1.1 Introduction

Words are the building block of the English language. They are very important in verbal communication. We shall review in this chapter the term lexicology, the concept of word, word classes, the features of word, and the concept of semantic fields. We shall also discuss the difficulties in the definition of the word, the major features of words, and the place of words in linguistic analysis.

1.2 What Is Lexicology?

Word is a complex phenomenon in our daily life. As the name suggests, lexicology is the study of the vocabulary or lexicon of a given language. It deals not only with simple words, but also with complex and compound words. If we want to study words, we shall have to look at words and their relations to other fields from different perspectives. Lexicology is closely related to morphology, semantics, etymology, and lexicography, because these fields also deal with words.

1.2.1 Morphology and Semantics

Morphology is the study of the forms of words and their components. In morphology, morpheme is a basic concept. The major purpose of study in morphology is to look at morphemes and their arrangements in word formation.
Morphemes are considered as the smallest meaningful units which may constitute words or parts of words. From morphemes, we can specify the kind of relationship they have with the non-linguistic world.

From the lexical items: bug, boy, smuggle, builder, dipsticks, reading, we can see that bug, boy and smuggle cannot be divided further into meaningful units. However, builder, dipsticks and reading can be analysed as ‘build + er’, ‘dip + stick + s’, and ‘read + ing’. The items bug, boy, through, build, -er, dip, stick, -s, read and -ing are all morphemes. Bug, boy, smuggle, build, dip, stick and read are simple words while -er, -s and -ing are only parts of words.

Semantics is often defined as the study of meaning. It tries to explain and describe meaning in natural languages. As we know, meaning pervades the whole of language. Generally speaking, semantics focuses on the meaning of words, the meaning of utterances in context, the meaning of sentences, meaning relations between sentences, and the meaning relations that are internal to the vocabulary of a language. According to Jackson and Amvela (2000), semantics is usually approached from one of two perspectives: philosophical or linguistic. Philosophical semantics is concerned with the logical properties of language, the nature of formal theories, and the language of logic. Linguistic semantics involves all aspects of meaning in natural languages, from the meaning of complex utterances in specific context to that of individual sounds in syllables. As semantics covers all aspects of human language, meaning should be studied by detailed analyses of the way words and sentences are used in specific context (Crystal, 1997). In fact, a number of factors are involved in the use of words. Thus, we should approach meaning in relation not only to lexicology, but also to phonology, syntax, pragmatics, functional linguistics, sociolinguistics, psycholinguistics, cognitive linguistics and text analysis.

1.2.2 Etymology and Lexicography

Etymology is the study of the whole history of words. For Jackson and Amvela (2000), etymological studies face several difficulties. First, some words are not etymologically related to ancient forms. It is therefore difficult to establish and indicate their origins. Consequently, the forms from which such words are said to derive can only be produced by analogy. Second, while it is possible to specify the exact time when some terms entered the language, it is clearly impossible to say exactly when a form was dropped, since words can disappear from use for various reasons. Third, there can be no ‘true’ or original meaning, since human language stretches too far back in history.
When speakers cannot analyze an obscure form, they use ‘folk etymology’ to replace it with a different form which is morphologically transparent. Gramley and Pätzold (1992) give several examples of folk etymology. For the verb *depart*, its initial use was restricted to wedding ceremonies to mean ‘separate’ in the expression ‘till death do us depart’. Later, the verb became obsolete and was analyzed as *do* and *part*, hence the corresponding Modern English expression ‘till death do us part’ (Jackson and Amvela, 2000).

Lexicography is closely related to the words in a given language. It involves the writing and compilation of dictionaries, especially dealing with the principles that underlie the process of compiling and editing dictionaries. Jackson (1988) considers lexicographical compilation as derived from lexicological theory. In Jackson and Amvela’s (2000) words, lexicography developed its own principles and tradition independently of linguistics in general, but in recent years the link between lexicography and linguistics has been clearly established. Dictionaries are compiled now mainly by lexicographers with linguistic knowledge. People consider lexicography as applied lexicology, as it involves a wide range of fields, such as phonology, lexicology, morphology, syntax, semantics, sociolinguistics, pragmatics, functional linguistics, psycholinguistics, corpus linguistics, cognitive linguistics, and discourse analysis. These fields contribute in the study and selection of the information to be presented in the dictionary.

### 1.3 What Is a Word?

The notion of ‘word’ is central in the study of lexicology. Most fluent speakers of English seem to know what a word is. They know, for example, that words are listed in dictionaries, that they are separated in writing by spaces, and that they may be separated in speech by pauses. However, word is used traditionally to refer to a sequence of letters bounded by spaces. Apart from word, people use the terms ‘vocabulary’, ‘lexis’, and ‘lexicon’, but these terms may be considered “more or less synonymous” (Jackson and Amvela, 2000).

Before proposing the definition, we shall first discuss the difficulties involved in the definition of the word. Then we shall discuss in turn the characteristics of the word.

#### 1.3.1 Difficulties in the Definition of the Word

The term word is also used to refer to an intermediate structure smaller
than a whole phrase and yet generally larger than a single sound segment. However, people always face the difficulty of deciding what a word is. Even experts do not agree on all points of definition.

Many people tend to think of the word in visual terms, that is, as a meaningful group of letters printed or written down in a piece of paper. Such a casual conception, of course, is little more than a reflection of the millions of words which appear on pages of textbooks, journals, newspapers, magazines, and novels. Linguists have traditionally depended on the written word as primary source material for defining the essential meanings of words.

Some linguists regard the study of spoken word as more important than the study of the written. Children learn to master the sounds of a language, its basic grammatical structure and an elementary vocabulary, long before they learn to write. Historically, the spoken word comes first. The earliest evidence of writing dates back about several thousand years.

