Unit 9 Allomorphy & Morphological Types

Objectives

After completing this unit, you will be able to

1. Define and describe allomorphs
2. Describe different morphological types of languages
   a. Analytical (isolating)
   b. Synthetic (agglutinating, inflectional, fusional)

9.0 Introduction

In this unit, we will discover more proof of the changing nature of language – morphemes can, and do, change, depending on their history and the neighbouring speech sounds.

9.1 Allomorphs – Variant Forms of the Same Morpheme

One of the main discoveries of modern linguistics, in the words of the American linguist Steven Pinker, is that 'a morpheme may be stored in the mental dictionary in a different form from the one that is actually pronounced.' Compare, for example, the sounds of the

⇒ Past Tense morpheme –*ed* in the following verbs: play**ed**, pass**ed**, watch**ed**, clean**ed**, etc.
⇒ 3rd Person Singular ending –*s* in He sit**s**; She watch**es**; It figure**s**; Time pass**es**; etc.

Why do they sound different? The answer is simple: our tongues are not fast enough to keep up with the complex strings of sounds we want to make, and sometimes it is either difficult or even impossible to produce certain sounds in combination; try, for example, to say *Time passes* or *He watches* without inserting that [i] sound before the final [s]! In Unit 10, we will learn more about our Organs of Speech and speech sounds, but, basically, there are two interrelated factors at play here:

⇒ The physical limitations of our articulators (when we speak, the movement and position of our organs of speech are not always precisely the same, which naturally affects the *quality* of the sounds we produce), and
⇒ The actual sounds we make are influenced by other sounds that come before and after them.

Language-specific phonological rules adjust the *features* of the sounds we make, not *phonemes*. When communicating, we are not sidetracked by the differences in the actual sounds we hear (allophones) – we still perceive them to be the distinctive sound intended by the speaker. Communication generally would become impossible, if we could not match speech sounds with the '*footprint images*' of targeted phonemes.
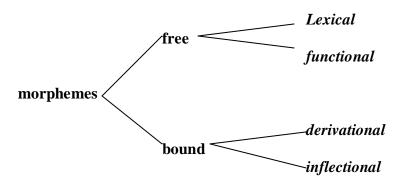
Morphemes are made up of phonemes, which in turn are represented by their variant forms (allophones). It is logical to suppose that forms, which made up of varying constituent parts, will also vary. Therefore, our speech sounds form strings of *allomorphs* (variant forms of morphemes), which we still *perceive* to be the same morpheme, i.e.:

He play**s** [z], she watch**es** [iz]**,** and it all make**s** [s] sense.

Allomorphy processes, then, are largely due to some *natural tendencies* in the way we make speech sounds (more on this in Unit 10).

9.1.1 Some Problems of Our Morphological Description

There are also some other puzzling issues which sometimes make it difficult to identify morphemes. Remember our neat diagram representing different types of morphemes? (Re: Unit 8)

Well, sometimes it is impossible to separate the morpheme from the word remember also that morphological rules do not just 'glue' morphemes together in a chain, where they could be easily identifiable as separate 'meaningful units.' The output of one morphological rule could be the input to another, including the rule that created it. Through their interaction, these rules can create complex three-dimensional structures that are not always easy to understand without an insight into language change over time. Why, for example, is the plural of *sheep, sheep?* And what about all those other 'exceptions to the rule' like *mice, men, geese,* or *deer*, not to mention all those hundreds of irregular verbs?

Sometimes a morpheme has only one phonological form – but often it has a number of variants known as ***allomorphs***. Totally dissimilar forms may be allomorphs of the same morpheme: *cats, dogs, horses, sheep, oxen, geese, feet* – all contain the English plural morpheme.

An **allomorph** is said to be ***phonologically* conditioned** when its form is dependent on the adjacent sounds.

An **allomorph** is said to be ***lexically* conditioned** when its form *seems* to be purely accidental, linked to a particular vocabulary item.

Let us now look at the English plural morpheme, because it is a good example of both types of conditioning:

9.1 Phonological Conditioning

Morphophonology is the study of different phonemic shapes of allomorphs; it is sometimes abbreviated to ***morphonology.***

/-z/ /-s/ /-iz/ are all phonologically conditioned allomorphs of the English plural morpheme. That is, each allomorph occurs in a predictable set of environments:

/-z/ occurs after most voiced sounds, as in *dogs, lambs, bees*, etc.

