
UNIT 1: THE STUDY OF WORDS

Structure

- 1.0 Objectives
- 1.1 Introduction
 - 1.1.1 Profiling word
 - 1.1.2 The advent of word
- 1.2 Kinds of word
 - 1.2.1 Word as a physical shape: phonological and orthographic words
 - 1.2.2 Word as an abstract entity (1) The lexeme
 - 1.2.3 Word as an abstract entity (2) The grammatical word
- 1.3 Definition of word
 - 1.3.1 'A minimum free form'?
 - 1.3.2 Meaning and grammatical function
 - 1.3.3 Word vs. morpheme
 - 1.3.4 Relationship between levels: composition or realization?
- 4.0 Conclusion
- 5.0 Let Us Sum Up
- 6.0 Key Words
- 7.0 Bibliography
- 8.0 Questions
 - Notes on 'Questions & Exercises'

1.0 OBJECTIVES

The objectives of this unit are that at the end of this unit you should be able to

- identify those features which give the word its special status in a language,
- to distinguish between the different ways into which 'word' can be analysed in order to aid an understanding of its nature,
- to make a critical evaluation of the existing linguistic definitions of 'word',
- to understand the notion of 'morpheme' and the need for it,
- to distinguish between word and morpheme and to appreciate the nature of the relationship between the two.

1.1 INTRODUCTION

1.1.1 Profiling 'word'

You might have sometimes noticed how a word which you have always taken for granted and whose meaning you are quite confident you know very well, turns out on

element but linguists do not : they analyse it further into morphemes, thus making morpheme the smallest unit. Another kind of refinement is made in Def. 1. It states that it is the ultimate minimal (i.e. the smallest) element having a meaning. This would allow the possibility of there being smaller elements, or units, but they would not bear meaning. If morphemes are smaller than word, then they are presumably not meaning-bearing elements.

4. All definitions seem to agree on another point: that words are meaningful elements. Defs. 1 & 2 in addition also suggest that they may be the smallest elements having meaning.
5. Def. 4 puts forward an additional idea : a word cannot be broken down into smaller units 'capable of independent use'. Here 'use' must be taken to be different from 'meaning'. While there may be some commonsense support for the idea that a word cannot be broken down into smaller units with independent meaning (Def. 2), the idea that the smaller units also lack independent use may be difficult to sustain, as we shall see below.

1.1.2 The Advent of 'word'

It is interesting to observe that while these definitions yield a certain sort of profile of 'word', 'word' has historically not always been apprehended in this way. In fact, according to one school of thought, till writing systems evolved, there was no notion of the word at all, and 'word' was taken to be synonymous with language, or verbal expression in general, which may account for the first category of meaning ascribed to 'word' by the Oxford English Dictionary. According to this school of thought, in languages which are not written down, even today a word is not distinguished from an utterance, just as a child who has not yet learned to read is unable to distinguish word boundaries (e.g., the child who insisted on having 'a numberella' for himself). It is argued that when alphabetic writing first started, it also had to face the question of where to draw word boundaries, and in some cases the indeterminacy continued till a very late stage. For example, the word orange of English originated from a proto form which is reflected in the Arabic *naranj* of the Persian *narang* (from which comes the Hindi *narangi*). When the word was absorbed into Middle English, it occurred with the indefinite article *a norenge*, but soon the word boundary came to be drawn after *n* rather than before it, and gave us *an orange* rather than *a norange*. In this case, the boundary line was clearly dictated by the 'an before a noun beginning with a vowel' analogy. Other similar factors must also have decided where the line was drawn. What this school regards as certain is that words came to be established after the advent of literacy, when the need arose to write in units separated by spaces.

This view is disputed by others. Lyons (1968:199), for example, has this to say on the topic:

... the ability to break utterances up in words is not only characteristic of educated and literate speakers of a language. Sapir tells us that uneducated American-Indian speakers, with no experience of writing any language at all, when asked to do so, were perfectly capable of dictating to him texts in their own language 'word by word', and had little difficulty in isolating words from utterances and repeating them to him as units. Whatever else we may say about the word as a linguistic unit, we must reject the view ... that 'primitive languages' do not have words. The habit of reading and writing ... may well reinforce the native speaker's consciousness of the word as an element of his language ... but it certainly does not create his ability to break utterances up into words in the first place.'

closer scrutiny to be a very complicated business. One such word is the word 'word' itself. If you look up 'word' (noun) in a good dictionary (let us choose the **Oxford English Dictionary**), you will first be disconcerted to see its meaning and usage taking up two large columns, very closely printed in very fine print. Next, you will note that the meanings and usage are classified into two major categories : in the first category are those uses of this word in which it stands for verbal expression in general and is, by extension, used for such meanings as 'command', 'a saying or proverb', 'text of a song', 'a promise', 'a declaration' 'a contention', etc. In the second category are included its uses as 'an element of speech', 'a combination of sounds, or one such sound, used ... to express an idea', 'a written character or set of characters' representing this, etc. In this sense, 'word' can refer to a name, title, idea, printed marks, a telegraphic message, and so on. You will find these and many more senses of the word 'word' listed and exemplified in detail : altogether eleven sense-groups in the first category and seven in the second.

In this course, our aim is to study words in the sense in which they represent 'elements of speech', i.e. in the second, and the technical, sense of the word. In fact, more recent dictionaries, which are not written on historical principles (as the **Oxford** is), place this definition first. Let us look at a few of these definitions, beginning with the **Oxford** definition in full :

1. **Oxford English Dictionary**: 'A combination of vocal sounds, or one such sound, used in a language to express an idea (e.g., to denote a thing, attribute, or relation), and constituting an ultimate minimal element of speech having a meaning as such.' (1927, 1989)
2. **Collins English Dictionary**: 'One of the units of speech or writing that native speakers of a language usually regard as the smallest isolable meaningful element of the language, although linguists would analyse these further into morphemes.' (1986)
3. **American Heritage Dictionary**: 'A sound or a combination of sounds, or its representation in writing or printing, that symbolizes or communicates a meaning and may consist of a single morpheme or of a combination of morphemes' (1985)
4. **Webster's Ninth New Collegiate Dictionary**: 'A speech sound or series of speech sounds that symbolizes and communicates a meaning without being divisible into smaller units capable of independent use.' (1984)

Let us try to set up a profile of 'word' extracting various features from these definitions. It would appear from these definitions that we can apply the word 'word' to an entity that possesses the following characteristics :

