



MODULE 5:

MORPHOLOGICAL

MAGIC

INTRODUCTION

The secrets of teaching how to define, spell and learn word parts and their combinations.

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ETYMOLOGY

Like people, words have their stories. They have their origins, their nationality, their relationships with other words and the way they turn out is very much dependent on their journey.

The study of words' stories is called *etymology*. It is a wide and captivating field. No one knows *all* the stories. Sometimes an etymologist will have to declare "origin unknown". Sometimes competing theories will be hotly contested by academics. Sometimes, theories that have been widely accepted are suddenly shown to have been utterly untrue. Such is thrust and parry of the etymological debate.

We do, however, know some stable facts about words and their histories. For instance, in English, our two main influences are known as the Romance and Germanic languages.

Around 60% of our words have Greek or Latin roots, but many have come directly from the French around the time of the Norman Invasion. War and conquering has so much to do with the development of English. Other Romance-influenced languages are Portuguese, Spanish, Catalan, Provençal, French, Italian, and Romanian.

We know that around 25% of our words are Germanic. Other Germanic languages are Icelandic, Faroese, Norwegian, Swedish, Danish, Frisian, Flemish, Dutch, Afrikaans, German, and Yiddish.

Romance and Germanic languages are said to both have their roots in a single prehistoric language known as Proto-Indo-European (PIE). Bear in mind the *proto* part of Proto-Indo-European. There are no written records dating back to the time scholars believe this kind of language was spoken, rather, they have traced it back based on assumptions, similar to the way in which we depict prehistoric creatures.

English is known as Germanic because of its structure and origin, but it has borrowed extensively from other languages throughout its documented history. Nobody quite agrees on relative percentages, but knowing Latin and Greek morphemes is not disputed as a great start when deepening our understanding of words and word forms in English.

An indisputably useful resource called Etymonline emerged in 2010. It was authored by historian and language enthusiast Douglas Harper, and is an ever-growing guide to word origins in English. The author himself admits that there can sometimes be flaws, but in terms of setting things out in a memorable, accessible way, Etymonline does a superior job.

Familiarity with this resource both for you and your students is highly recommended. The other fantastic etymological source is the Oxford Etymologist, Anatoly Lieberman. His blog can be found at:

https://blog.oup.com/category/series-columns/oxford_etymologist/

ETYMOLOGY

BASES AND ROOTS

Every word contains a base and every base comes from a root. Sometimes we no longer know what that root is. Sometimes we do. Sometimes etymologists argue over it. This is all fine.

Here is an example of a word, its base and the root of that base:

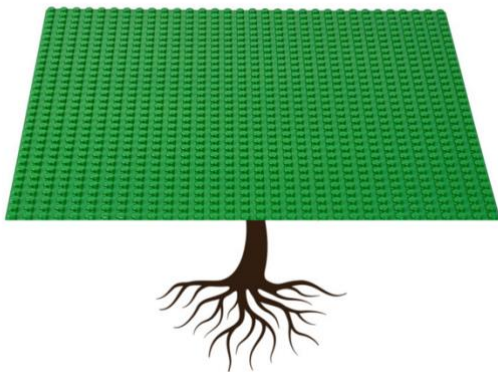
Word: ornithology

Base: ornitho- “bird, birds”

Ornitho- root: Proto-Indo-European (or PIE)- “large bird”. Other words from that root are *eagle*, *Arnold* and *Arthur*.

On that base we can build:

- ornithologist (a person who studies birds),
- ornithopod (short for ornithopod dinosaur, meaning a dinosaur with bird-like back legs), and
- ornithopter (a flying machine that is designed to flap its wings).



Sometimes the words *base* and *root* get mixed up or used interchangeably (I have been guilty of that!). It helps to think about bases as in Lego, where you build things upon them, and root as something unseen unless you do some digging, like the roots of a tree.

Using the Online Etymology Dictionary (www.etymonline) will help with distinguishing bases from roots.