9.2 Lexical Conditioning

Down at the level of word roots, we also find messy patterns in irregular plurals like *oxen, feet, sheep, mice*, etc. and in irregular past tense forms like *think – thought, bring – brought, seek – sought, fight – fought; drink – drank, shrink – shrank, sing – sang, sink – sank; know – knew, blow – blew, fly – flew, and throw – threw.* This is because Proto-Indo-European had rules which replaced root vowels with others to form plurals and past tense forms. This explains why we have irregular (strong) verbs in English – they still obey those old rules, though they no longer apply in present day English. Most words have 'moved with the times' and now obey new rules, but a few stubborn words always remain. These 'fossils,' then, are considered to be ***lexically conditioned***. They do not follow any specific modern rule, and so have to be learnt separately. Linguists have thought of ways of analysing them, such as: o*xen, sheep, geese* each contain 2 morphemes, which cannot be separated:

Ox + plural	*Goose* + plural
Sheep + plural	*Goose* + plural

Verbs, such as *went, took*, etc., receive a similar explanation:

Go + past tense	*Take* + past tense

✎ Activity 9.2

Look at the words in **bold**: What is the point of this humorous poem?

> Sally Salter, she was a young teacher who taught,
> And her friend, Charlie Church, was a preacher who **praught**,
> Though his enemies called him a screecher, who **scraught**.
> His heart, when he saw her, kept sinking, and sunk;
> And his eye, meeting hers, began winking, and **wunk**;
> While she in her turn, fell to thinking, and **thunk**.
> In secret he wanted to speak, and he spoke,
> To seek with his lips what his heart long had **soke**,
> So he managed to let the truth leak, and it **loke**.
> The kiss he was dying to steal, then he stole;
> At the feet where he wanted to kneel, then he **knole**;
> And he said, 'I feel better than ever I **fole**.' ☺

9.2 Morphological Type

Languages can be grouped according to their ***morphological type***, i.e. the way in which they combine morphemes into words. We generally distinguish three main types of languages:

1. ***Isolating*** (also called ***analytical***) languages typically have only one morpheme per word; this means that most of their morphemes are free, and thus function as word-meanings. Many Asian languages, such as Vietnamese, Korean, and Chinese (Mandarin) are the isolating type, as do English and Hiri Motu. If you examine the Hiri Motu sentence below, you will see that each word expresses only one meaning:

Lauegu	sinana	gwarume	ta	ia	hoia	Koki	dekenai.
My	mother	fish	one	she	bought	Koki	at

   'My mother bought a fish at Koki.'

2. ***Agglutinating*** languages typically have words made up of many separate morphemes, all 'glued' together to make up larger words. The boundaries between morphemes in an agglutinating language are easy to recognise, because they are just 'strung' together into longer words. Turkish and Swahili are well-known examples. The Sye language (spoken in Vanuatu) also belongs to this type:

ov-nevyarep	ɣu-tw-ampy-oɣh-or	u-ntoɣ
plural-boy	they-will-not-want-to-see-them	in-sea

   'The boys will not want to see them in the sea.'

and
3. ***Fusional (Inflectional, or Synthetic)*** languages. These languages also typically have many morphemes in a single word, but the boundaries between different morphemes are not always clear. The morphemes are 'glued' together so tightly, that they 'fuse,' or 'blend' together, resulting in <u>a single morpheme having several different meanings, all wrapped up in one</u> (Latin is a good example, as are also many other Indo-European languages, such as Slavic (Polish, Czek, etc.), Baltic and many others.

Agglutinating and fusional languages are sometimes called ***synthetic*** languages, because both agglutinating and fusional languages 'synthesize' /join or *connect* morphemes together, even though in different ways.

✎ Activity 9.2

What morphological type is Russian?

Ya dumayu chto eto xorosho ...

Ya	duma	-yu		chto	eto	xorosho ...
I	/ think /	1st person sg., present, indic. mood /		that /	it /	good/ ...

For an example of the agglutinating type of language, look at these words from *Swahili*, the *lingua franca* of East and Central Africa:

Nitakupenda	= I will love you:	**ni**	**ta**	**ku**	**penda**
		'I'	'will'	'you'	'love'

Ninakupenda	= I love you:	**ni**	**na**	**ku**	**penda**
		'I'	present	'you'	'love'

Nilikupenda	= I loved you:	**ni**	**li**	**ku**	**penda**
		'I'	past	'you'	'love'

We should remember, though, that no language is of one 'pure' morphological type, because languages are 'live' structures that change over time – word-meanings tend to get 'glued' or later 'fused' together, foreign words enter the lexicon, etc.