1. A word is made of a sound, or a series of sounds; we may also apply it to describe representations of these in writing.
2. A word is a unit of speech (presumably when it is a sound or a series of sounds) or writing (presumably when it is a representation of the sound/series of sounds in writing).
3. The definitions do not seem to agree on whether or not the word is the smallest unit of speech/writing. Def. 4 implies that it is, since it says that it is not 'divisible into smaller units capable of independent use'. Def. 3 states that a word may consist of a single morpheme or a combination of morphemes, thereby implying that the smallest unit is the morpheme and not the word. Def. 2 makes a further refinement by saying that native speakers of a language regard it as the smallest

Whatever be the truth about the relationship between the word and literacy, it remains a fact that in all literate communities there exists a notion of 'word', even if the way its nature is apprehended is not the same. For example, there are languages in which the entire English utterance consisting of three words 'I have eaten' may be expressed by a single 'word'. In Hindi, expressions like *jitwaanaa* and *harwaanaa* are apprehended as single words but their English equivalents require four words each: 'to cause to win' and 'to cause to lose'. Languages may differ in the amounts of meaning they pour into individual words, but that does not effect the fundamental nature of words. The words still remain a potent means of expression. Whatever can be expressed in one language using one set of words can more or less be expressed in another language using another set of words. If to express some idea one has to use four words in one language against one in another, there may be another idea for which the situation is reversed. All languages have simple words and complex words and all languages have processes of word-formation. And this is what is more important than the fact that the sets and processes are not the same. Let us therefore try to understand the fundamental nature of the word in this unit before turning to the specific manifestations of word-classes and word-formation processes in English in the next three.

1.2 KINDS OF WORD

1.2.1 Word as a Physical Shape: Phonological and Orthographic Words

The characteristics of 'word', that we have extracted from dictionary definitions above seem to indicate that there are actually more than one kind of 'word'. Since a word can either be a sound or a sequence of sounds, that makes one kind of word: let's call it the **phonological word** and represent it by writing it in phonetic transcription. We may also use 'word' to refer to the written, or orthographic, representation of the phonological word, so that gives us the **orthographic word**, which we shall represent by writing it in small letters. We can try and explore the relationships between these two kinds of words. The orthographic representation of a phonological word is never a straightforward, one-to-one, representation. Sometimes two or more phonological words are represented by the same orthographic word, e.g., the orthographic word *read* represents the two phonological words /ri:d/ and /red/; *lead* represents /li:d/ and /led/. Such cases are known as **homographs**. Sometimes one phonological word (e.g., /mi:t/, /kɔ:s/) may be represented by two or more orthographic words (*meet* and *meat*; *coarse* and *course*). Such cases are called **homophones**. An exploration of these relationships for languages will help us to banish such popular myths that certain languages (e.g., Hindi) have 'phonetic' writing systems while others (e.g., English) have unphonetic, and therefore 'unscientific', systems of writing.

Phonological and orthographic words are thus regarded as purely physical shapes made up of sound and spelling respectively. When words are regarded as purely physical shapes, two shapes differing even slightly are treated as two different words. For example, the five words contained in the following set, when seen as phonological or orthographic shapes, will be regarded as five different words:

{eat, eats, ate, eaten, eating}

1.2.2 Word as an Abstract Entity: (1) the Lexeme

Yet we know that there is a sense in which these five are said to be different forms of the 'same' word. In fact, that is how traditional grammars treat them. They claim that there is an abstract word **EAT** which is 'realized' by these five forms in the grammati-

meaningful element' will have to be revised since otherwise these forms (younger, older, etc.), not being the smallest meaningful elements, would not be regarded as words.

There cannot be any doubt that elements like **-er**, **-est**, **-al** are meaningful: added to any adjective **A**, **-er** produces the meaning 'more **A**', while **-est** produces the meaning 'most **A**'; **-al**, added to a noun **N**, produces the meaning 'of, concerning, pertaining to, etc. **N**'. It is because these elements have fixed meanings that we are able to add them to other forms to derive precisely the meanings we want and not any other.

It must be quite clear by now that what we are looking for is a definition of 'word' that will agree with the native speaker's intuitive understanding of this concept. Since Bloomfield's definition does not, it will not do. There are elements which are isolable, and which are meaningful, but which the native speaker does not intuitively recognize as words (e.g. **-er**, **-est**, **-al**). We must find a definition which will conform to the native speaker's intuition about words.

Can we revise the definition so that it takes care of this difficulty? Perhaps we can, but we must first do something about the smallest meaningful elements which are not words, which we have just discovered. We must recognize them, give them some status and define their relationship with words.

When we analyse the form **national** into the elements **nation** and **-al**, we have a feeling that we have now two elements one of which (**nation**) also occurs independently while the other (**-al**) is a bound form and cannot occur independently. We have a similar kind of feeling about forms like **works**, **worked**, **working**, etc., which we can respectively analyse into **work+s**, **work+ed** and **work+ing**. There is, however, a difference between suffix forms like **-al** on the one hand, and **-s**, **-ed**, and **-ing** on the other: we can associate some kind of meaning with affixes like **-al** as we did above, but it is difficult to associate such meanings with affixes of the latter set. For example, there is no specific way in which the meaning of **run** in **I run** can be said to be different from the meaning of **runs** in **He runs**. It is the third person subject that requires the presence of the suffix **-s** in the verb in the latter sentence. In other words, the suffix **-s**, here signifies the presence of a third person singular subject, in addition to signaling, in common with the **run** of the former sentence, the presence of the simple present tense. Affixes like **-s**, **-ed** and **-ing** derive their significance not from meaning but from use, or from the functions they perform. As we have stated earlier, the suffix **-ed** performs the function of signaling past tense, **-ing** that of signaling the continuous tense, and so on. In other words, such affixes perform grammatical functions. In this respect, they are rather like articles (**a**, **the**) or auxiliaries (**am**, **is**, **was**, **can**, **may**, etc.) which also have no dictionary type meanings but perform certain types of grammatical functions.

The point here is this: Whether they are meaning-bearing affixes like **-al**, or affixes with grammatical functions like **-s**, **-ed**, **-ing**, etc., such elements cannot occur independently. The Webster's definition quoted in 1.1 expresses this fact by excluding from the definition of 'word' forms 'divisible into smaller units capable of independent use.' In other words, forms like **word**, **working**, **worked**, are included in the definition of words, because, though they are divisible into two smaller parts, both parts are not capable of independent use: only one is.