PREFIXES

Definition: a letter or letters placed before a base to alter the base's meaning

Structure: pre- = before + -fix- = to fasten

Prefixes are fairly easy to teach, in that they are a finite set in English, that is, we aren't making any new ones. The common ones constitute a relatively small list, easily taught and understood, since they are already in the everyday language of an average primary school child.

There are times when adverbs/prepositions are mistaken for prefixes, such as up (upward), over (overboard) and under (underestimate), and a good way to tell the difference is that if what you think is a prefix can stand alone, then what you have is actually a base plus a base. Contrast up, over and under with a word-forming element like trans- (transport, transatlantic). Trans- still indicates something to do with direction or movement, but it doesn't stand alone.

An exception here is the prefix be- (become, beyond), which happens to look like the verb *be*, but etymologically speaking, they have different origins. Can you figure them out?

PREFIX VARIANTS

Sometimes prefixes can change, according to their environment. An immediately recognisable prefix like ad- ("to, towards", *advance, admit*) also appears in other words as a-, and can even take on the first letter of the base it's attached to (*aggressive, affection, appear*). Of course it does, and so do other prefixes too. They have to, since ease of communication is our goal, so if they remained as ad-, that stoppy consonant /d/ would make it harder to speak.

Remember, placing of phonemes may look as if they are geographically distant, but in the rapid torrent that is the speech stream, minute placing adjustments make all the difference.

If you cast your mind back to the three musketeers of phonemes: voice, manner and placing, you'll notice that there are distinct front, middle and back areas of the mouth. Speech is very rapid, and the distance between the lips and the throat is quite considerable at that speed. So phonemes change and words are formed according to *order*.

Take the sound /p/, for instance. Think it through using your three musketeers. Where was that sound made? How was it made? The front of the mouth with the two lips closed, right? So if a front of mouth sound begins a base, like the base *pose* for instance, a prefix that usually ends with a middle-mouth sound, like the prefix in-, doesn't have time to travel from the front to the middle and becomes im-.

Taking -pose- again as our base, try adding the common prefix con-. What happens?

Some people call these ‘chameleon prefixes’, since they change according to their environment. That’s a good way to describe them. They are also known as assimilated prefixes

Let’s look at more assimilated prefixes and try to figure out why they act like that (clue: it’s always phonology!).

Here’s a key list of some common ones:

PREFIX	MEANS	ASSIMILATES TO	EXAMPLES
ad-	to/toward	ac-, af-, ag-, al-, an-, ap-, ar-, at-	accept, afflict, aggressive, allege, announce, approach, arrest, ascend, attract
co-	with, together	col-, con-, com-, cor-	coagulate, collect, contain, compress, corrode
ex-	out of	e-	eject, emit
in-	not	im-, il-, ir-	imperfect, illegal, irregular
ob-	against	oc-, of-, op-	occur, offend, oppose
sub-	under, beneath	suc-, suf-, sum-, sup-, sur-, sus-	succumb, suffer, summon, suppress, surround, suspect

PREFIXES ROOTS AND BASES

DEFINE

REFLECT

COLLABORATE

LATIN AND GREEK

It's not surprising that we still study the ancient Roman and Greek civilizations today. Their influence on modern life has been profound, not least in the linguistic arena.

When the Roman Empire was cracking its knuckles and taking over its neighbouring countries and beyond, the Iron-Age inhabitants of the place we know today as Britain were living in small settlements, eking a living from the Earth and finding ways of staying warm.

Civilization on the Mediterranean was advancing at quite a pace however. Not only were great strides being made in engineering, medicine and politics, but art, religion and philosophy were also developing, and with them, the words and fields of human endeavour that we study to this day.

There are varying estimates of how much Latin and Greek is in English, and the answer depends on how you classify the words in question, but what is important is the fact that knowledge of Latin and Greek bases and word-forming elements is extremely useful.

After introducing the concept of Latin and Greek to my students, we take some time to learn and use a set of morphemes from both languages.

