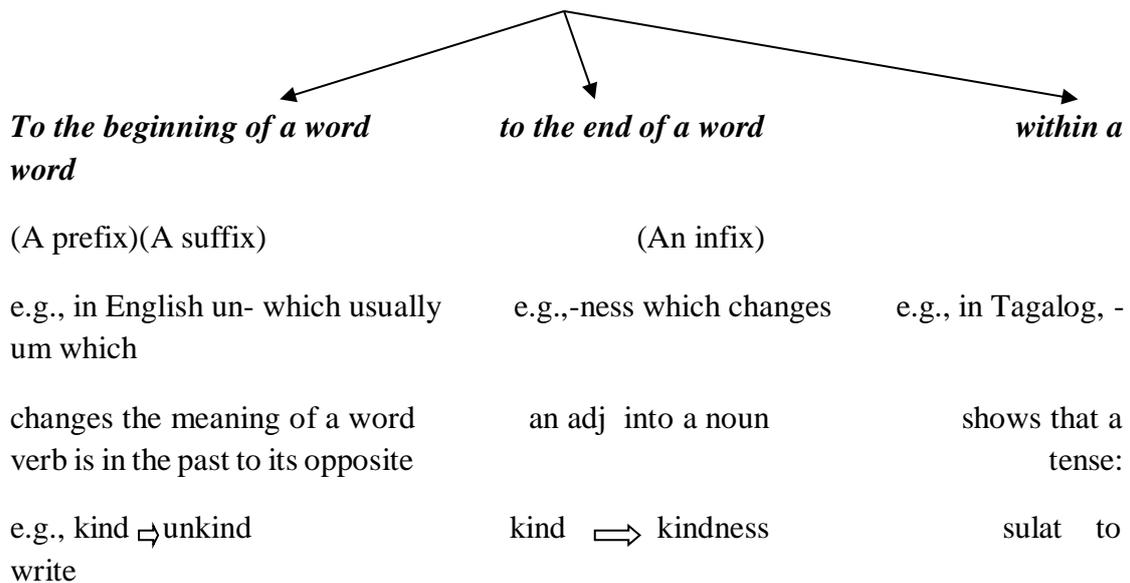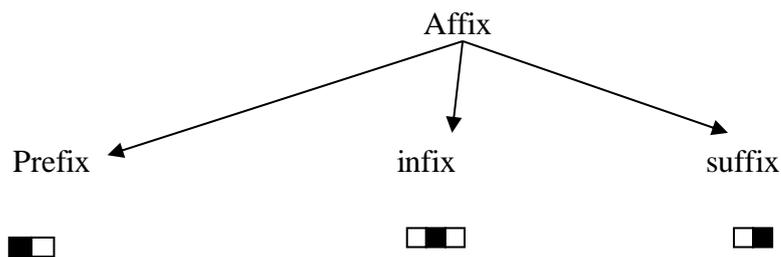
Inflectional Vs derivational Morphology

Bound grammatical morphemes can be further divided into two types inflectional derivational morphemes

Derivation   Inflection

Methods of forming new lexemes from already   production of word-forms
corresponding to a given

  Existing ones   lexeme,the process of adding an
                                                AFFIX to a word or
                            changing it in some other way according to the rules

of grammar of a language. It marks gender, number

, case, tense, voic-may change categories of words e.g., cats, he brings, wanted, was killed

e.g.,nounverb

verbadj

-less productive than inflection

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                              Morphemes
               _____/            _____
              /                                          \
          Lexical                                   Grammatical
      ____/      \____                         ____/          \____
     /                \                       /                    \
   Free              Bound                  Free                   Bound
                                                                  /    \
   Nouns             ¦              Prepositions                 /      \
   Verbs             ¦              Articles                    /        \
   Adjectives        ¦              Conjunctions       Inflectional   Derivational
      ¦              ¦                  ¦
      ¦              ¦                  ¦
      ¦              ¦                  ¦
      ¦              ¦                  ¦
 e. g., compress   e. g., subvert    e. g., at
        depress          invert            the
        oppress          convert           and
        repress
        suppress
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