The question that now arises is that if forms like **national**, **works**, **working**, etc. are indeed words, i.e. if they are 'the smallest isolable meaningful elements' that are '(in) divisible into smaller units capable of independent use' (we must remember that this definition still excludes compounds from the definition of the word), then what is the status of the smaller elements into which they can be broken down, some of which are in fact meaningful elements (e.g., **-al**) but are excluded from the definition of word because they cannot occur independently?

cal paradigm of English. By a 'grammatical paradigm' we mean a set of forms derived by the application of a particular rule of grammar. The above set of forms is derived by the application of the tense formation rule, as follows:

The lexeme 'EAT'

RULE	Person	Number	Form
Simple Present Tense Formation	I	Sing.\Plu	'eat'
	II	-do-	'eat'
	III	Sing.	'eats'
	III	Plu.	'eat'
Simple Past Tense Formation	I,II,III	Sing.\Plu.	'ate'
Past Participle Formation	I,II,III	Sing.\Plu.	'eaten'
Present Participle Formation	I,II,III	Sing.\Plu.	'eating'

When the simple present tense formation rule is applied to the abstract word **EAT** we get **eat** in the first and second persons singular and plural and in the third person plural, **eats** in the third person singular; when the simple past tense formation rule is applied we get **ate** in all persons and numbers; when we apply that past participle formation rule we get **eaten**, and when we apply the present participle formation rule we get **eating**. But the underlying word is the same as shown by the fact that the basic meaning of all the four forms is identical. It is only modified in certain fixed ways to refer to different points of time, or to duration. In this abstract sense, a word is different from a phonological or an orthographic word. For one thing, the word in this sense has meaning, i.e it denotes something in the external world, an idea, or object, or action or state. For another, it is an abstract entity: it is not a physical shape at all. The abstract idea **EAT** that occurs in all the five forms above is actually a meaning, a name of an action. There is an orthographic shape 'eat' and a phonological shape /i:t/ which 'realize' or 'represent' this idea. When the grammatical paradigm of the abstract word is to be constructed, grammatical rules appropriate to the category of the word are applied, producing grammatical words, which we discuss below. These grammatical words are in turn realized by phonological and orthographic words (also collectively called word-shapes).

In this first of the two abstract senses in which it is used, in which we focus on its meaning, the word has been called by different names, the most common one being **lexeme**. Other names are 'lexical word', 'lexical item' and 'vocabulary item'. We will use the terms **lexeme** and **lexical word** and interchange them freely. We will differentiate the lexeme from word in the other senses by writing it in capital letters. Here are the characteristics that distinguish a lexeme from the other kinds of word discussed so far:

1. A lexeme is viewed in relation to its meaning, i.e in relation to things, actions, states, etc. in the world. Accordingly, lexemes fall into grammatical categories like noun, verb, adjective, adverb, etc.
2. Depending on its grammatical category, each lexeme may be realized by a set of forms in its grammatical paradigm, e.g., a noun may have singular, plural and possessive forms (e.g., **boy**, **boys**, **boy's**), an adjective may have positive, comparative and superlative forms (**nice**, **nicer**, **nicest**), a verb present, past, and participle

1.3.3 Word vs. Morpheme

It is mainly to account for such forms that linguists set up the category of **morpheme**. **Morphemes are defined as the smallest elements that have meaning, or that perform a grammatical function.** It is immediately clear that this definition will include a large number of forms so far defined as words, e.g., **old, young, sweet, a, the, was, can, may, etc.**, though the category 'morpheme' was obviously not necessitated by forms like **-al, -s, -ed, -ing, etc.** which are the smallest elements (ie they cannot be broken down further) that have meaning (**-al**) or perform a grammatical function (the rest).

You must have noted that the definition of morpheme is free from the condition that the forms be able to occur independently. It was this condition that had disqualified elements like **-al, -s, -ed, -ing, etc.** from being called words. So these forms are automatically included in the category of morphemes. But so also are all independently occurring forms which are not made up of smaller independently occurring forms. This is because the definition of morpheme includes all 'smallest' elements, irrespective of whether they can occur independently or not.

With a morpheme defined in this way, words and morphemes necessarily enter into a particular kind of relationship. Let us tentatively define this relationship as that of 'composition': ie a word is 'composed' of one or more than one morpheme. Words like **nation, old, young, nice, play, run, etc.** are monomorphemic, whereas words like **national, older, younger, nicest, played, running, etc.** are composed of two morphemes each. Of the two morphemes that make up each of the words in the second list, one is a **free morpheme**, capable of occurring independently, and the other a **bound morpheme**, which is not thus capable. You can easily guess what the free morphemes are, since they also occur as monomorphemic words (viz. **nation, old, young, nice, play, run**); the suffixes (**-al, -er, -est, -ed, -ing**) are all bound morphemes.

However, it is also possible for a word to be composed of two free morphemes, e.g., **postman, blackboard, and goalkeeper**. In other words, by setting up the category of 'morpheme' we are able to solve the problem the Bloomfield's definition of word as 'minimum free form' faced with compounds. You will recall that they were excluded from the category of words by the Bloomfieldian definition as they were not minimum free forms: they were free but not minimum, as they consisted of smaller forms (like **post, man, black, board, etc.**). With the setting up of the morpheme category, this problem no longer exists, as the smaller forms are now labelled morphemes. They can either occur as monomorphemic words, or can combine as free morphemes to form a compound.

1.3.4 Relationship Between Levels: Composition or Realization?

We thus have two levels of structure where we formerly had only one. The lowest level is that of the morpheme, which consists of the smallest meaningful elements. The elements of this level (ie morphemes) make up the forms at the next higher level, the level of word. This relation of 'making up', or 'composition' is obvious only in those cases where two or more morphemes are combined together to form a word. It is not so obvious in the case of monomorphemic words, where one morpheme makes up one word. In such cases, it appears that it would be more appropriate to speak of 'realization' rather than 'composition'. We could thus say that the form 'young' at the level of morpheme is 'realized' as the form 'young' at the level of word, though at first this appears to be a vacuous thing to say (ie the relationship of 'realization' appears to be empty of substance). But a little consideration shows that it is essential to postulate this relationship between the two levels, even for those cases where words are 'made up

forms, and so on. These forms are given physical realizations by processes like affixation, vowel shift, stress change, etc., acting upon the phonological and orthographic words which represent the lexeme.

3. Words occurring as headwords in a dictionary are lexemes. For example, a dictionary does not list **eat**, **ate**, **eaten** and **eating** as four separate words: **eat** alone is listed once.
4. The term lexeme also includes items which consist of more than one word-shape, e.g., multi-word verbs like 'to catch up on', phrasal verbs like 'to drop in', and idioms like 'to kick the bucket'. Accordingly, they also find separate entries in the dictionary, though for ease of reference they are included under the entry for a key word occurring in them (e.g. **kick the bucket** will be found under the entry for **kick**).

Lexemes and word-shapes – Relationships: The relationship between lexemes (or lexical words) on the one hand, and word-shapes (or phonological and orthographic words) on the other, is quite complex but it also accounts for a lot of creative uses to which language is put in literature, advertising, jokes, etc. Let us first look at those cases where the same word-shape (ie phonological or orthographic word) belongs to two or more different lexemes.