I used to do this off the top of my head until I discovered Caesar Pleaser and Socrateaser. These two resources have helped me produce high quality Latin and Greek lessons without having to break my brain every time.

In a knowledge rich curriculum, it would be ideal to study the ancient Greek and Roman civilizations. I have never seen a child not enthused by stories of their deities and myths. The entire Marvel Universe, it would seem, is built upon such keen interest, yet who among that audience knows from whence those characters came?

SUFFIXES PART ONE: INFLECTIONAL SUFFIXES

Suffixes Part One: Inflectional Suffixes

The word *suffix* actually has a chameleon prefix. Can you spot it?

suf- is a version of sub-, but since -fix- begins with a fricative (manner, not placing this time), old sub- becomes the new and improved suf-.

Sub- means “under”, that’s what everybody knows, but under also has the meaning of “secondary/after”. So why is the word suffix built like it is?

A suffix is a letter or letters placed after a base to change that base’s meaning. The thing I really, really want you to understand about suffixes, though, is that they only have TWO jobs. That’s it. But you will not understand them fully if you don’t understand your parts of speech and syntax.

Here are the two things suffixes do...

They tell us a bit more information about the base. In posh terms, they help the base *inflect*, that is to *bend*. The base is still the base, doing its basey thing and remains the same part of speech, it’s just that if it needs to express precisely how many, who did the thing or even when, it needs a suffix to help it.

This is where an inflectional suffix comes in.

The terrific news here is that there are only eight inflectional suffixes in English. All the rest are the other type, which we will get to shortly.

Here’s the big eight:

1. **The plural suffixes** (-s, -es, -en, -ae, -i)

Nouns have two ways of changing and still being nouns. They can change their number by adding a plural suffix.

Dog becomes dogs.

Fox becomes foxes.

Child becomes children.

Antenna becomes antennae.

Fungus becomes fungi.

Easy.

2. **Apostrophe <s> (-’s)**

Nouns can have a suffix that shows they own or have a very close relationship to another noun. That suffix is apostrophe + <s>: -’s

The dog owns a bone, it is the dog’s bone.

A hard day’s night – not ownership but very close relationship.

Easy if this suffix is not taught as some kind of punctuation mark.

Verbs can also change and remain as verbs:

3. Third person singular present tense: -s

When he, she or it is does or has something, your verb should end with an -s.

He sits.

She stands.

It howls.

So three of our inflectional suffixes contain the letter <s>. No wonder people get confused!

4. Past tense (-ed)

Usually, we use the suffix -ed. However, there are verbs that don't do this and they are known as irregular verbs. Because learning the grammar of your native language is biologically primary, getting to grips with irregular verbs is something that typically developing children do without explicit instruction.

This means that irregular verb instruction tends to be left out of mainstream curricula, which is understandable. However, there are children who have developmental language disorders and therefore do not learn irregular verbs as readily as their typical peers.

It's a good thing to check this wherever possible. The other good thing is that it's not too difficult to acquire, once explicitly taught and practised.

There are hundreds of irregular verb lists ready available online. Pick one and work your way through it. Examples below:

Irregular: He sat.

Irregular: She stood.

Regular: It howled.

5. Present participle (-ing)

These verbs end with -ing and indicate that the be/do/have in a sentence is happening at the same time as the utterance. Compare *he walked* to *he is/was walking*.

6. Past participle (-en)

When a verb takes the suffix -en with *have*, it indicates past tense and passive voice.

Past tense:

They have stolen my bike.

She has forgotten the keys.

Passive voice:

My bike has been stolen.
The keys were forgotten.

Adjectives can also have suffixes added:

7. Comparative

When comparing one thing to another, the suffix -er is often added to the adjective:

Some girls are bigger than others.

8. Superlative

In a comparison of more than two, the most extreme takes the suffix -est:

The greatest show on Earth.