Summary

1. Morphemes have variant forms (allomorphs)
2. Morphemes change, depending on
   ⇒ their history (lexical conditioning) and
   ⇒ the neighbouring speech sounds
3. There are three major types of language morphology:
   a. Isolating (free morphemes)
   b. Agglutinating (morphemes 'strung' together)
   c. Fusional /inflectional (morphemes fused together)

References

Yule, George (1998) The Study of Language. Cambridge University Press

Self-Assessment Exercises

Ex. 1 Examine the following data from the Nakanai language of the west New Britain Province, PNG and then answer the questions below:

gutu	*cook*	gulutu	*cooking*
taga	*be afraid*	tilaga	*fear* (noun)
pou	*sit*	pulou	*residence*
muga	*lead*	muluga	*the first*
peho	*die*	pileho	*death*
tuga	*to walk*	tuluga	*journey*
sapa	*sweep*	silapa	*broom*
voku	*make*	vuloku	*something made*

(a) The verbs in the left column appear in the right-hand column with an infix. What is the function of the infix?

_____

(b) The infix has 2 allomorphs. State whether the conditioning factor is phonological or lexical and, if phonological, state precisely the phonological factors involved.

_____

_____

_____

Ex. 2:   Look at the data from Motu (Central Province, PNG) and answer the questions below:

nahodomu	*I stoned you*	narakatanimu	*I left you*
ehodogu	*he stoned me*	erakatanigu	*he left me*
ohodoa	*you stoned him*	orakatania	*you left him*
eutugu	*he cut me*	nahamasemu	*I killed you*
nautumu	*I cut you*	ohamasegu	*you killed me*
outua	*you cut him*	nahamasea	*I killed him*
eitamu	*he saw you*	ehadikagu	*he abused me*
naitaia	*I saw him*	ohadikaia	*you abused him*
oitagu	*you saw me*	nahadikamu	*I abused you*

1. List the prefixes and state what they mean: _____
2. What is the suffix meaning 'me'? _____
3. What is the suffix meaning 'you'? _____

4. The suffix meaning 'him' has 2 allomorphs. What are they, and what is their distribution?

Ex. 3.   In Fijian, when a verb has an object, it takes a suffix. The verbs on the left have no objects, but the verbs on the right have objects following them. Examine the data and answer the questions below:

ʁai	*look, see, look at*	raiða
ðabe	*sit, sit on*	dabeða
ɣadra	*guard*	ɣadrava
ðre	*pull*	dreta
ðudru	*be angry (at)*	ðudruva
kaba	*climb*	kabata
koti	*cut*	kotiva
dresu	*tear*	dresuka
viri	*throw*	virika
moku	*kill*	mokuta
ŋunu	*drink*	ŋunuva

The transitive suffix has a number of allomorphs. List them, stating whether the conditioning factor is phonological or lexical, and if phonological, state precisely the phonological factors involved.

Ex. 4: The verb in Futunese (Futuna, Vanuatu) takes a suffix when followed by an object. Examine the list of intransitive (left column) and transitive (right column) verbs below, then list the allomorphs and state their conditioning and distribution.

tau	*hang*	tauria
fonu	*be full, fill*	fonua
waru	*scrape*	warusia
siki	*nurse*	sikina
foro	*swallow*	foromia
visau	*speak*	visaua
tanu	*bury*	tanumia
furu	*wipe*	furuna
suki	*sew*	sukia
toro	drag	toroʃa
tako	kick	takofia
toto	catch	totomia

_____
_____
_____

Ex. 5 Examine the following data from French, then answer the questions below:

ʒəvwaː	*I see*	tʊnevwaː	*You don't see*
ʒəmavwaː	*I see myself*	tʊnətəvwaː	*You don't see yourself*
ʒətəvwaː	*I see you*	tʊnəməvwapa:	*You don't see me*
tʊməvwa:	*You see me*	ʒənətəvwapɑ:	*I don't see you*
tʊtəvwa:	*You see yourself*	ʒənəməvwapɑ:	*I don't see myself*
tʊvwa:	*You see*	ʒənəvwapɑ:	*I don't see*
ʒəlav	*I wash*	ʒənəməlavpɑ:	*I don't wash myself*
ʒətəlav	*I wash you*	tʊnəlavpɑ:	*You don't wash*
tʊtəlav	*You wash yourself*	tʊmənəlavpɑ:	*You don't wash me*
tʊməlav	*You wash me*	ʒənətəlavpɑ:	*I don't wash you*
tʊlav	*You wash*	ʒənəlavpɑ:	*I don't wash*
ʒəməlav	*I wash myself*	tʊnətəlavpɑ:	*You don't wash yourself*

1. What are the verb roots?

      Wash _____ See _____

2. What are the affixes marking Subject? What type of affixes are they, and what does

each mean? _____

3. What are the affixes marking object? What type of affixes are they, and what does

each mean? _____

4. What is the affix marking negative? What type of affix is it? _____

_____