Some of the simplest examples of this kind are word-shapes like **bank**, **bat**, **eat**, **port**, etc. Each of these word-shapes belong to at least to two lexemes. e.g., **bank** may be **BANK**¹, 'the financial institution' or **BANK**² 'sloping river side'; **bat** may be **BAT**¹ (the animal) or **BAT**² (the cricketing bat); **ear** may be **EAR**¹, the body part, or **EAR**², part of a cereal plant, and so on. Such cases, known as **homonyms**, show a one-many relationship between the phonological/orthographic word and the lexical word.

Cases of homonymy must be distinguished from cases of polysemy. In homonymy two or more lexemes are involved; as a result, the meanings are quite unrelated to each other. In polysemy, on the other hand, the meanings are closely related: there is only one lexeme that is involved but its meaning is figuratively extended (see Unit 4, Sec 3.0 below). Thus, for example, the word-shape 'mouth' is related to the same lexeme **MOUTH** in both the following uses: 'the child's mouth' and 'the mouth of the river'. Dictionaries usually reflect this distinction by having separate entries for the lexemes involved in cases of homonymy.

A lot of word-play in literature, and more recently, in the language of advertising and jokes exploits homonymy, or near-homonymy. For example, Siegfried Sasson, a First World War poet, exploits the homonymy of **base** (noun meaning 'military encampment') and **base** (adjective meaning 'reprehensible', 'cowardly', etc.) in his poem 'Base Details' to parody cowardly generals who themselves stay at the base while sending young soldiers to their deaths at the front. An ad. by a Hi-Fi equipment manufacturer says 'We've been giving **sound** advice for over 50 years', exploiting the homonymy of **sound** (adjective meaning 'good', 'useful', etc.) and **sound** (noun as in 'the sound of music'). Near-homonymy refers to homophones, which are cases of homonymy with respect to the medium of speech only. Thus Belloc's epigram **On his Books** exploits the homophony of **read** (past tense of the verb **read**) and the adjective **red**:

When I am dead, I hope it may be said:
'His sins were scarlet, but his books were read.'

We have now distinguished three kinds of word: **phonological**, **orthographic** and **lexical**. It will be apparent that the three kinds are not distinguished by a common criterion: the first two are distinguished from each other by the criterion of the medium

of two or more morphemes, and that it is not enough to posit a relationship of 'composition' between the two levels.

The first reason for this is that 'morpheme' and 'word' are now theoretically two different levels, and elements of two theoretically different levels cannot be joined together by the relationship of composition only. A combination of morphemes remains a combination of morphemes till it is, by some process, transformed into a word and acquires all the properties of a word described earlier. To give an analogous example, it may be possible to analyse morphemes into phonemes, or sounds, but it is not possible to say that morphemes are 'made up of' phonemes and the relationship between morphemes and phonemes is one of composition only. Then, the question remains unanswered: How does a combination of phonemes acquire meaning? Where does the morpheme get meaning from? Hence, it would be preferable to say that a combination of phonemes may be 'realized' as a morpheme, which is a pre-existing meaningful unit. Therefore, when a combination of phonemes is realized as a morpheme, it automatically acquires meaning. We must remember that not all combinations of phonemes are realized as morphemes: only those which are, acquire meaning; similarly not all combinations of morphemes are realized as words: only those which are, acquire the properties of words.

Another reason for postulating the relationship of realization between the levels of morpheme and word is that this enables us to account for those cases in which the morpheme, a meaningful element, has no phonological or orthographic manifestation. To illustrate, in the following words we are able to associate distinct phonological and orthographic fragments with the two morphemes that make up each word:

Orthographic:	killed	taken	horses
Phonological:	/kild/	/teɪkən/	/hɔːsɪz/

The morphemic analysis of these words will yield the following morphemes:

Orthographic:	kill, -ed;	take, -en;	horse, -s
Phonological:	/kɪl/, /-d/;	/teɪk/ /-ən/;	/hɔːs/, /z/

This morphemic analysis is based on the assumption that specific meanings or grammatical functions are associated with each of the forms. The meanings associated with the free morphemes *kill*, *take* and *horse* are specified in the dictionary, while the grammar of English assigns the past tense formation function, the past participle formation function and the plural noun formation function to the bound morphemes — *ed*, *-en* and *-s* respectively. Thus, each of the morphemes (the smallest meaningful elements) has a clearly identifiable phonological and orthographic representation. This makes it possible for us to say that the word *killed* is 'made up' of the morphemes 'kill + ed or /kɪl/ + /d/, the word *taken* is made up of the morphemes *take* + *en* or /teɪk/ + /ən/ and so on.

However, this situation does not obtain with the following forms:

Orthographic:	took	sung	sheep
Phonological:	/tuːk/	/sʌŋ/	/ʃiːp/

Here we do not have clearly identifiable orthographic and phonological segments to represent the morphemes, though we know that the same bound morphemes (past tense, past participle tense, plural number) are also present here. We therefore cannot say that *took* is made up of *take*+*ed*, *sung* of *sing*+*en*, *sheep* (pl) *sheep*+*s*. It now appears that it was a mistake to identify a morpheme with its phonological or orthographic repre-

(or substance) in which the word is realised — sound vs. spelling or spoken vs. written — but the last kind is identified on the basis of meaning or content. Meaning or content is usually contrasted with form, where 'form' refers not to the physical form but to abstract structure. For example, a sentence has a meaning and it has a form, or syntactic structure. So, if the lexeme represents the content, or the meaning of a word, how is its form represented? The phonological and the orthographic words represent, as we have said, not the 'form' of the words but the substance or the medium in which they are realised. Form, like meaning, is also an abstract entity: it is not to be confused with substance. In order to give recognition to this criterion of content vs. form, we must recognize another kind of word which will underlie both the phonological and the orthographical kinds. We can call it the **grammatical word**.

1.2.3 Word as an Abstract Entity (2) the Grammatical Word

Grammatical words are words that occur in a grammatical paradigm, e.g., the forms of eat cited above: **eat, eats, ate, eaten, eating**. Each of these words has a phonological form, an orthographic form, and a grammatical form which underlies both. Thus **eating** is the phonological word $/i:tiŋ/$, the orthographic word 'eating', and corresponds to the grammatical word 'present participle form of eat'. The grammatical word represents the grammatical properties of the word i.e. the properties which determine how it is to be used in a sentence. For example, the form **eating** has certain properties which determine its use in a sentence which are different from the properties (which determine the use) of **eat, eats, ate** and **eaten**. To cite just one property, for **eating** to occur in a sentence it must be preceded by a form of the verb **be**: **is, am, was, are, were** or **be**; it may not be preceded by a form of **have**, which is necessary if **eaten** is to occur in a sentence. Properties of this kind, which determine how a word combines with other words in a sentence, are called the grammatical properties of a word, and when we conceive of the word as embodying these properties we call it the **grammatical word**.