Part of speech	Suffix	Example
NOUN	-s	dogs
	-’s	dog’s
VERB	-ed	skipped
	-s	jumps
	-ing	singing
	-en	enlighten
ADJECTIVE	-er	taller
	-est	highest

Key inflectional suffixes

The grammar and syntax scope and sequence in Language Arts offers suggestions about where and when to introduce the various inflectional suffixes.

SUFFIXES PART TWO: DERIVATIONAL SUFFIXES

Etymology:

de (off or away from) + riv (brook/stream) = derive

To derive, is to trace the origin. In its most literal sense, words float downstream from other words.

Derivational suffixes are used to make (or derive) new words. In particular, they are used to change a word from one part of speech to another. Here is an example:

entertain = verb + -ment = entertainment = noun

These are the three main parts of speech that derivational suffixes fall into:

- noun-forming
- adjective-forming
- verb-forming

In the example above, we call -ment an noun-forming suffix because it creates nouns. A noun-forming suffix can change verbs into nouns, as we saw. A noun-forming suffix can also turn adjectives into nouns:

happy = adjective+ -ness = happiness = noun

Of course, suffixes can be added to bases that don't stand alone to make nouns, adjectives or verbs. Take the base -fin, meaning *last*:

-fin- + -al = final = adjective

Some quick reference tables:

SUFFIX	EXAMPLES
-hood	childhood
-ness	wellness
-ance/ence	inheritance, independence
-ion	celebration, region
-ty	enmity, ability
-ment	enjoyment

Noun-forming suffixes

Suffix	Examples
-al	final
-ous	famous
-ish	reddish
-ent	independent
-y	muddy

Adjective-forming suffixes

Suffix	Examples
-ate	eliminate
-en	shorten
-fy	identify
-ise/ize	idolise/familiarize

Verb-forming suffixes

An important aspect of suffix work is the way in which the base needs to alter in the presence of various suffix types. This is the theme of the next unit.

SUFFIXES

DEFINE

REFLECT

COLLABORATE

SPELLING AND MORPHEMES

Now that you know what all the word parts are, the next task is to get them working together.

Adding morphemes to bases can get tricky. Bases and morphemes can change their form (their spelling or their pronunciation) according to who their neighbours are. We will start with some obvious examples and then get more subtle.

Chameleon prefixes

We've looked before at the prefixes that change their form according to the base. Have you noticed, though, that when they do that, the change emerges in spelling as a double consonant?

Take the prefix in-, meaning "not": If we add it to the free base regular, instead of *in+regular we get ir+regular.

Take the prefix ad-, meaning "to, toward": If we add it to the bound base "-gress-", meaning step, we get ag+gressive, instead of ad+gressive.

Words that end with Final Silent E

Whatever you call word-final letter <e>, you will have to teach how to deal with it when a base ends that way and you want to add a certain kind of suffix. Here is the mechanism:

Final Silent E word	+	vowel suffix	=	delete Final Silent E
hope	+	-ing	=	hoping
Final Silent E word	+	consonant suffix	=	do not delete Final Silent E
hope	+	-less	=	hopeless

The words *courage*, *advantage* and *outrage* do not do this. Why not?

Words that end with -y

The letter <y> is used word-finally to denote an /i:/ or an /aɪ/ sound (it is also a derivational suffix itself, often denoting nouns and adjectives).

We use <y> to replace <e> and <i>, as our orthographic rules state that word-final, syllabic <e> or <i> is not permitted.

However, since adding a suffix to a base means the last letter in the base is no longer the final letter in the word, our illegal <i> can return. So no matter whether the base is consonant-initial or vowel-initial, Illegal <i> returns.

Worked examples:

happy	+	-ness	=	happiness
beauty	+	-ful	=	beautiful

A teachable moment arises when the suffixes happen to be non-syllabic, like -s or -th. That letter <i> would collapse right into them, so a bit of additional space is made by adding the letter <e> when forming words with this structure.

Worked examples:

city	+	-s	=	cities
twenty	+	-th	=	twentieth