Actually it is quite important that we set up a category of grammatical word, because the grammatical word is quite distinct from both the lexical word (which focuses on meaning) and the phonological/orthographic word (which focus on substance), and because the relationships between them can be quite complex. We saw above that **eat, ate** and **eaten** are three different grammatical words, though they are the same lexical word. This is because their grammatical properties are different. In traditional grammar, these forms are called the present, past and past participle forms of **eat** respectively. Let us now look at the corresponding forms of some other verbs:

	PRESENT	PAST	PARTICIPLE
EAT	eat $/i:t/$	ate $/et/$	eaten $/i:tn /$
SING	sing $/siŋ/$	sang $/sæŋ/$	sung $/sʌŋ/$
READ	read $/ri:d/$	read $/red/$	read $/red/$
PLAY	play $/plei/$	played $/pleid/$	played $/pleid/$
CUT	cut $/kʌt/$	cut $/kʌt/$	cut $/kʌt/$

We notice that there is a one-to-one correspondence between the grammatical forms on the one hand and the phonological and orthographic words on the other in the case of **EAT** and **SING**: no two grammatical words are realized by the same phonological or orthographic word. In the case of **READ**, there is a many-one relationship between the grammatical words and the orthographic word, as all the three grammatical words (for now, we refer to them as the present tense form, the past tense form and the past participle form respectively) share the same orthographic form 'read'. All the three words form the grammatical paradigm, which in the case of **EAT** and **SING** have

sentation. In order to take advantage of the notion of morpheme to bring on par regular and irregular verbs, regular and irregular nouns, and regular and irregular forms of a language in general, we should perhaps treat a morpheme as an abstract entity, just as we treated lexical and grammatical words as abstract entities. We could now say that the word 'took' has the morpheme combination **TAKE + PAST TENSE**, where **TAKE** and **PAST TENSE** are abstract morphemes representing meanings and not any phonological or orthographic entities. Similarly, *sung* would be said to have the morphemes **SING + PAST PERFECT**, and *sheep* **SHEEP + PLURAL**. However, in order to specify the relationship more accurately, we would have to resort to the relationship of realization, as the relationship of composition ('made up of') implies a more physical relationship. We can now say that the combination **TAKE + PAST** at the morpheme level is realized as the form 'took' at the word level, the combination **SING + PAST PERFECT** is realized as 'sung', and so on. By doing this, we free the morpheme from the constraint of a compulsory physical manifestation and thus increase the utility of this concept considerably. We are now able to show that, despite the lack of any phonological and orthographic indication, forms like *broke*, *sang*, *ran*, *caught* have the morpheme **PAST TENSE** in them in common with the forms *worked*, *changed*, *returned*, etc. The relationship of realization also allows for the same phonological or orthographic shape to realize different morphemic combinations, or a many-one relationship between orthographic=phonological words on the one hand and the grammatical word on the other. Thus, the phonological form [hit] and the orthographic form 'hit' realize the three morpheme combinations **HIT + PRESENT**, **HIT + PAST**, and **HIT + PAST PERFECT**.

In other words, with this conception of a morpheme as an abstract entity, and with 'realization' replacing 'composition' as the relationship between morphemes and words, we can expand the definition of the word to include the grammatical word. Bloomfield's definition of word as the minimum free form, as we saw, applied only to the phonological word. This was because the minimum free forms were seen to be 'made up of' other forms which included some bound forms. When we redefine the grammatical word as an abstract realization of a combination of morphemes, we are not obliged to look for stretches of sound corresponding to the morphemes, but only for such morphemic combinations as might be possibly realizable in the language as words. E.g., while combinations like **NOUN + PLURAL** and **VERB + PAST TENSE** may be realized by words, combinations like **NOUN + PAST TENSE** are not so realizable. What combinations of morphemes are or are not realizable as words is established by the full grammar of the language. The grammar specifies which combinations are possible and, using the criteria of positional mobility and stability described in 1.2.1, goes on to describe which combinations are actually realized. This distinction between realizable vs. non-realizable on the one hand, and between realizable vs. actually realized on the other is an important one. The morpheme combination **NOUN + PAST TENSE** is an illegitimate combination, and is therefore unrealizable as a word. Such a combination will not be produced by the rules of the grammar. On the other hand, **VERB + PAST TENSE + THIRD PERSON + PLURAL** is a possible morphemic combination but one that is not realized in the form of a grammatical word in English. This can be seen from the fact that **VERB + PRESENT TENSE + THIRD PERSON + PLURAL** is a possible and realized morphemic combination in English. Consider *They run* VS. *He runs* where *run* realizes **VERB + PRESENT TENSE + THIRD PERSON + PLURAL**.

1.4 CONCLUSION

The framework for the study of words that we have developed in this unit can now be diagrammed as follows:

different orthographic realizations, have a common orthographic realization in this case. The relationship between the grammatical words and the phonological words is also many-one in the case of the past and past participle forms: both forms are realized as /red/. In the case of **PLAY**, the grammatical forms for past and past participle are in many-one relationship with both the phonological and the orthographic forms i.e. both grammatical forms correspond to a single orthographic and a single phonological word-shape ('played' and /plaid/ respectively). In the case of **CUT** this situation obtains with regard to all the three grammatical forms.

This phenomenon, viz. the realization of distinct grammatical words by the same word-shape is known in linguistics as *syncretism*. Syncretism is the evidence that we need to make a distinction between the word as a grammatical unit and the word as a phonological or orthographic unit. In English, syncretism occurs widely and not with verbs alone. Here are some examples which will further clarify the notion of syncretism:

Verbs:

Present	Past	Past Participle
I <u>sing</u> a song	I <u>sang</u> a song.	I have <u>sung</u> a song.
I <u>dance</u> a samba.	I <u>danced</u> a samba.	I have <u>danced</u> a samba.
I <u>cut</u> my finger.	I <u>cut</u> my finger.	I have <u>cut</u> my finger.

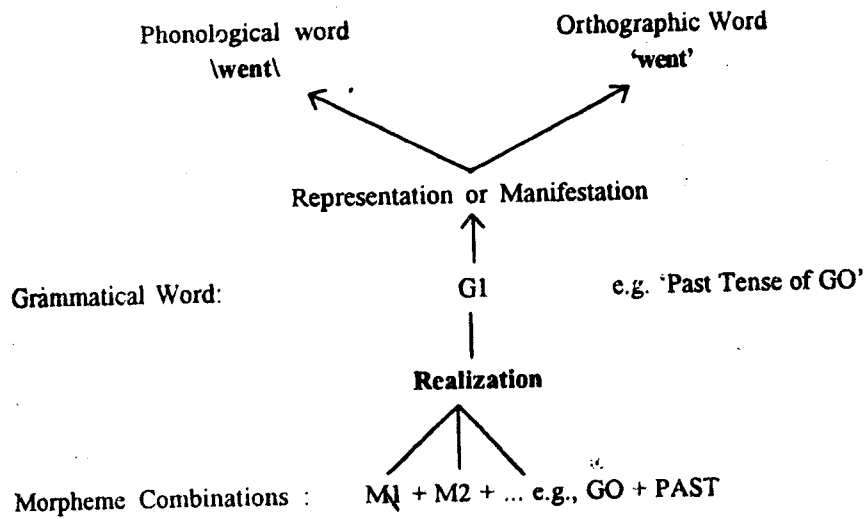
Nouns:

Singular	Plural
The tiger <u>killed</u> a cow.	The tiger <u>killed</u> three cows.
The tiger <u>killed</u> a deer.	The tiger <u>killed</u> three deer.
Singular Possessive	Plural Possessive
This is the man's /mæz/ room.	This is the men's /menz/ room.
This is the boy's school. /bɔiz/	This the boy's school. /bɔiz/

The underlined forms show syncretism.

The reverse case of a one-many relationship between the grammatical word and the phonological or orthographic word, though less common, is not entirely absent. For example, the grammatical word 'past participle of 'dream' is realized either by /dri:md/ 'dreamed' or by /dremt/ 'dreamt'. In American English, the grammatical word 'Past tense of 'dive' corresponds to two phonological and orthographic words each: /daivd/ 'dived' and /dəuv/ 'dove'.

Also included in the category of grammatical words are classes of words like articles, pronouns, auxiliaries, prepositions, etc., also sometimes called 'function words'. If at all listed in a dictionary, they are defined in terms of the functions they perform rather than in terms of their meanings, since they do not carry meanings in the sense in which a lexeme does. Hence, they do not correspond to lexical words. As grammatical words, however, they are all capable of abstract characterization and also display syncretism. For example, the two pronouns, second person singular and plural, correspond to the same phonological and orthographic word-shape 'you' and thus display syncretism. Similarly, four present tense auxiliary forms, and the four corresponding past tense forms - the first person plural, the second person singular and plural, and the third person plural - are all syncretized to single phonological/orthographic forms ('are' and 'were' respectively).



The smallest meaningful units are morphemes. Morphemes combine to make higher meaningful units. Some of these combinations may be realized as grammatical words. These grammatical words are then represented or manifested by phonological and orthographic words.

This diagram shows only the formal aspect of the study of words, which is what we shall be concerned with in the following units. The aspect of meaning does not concern us in these units. That is the reason why the lexeme does not find a place in the above diagram.

1.5 LET US SUM UP

1. Every speaker of a language has an intuitive apprehension of 'word'. If asked, he is able to identify the stretch of sound which constitutes one word. This ability is strengthened by literacy since in writing words have to be separated by spaces.
2. Though languages differ in the way they codify meanings into words, every language does have the unit 'word'.
3. The notion of word can be analysed into four types depending on the way it is apprehended on different occasions: phonological, orthographic, lexical and grammatical.
4. When we use 'word' to refer to a stretch of spoken speech, the reference is to the phonological word.
5. When we use 'word' to refer to a stretch of written or printed symbols, we refer to the orthographic word.
6. The relationship between the phonological and the orthographic word may be one-one, one-many or many-one. When the relationship is one-many (/mi:t/ → meet/meat) we have a case of homophony: when it is many-one (/li:d/, /led/ → 'lead'), we have homography.)
7. The abstract word which is realised in different grammatical forms is called the **lexical word** or the **lexeme**. In this sense, the word focuses on meaning. The headwords in a dictionary represent lexemes. Though most lexemes are realized by single words, some lexemes can be realized by a sequence of words (e.g., idioms).

1.3 DEFINITION OF 'WORD'

1.3.1 'A minimum free form'?

By setting up four kinds of 'word' we have captured at least some of the five characteristics of 'word' that we had gleaned in 1.1 from the dictionary definitions. Characteristics 1 & 2 are captured by the notions of phonological and orthographic words.

Characteristic 4, which says that words are meaningful elements, is captured by the notion of the lexical word, or lexeme. The status of characteristics 3 & 5, which are about the 'analysability' of the word into smaller units, remains unclear. Is the word the smallest unit or can it be broken down into smaller units? What kinds of units are we talking of here? Word as a grammatical unit (ie the grammatical word) or word as a meaningful unit (ie the lexical word)? When some dictionary definitions talk of 'morpheme', what do they mean? What is a morpheme? Is it a grammatical unit or a unit of meaning?

These are the kinds of questions that arise when we probe characteristics 4 & 5 further. These questions actually arise from the linguists' attempts to define a word scientifically. Linguistics claims to be a science and since the word is one of the basic units of language, a scientific definition of 'word' is a prerequisite for this science.

Several attempts have been made to define 'word' in linguistics. The dictionary definitions given above in 1.1 are actually derived from these definitions. The most well-known of these definitions is the one by Bloomfield who defined the word as 'a minimum free form'. The two crucial words here are 'free' and 'minimum'. 'Free' means 'those which can occur alone as whole utterances'. For example, *young*, *old*, *right*, *wrong*, etc. are free forms since they can occur as whole utterances, (e.g., in response to questions like 'Was the visitor young or old? 'Do you consider use of force to settle disputes right or wrong?') 'Minimum' of course means 'the smallest' or 'those which cannot be broken down further into smaller parts'. None of the forms cited above can be broken down into smaller parts. Thus they meet both conditions set out by Bloomfield and are words by his definition. So are forms like 'younger', 'oldest', 'sweeter', 'sweetest', etc., since they too are minimum free forms. We can break them down into parts like 'sweet' and '-er', 'old' and '-est', etc., but '-er' and '-est' are bound, not free forms: they cannot occur as utterances alone. Bloomfield's definition faces problems with forms like 'a', 'the', 'because', etc., which are traditionally regarded as words but cannot occur alone as utterances, and linguists have tried to extend and elaborate the meaning of 'free' to take care of this problem.

These linguists argue that 'freedom' here means (1) **positional mobility** and (2) **stability**. Positional mobility refers to the fact that the word is the smallest unit which can be moved around in the sentence. For example, look at the following sentences where the form 'surely' has been moved around:

Surely, he doesn't deny that.

He surely doesn't deny that.

He doesn't deny that, surely.

Here we cannot move around 'sure' by itself, or '-ly' by itself, the way we can move around 'surely'. Sometimes longer forms can be moved around, e.g.,

8. If the same word-shape belongs to two different lexemes (ie has two unrelated meanings) we have a case of **homonymy**. If the meanings are related, ie if one meaning can be derived from another by metaphorical or figurative extension. We have **polysemy**.
9. When a grammatical rule is applied to a lexical word, we get a grammatical word. Like the lexical word, the grammatical word too is abstract. To get a physical shape, it has to be realized as a phonological or an orthographic word. The grammatical word represents the grammatical properties of a word.
10. Function words (articles, pronouns, auxiliaries, prepositions, etc.) occur only as grammatical words. They do not correspond to any lexical words.
11. The relationship between a grammatical word and a phonological word may be one-one, one-many or many-one. The same is true of the relationship between a grammatical word and an orthographic word.
12. When two or more distinct grammatical words are realized by the same phonological/orthographic word, we have **syncretism**.
13. Linguists have defined 'word' as 'a minimum free form'. This definition identifies word as the unit which cannot be broken down further into independently occurring units. The word is thus identified as the smallest 'positionally mobile' and 'internally stable' unit of language. This definition faces difficulty with compound words and applies only to the phonological word.
14. Commonly the word is identified as the smallest meaningful unit of language, but linguists believe that the word can be divided into smaller meaningful parts called **morphemes**. Some of these smaller units can also occur by themselves as words, others can't. The former type are called **free** and the latter **bound** morphemes.
15. Some morphemes signal a grammatical function rather than meaning. Such grammatical morphemes can also be free or bound.
16. Morphemes are often, but not always, represented by clearly identifiable phonological or orthographic material. Hence they are best treated as **abstract** rather than concrete entities.
17. The relationship between morphemes and words is one of **realization** and not composition. Combinations of two or more morphemes may therefore be seen as one of **realization** and not composition. Combinations of two or more morphemes may be realized as a single word.

1.6 KEY WORDS

Bound morpheme: A morpheme which must combine with a free morpheme to be realized as a word (cf. **FREE MORPHEME**).

Composition: A relationship between the units of two levels of structure in which the units of the higher level are made up of, and analyzable into, clearly identifiable units of the lower level.

Free morpheme: A morpheme which can be realized as a word by itself (cf. **BOUND MORPHEME**).

Function words: Words belonging to the categories of articles, pronouns, auxiliaries, conjunctions and prepositions, which have no lexical meaning but only perform grammatical functions. They are included in the category of grammatical words.

They were all keen to see the young Indian from Chicago.

The young Indian from Chicago, they were all keen to see.

Here 'the young Indian from Chicago' shows the same kind of positional mobility as does 'surely' in the earlier example. But 'the young Indian from Chicago' is not a minimum form as it contains smaller forms capable of occurring independently. In other words, this form is a free form but it consists of more free forms and is therefore not a minimum form. Therefore it does not qualify as a word. Such forms are actually called phrases.

Stability refers to the internal cohesion of the word. As we have seen, a word can also be broken down into smaller (bound) elements (e.g., surely=sure+ly), but the order of these elements in a word is strictly fixed and cannot be changed. In other words, while a word has positional mobility, its elements do not.

Despite this additional support, the definition of word as a minimum free form is not quite free from trouble. It faces another difficulty with compounds. Compounds are words like **postman, blackboard, goalkeeper, etc.**, which are made up of two smaller words. By this definition, they would not be called words since they are not minimum forms, even though they are free. Everyone, however, agrees that compounds are indeed words.

Even if we were to accept Bloomfield's definition of 'word' despite all these problems, we would still have to ask: What kind of 'word', among the four kinds that we have identified above, would it apply to?

It is obvious that it could not apply to either the lexical or the grammatical kind of word. Why?

Because both these kinds of word are abstractions, not physical shapes. Bloomfield's definition attributes to words qualities like 'size' and 'occurrence as an utterance'. Lexical and grammatical words do not have size and they do not occur as utterances, since they are abstract entities. The orthographic word, though it can be said to have measurable size, also cannot occur as an utterance. Hence, Bloomfield's definition can apply only to the phonological word, and is therefore of limited use in our attempt to understand the nature of the word.

1.3.2 Meaning and Grammatical Function

Bloomfield's definition of the word as 'a minimum free form' addresses only the formal properties of the word i.e. it makes no reference to meaning. Yet all the dictionary definitions of 'word' given at the beginning of this unit make reference to meaning. Perhaps a definition of the word based on meaning may work where one based on formal properties alone doesn't.

Let us start with the phrase 'the smallest isolable meaningful element' which, in the opinion of Collins English Dictionary, is the way in which native speakers apprehend a word, though linguists don't agree. Why don't the linguists agree? After all, forms like **young, old, sweet, nation, universe, etc.** are all meaningful elements and they are also all unanalysable into smaller parts. The problem is not with forms like these but with forms like **younger, older, oldest, national, universal, etc.**, forms which can be analysed into smaller parts, as we saw earlier. In each of these forms we can isolate smaller elements (**young+er, old+er, old+est, nation+al, univers(e)+al**). We know that in each case the first element is a meaningful one; if the second one can also be shown to be meaningful, then the definition of 'word' as 'the smallest isolable

Grammatical word: A word apprehended as a grammatical unit, i.e. as a unit resulting from the application of some grammatical rule to a lexical word. The term also covers function words.

Homographs: When two or more phonological words are represented by the same orthographic word (= same spelling, different pronunciation), we get homographs.

Homonymy: When two or more lexical words are represented by the same phonological or orthographic word (= same pronunciation, same spelling but quite different meanings), we get homonymy.

Homophones: When two or more orthographic words are represented by the same phonological word (= different spelling, same pronunciation), we get homophones.

Internal stability: Signifies a characteristic of the unit word: the internal elements of a word are in a stable arrangement and cannot be moved around.

Lexical word (Lexeme): The word considered as an abstract meaning-bearing unit, independent of the various grammatical forms it acquires when subjected to the rules of grammar.

Minimum free form: Bloomfield's definition of the word as the smallest independently occurring unit of language. Freedom includes positional mobility and internal stability.

Morphemes: The smallest meaningful or grammatically functional unit of a language.

Orthographic word: The word conceived as a stretch of written or printed signs.

Phonological word: The word conceived as a stretch of spoken sounds.

Polysemy: When a lexical word is seen to have more than one meaning, but the additional meanings are seen as derived from the basic meaning of the word through metaphorical or figurative extension, we have polysemy.

Positional mobility: The property that belongs to a word, and sometimes to a phrase, but never to a unit smaller than a word, of being moved around in a sentence.

Realization: The relationship between the units of two levels of structure where the higher level unit, though it is seen to be related to the lower level units in a hierarchy, is independent of the lower level units and has properties of its own, not derivable from the lower level units. Cf. **Composition**.

Syncretism: When the same phonological/orthographic word realizes two or more distinct grammatical words, we have syncretism.

1.7 BIBLIOGRAPHY

On types of word: Crater: Ch. 1; Hockett: Ch. 19; Lyons 1968: 5.4; Katamba: Ch. 2

On lexeme: Lyons 1968: 5.4; 1977: 1.5; Katamba: Ch. 2; Carter: 1.2

Word as a minimum free form: Bloomfield: pp. 178ff.; Lyons 1968: 5.4.9

Positional mobility & internal stability of a word: Lyons 1968: 5.4.10; Katamba: 2.2.3

Morpheme: Lyons 1968: 5.3; Katamba: Ch. 3; Hockett: Ch. 14; Akmajian et al: 2.2

On homonymy & polysemy: Lyons 1977: 1.5 & 13.4; Katamba: 2.2.2;

Akmajian, A., Demers, R.A., Farmer, A.K. & Harnish, R.M. (1995) *Linguistics: An Introduction to Language and Communication*, Cambridge, Mass.: MIT Press/Prentice-Hall of India 1996.

Bloomfield, L. (1933) *Language*. London: Allen & Unwin

Carter, R (1987) *Vocabulary*, London: Allen & Unwin

Hockett, C.F. (1958) *A Course in Modern Linguistics*, New York: The Macmillan Company

Katamba, F. (1994) *English Words*, London: Routledge

Lyons, J. (1968) *Introduction to Theoretical Linguistics*, Cambridge: The University Press

Lyons, J. (1977) *Semantics*, Vols. 1 & 2, Cambridge: The University Press

1.8 QUESTIONS & EXERCISES

1. In informal spoken American English, we come across expressions like 'wanna', 'gonna', 'wannabe', 'Howdy?', etc. What are these four expressions supposed to be contractions of? In terms of word-types, how many phonological, orthographic, grammatical and lexical words can you identify in these four expressions?
2. Compounds in English are written in three ways: as one word (e.g., bedroom, bulldog), as two words (e.g., red tape, money order) and with a hyphen (e.g. swim-suit, kick-start).

Look up a dictionary and find out ten compounds of each type. Study them closely. Can you figure out any rational basis for the decision to write them the way they are written? Particularly, what consideration seems to guide the decision to write some compounds as one word and some as two words?

3. Identify and comment on the homonyms and homophones in the following passage from *Alice in Wonderland*:

Here the Red Queen began again. 'Can you answer useful questions?' she said. 'How is bread made?'

'I know that!' Alice cried eagerly. 'You take some flour...'

'Where do you pick the flower?' the White Queen asked. 'In a garden or in the hedges?'

'Well, it isn't picked at all.' Alice explained, 'It's ground...'

'How many acres of ground?' said the White Queen. 'You musn't leave out so many things.'

4. What kind of relationship between the phonological word and the lexical word is responsible for the humour in the following joke? Comment on the homonymy and the polysemy that makes the joke possible.

'Waiter, do you serve shrimps?'

'We serve anyone, sir. We don't mind what size you are.'

5. Which of the following forms listed below are words according to the theory of word as 'a minimum free form' and why? Why are the others not words by this theory?

boy's; boy; -s; girls; girl; -s; cornflakes; footpath; taller; tall; -er; Red Indian; childlike; I'm; its; it's

6. What difficulties do we face if we posit a composition relationship between morphemes and words, ie, if we say that words are made up of morphemes?

NOTES ON 'QUESTIONS & EXERCISES'

	PW	OW	GW	LW
wanna : want to:	1	1	2	1 (WANT)
gonna : going to:	1	1	2	1 (GOING)
wannabe : want to be	1	1	3	1 (WANT)
Howdy : How do you do	1	1	4	1 (DO:2nd)

2. See Unit 3. Section 3.5.

3. **Homophones and near-homonyms: 'flower' & 'flour' \flauð:** One-many relationship between the phonological word \flau \ and the orthographic words 'flower' and 'flour'. Hence homophones. The same phonological word \flauð, but not the same orthographic word, belongs to two different lexemes, hence near-homonyms.

Homonyms: 'ground' (noun) and 'ground' (past participle of 'grind'). One phonological and orthographic word belongs to two different lexemes: GROUND and 'GRIND'.

4. The single phonological and orthographic word 'shrimp' belongs to two different lexemes: 'shrimp' meaning 'small shellfish used for food' and 'shrimp' meaning 'a very small person'. There is a one-many relationship between the phonological word \ʃrimp \ and the two lexical words.

Polysemy is involved in the use of the verb 'serve'. The two related meanings are: (1) 'to dish up food' (2) 'to wait upon a person at table'. The joke partially depends upon the fact that the customer uses 'serve' in the first sense while the waiter uses it in the second sense. Partially, the joke depends on the two senses of 'shrimp'.

5. Words are: boy's; boy; girls; taller; tall; its

These are words because they cannot be broken down into smaller free forms: they themselves are the minimum free forms. Some of them can be broken down into two smaller forms, e.g., 'boy's into boy and 's, but since 's is not a free form by itself, boy's stay the minimum form, though boy by itself is also a free form.

Others are not words for different reasons: -'s, -s, -er are not free forms.

Cornflakes, footpath, Red Indian, childlike are not minimum forms; they can each be broken down into two smaller forms which occur freely. I'm and it's are not words because they are made up of two words each: 'm and 's here are not like 's in boy's; 'm stands for am and 's for is. The test of positional mobility shows that am is not tied after I, though at first that is how it looks. We can also say 'Am I?'

6. We face two problems : first, this means we treat both morphemes and words as physical entities and be able to demonstrate that every word is physically (ie phonologically and orthographically) composed of smaller physical units called morphemes. This is not possible as morphemes which are physically identifiable in many words are identifiable only by meaning, context, etc. in many others (e.g., the plural morpheme in plural nouns). Secondly, words have a number of 'emergent' properties or properties which are not derivable from their constituent morphemes. For example, words belong to grammatical classes like nouns, verbs,

etc. The grammatical class of a word cannot be predicted from a knowledge of its 'constituent' morphemes 'Breakable' (adjective) and 'breakage' (noun) both contain the morpheme break which is a verb as a word, while the morphemes -able and -age have no class properties by themselves. This shows that the property of belonging to a grammatical class is not derived from morphemes since morphemes don't have this property.