The word may be defined differently depending on whether we focus on its representation, the thought which it expresses, or purely formal criteria. There have been several types of definitions. Jackson and Amvela (2000) classify these definitions into three types.

The first type of definition relies mainly on writing traditions that separate by spaces sequences of letters or characters. As noted by them, these separations do not always correspond to functional realities. For example, in ‘a new waste paper basket’, the first two spaces do not have the same value as the last two because the group ‘waste paper basket’, although represented by three words, constitutes a semantic unit, while such a unit does not exist for the group ‘a new waste’. Thus, a definition based on writing traditions alone cannot be entirely satisfactory.

The second type of definition considers the word as a thought unit or a psychological unit. The main problem faced by this view of word is that of ‘delimitation’. For example, a word may form one block but include two units of thought, e.g. read, import and portable. Besides, the psychological unit exceeds the limit of the graphological unit and spreads over several words, e.g. all of a sudden, as usual.

The third type of definition relies only on purely formal criteria. Bloomfield (1933) was the first to suggest a formal definition of the word. A word is viewed as a minimal free form which can occur in isolation and have meaning but which cannot be analyzed into elements which can occur alone and also have meaning. Yet, word may be defined from the phonological, lexical, and grammatical point of view. For example, the phonological word
/ˈfaɪndz/ and the orthographic word *finds* correspond to the grammatical word ‘third person singular of *find*’. The word *find* as the base form is the lexical word. Lexical words are different from grammatical words. The latter are forms like *a, an, but, that*, which cannot usually occur alone as minimal utterances.

Following Jackson and Amvela (2000), we shall consider the word as an uninterruptible unit of structure consisting of one or more morphemes.

### 1.3.2 Major Features of Words

Apparently, words play an important role in our verbal communication. To facilitate our understanding of the concept of word, some scholars (Logwig and Barrett, 1967; Jackson and Amvela, 2000) have tried to generalize the major features of words.

1. A word is a sound or combination of sounds which we make voluntarily with our vocal equipment. In English, when linguists symbolize these sounds in writing, they use a special phonemic alphabet that has a different symbol for each phoneme. For example:
   - /æ/ (the vowel in *black, mat, bang*)
   - /ʃ/ (the first sound in *shirt* and the last in *fish*)
   - /ei/ (the diphthong in *say, bate, same*)
   - /Λ/ (the vowel in *run, flood*)
   - /ŋ/ (the last consonant sound in *running*)
   - /dʒ/ (the first sound in *jazz* and the last in *bridge*)

   In addition to phonemes, there are three other sound characteristics: stress, pitch, and juncture. Stress has to do with the degree of loudness, or accent, which is given to certain words or parts of words. Pitch refers to voice tones, which may range from high to low in a typical utterance. Juncture has to do with the pauses between speech sounds and at the end of utterances and also with the things that happen to the voice tones at those times. For example, the meaning of the following sentences, when spoken aloud, can be identified with the help of these characteristics:

   *I want some whitewall paint.* (paint for my tires)

   *I want some white wall paint.* (paint for my living room)

   In writing, the space or lack of it between *white* and *wall* helps us understand what is intended. In speech, our use of stress, pitch, and juncture does the job.

2. A word is symbolic and is used to stand for something else. In each language, sounds are used to represent objects, happenings, or ideas.
There is no logical relationship between the sound which stands for a thing or idea and the actual thing or idea itself. It is only a symbolic connection, and the word for a bull might just as reasonably be *lub* or *ulb* if we all agreed that it should be.

Words can symbolize something right before our eyes in the immediate here and now. They can also symbolize something not present, not seen, and not in immediate experience. They allow us to talk about something which now exists only in our mind, something which has happened in the past, or something which may happen in the future.

3. The word is an uninterruptible unit. When elements are added to a word to modify its meaning, they never interrupt the internal stability of the word. For example, the prefix *im*- and the suffix -*able* may be added to the words *possible* and *drink* and give *impossible* and *drinkable* respectively.

4. A word has to do with its social function. It helps human beings interact culturally with one another—which is another way of saying ‘communicate’. Words do much more than promote the exchange of information and ideas. As members of society we need words for all our life activities: to show affection, anger, pleasure, fear, and all the other emotions; to persuade others; to make a living; to change our institutions; to uphold law and order; to build dams; to make friends—in short, to operate normally in terms of our own culture. Without words there could be no culture; they are the glue that holds a society together.

Words help us fulfill the social need of talking together. Often the fact that we are saying something is more important than what we say. When we meet, we say ‘How do you do?’ without really expecting a physical report; we say ‘It’s a nice day’ without wishing really to engage in a discussion about weather. These customary polite exchanges are a kind of indirect communication. They say in effect: ‘I’m being friendly. I anticipate that you will be the same.’ Thus, words are part of the face we wear when we meet the world.

5. A word may consist of one or more morphemes. When it consists of one morpheme only, it cannot be broken down into smaller meaningful units, e.g. *dog, band, man, out, work*. These are called ‘simple’ words, which are typically ‘minimum free forms’, in the sense that they may stand by themselves and yet act as minimally complete utterances, e.g. in answer to a question.
6. Words are part of the large communication system we call language. A word is partly dependent for meaning upon its use in that larger context. To know a word, we are to recognize its sound in the stream of speech, the accumulated experiences with which the sound is associated, and its function in a sentence or utterance as it works grammatically with other words.

7. A word occurs typically in the structure of phrases. In the typical way, morphemes are used to build words, words to build phrases, phrases to build clauses, and clauses to build sentences.

The instant recognition of the meanings of words is a bit complex, as we must consider the context of each word in its sentence or utterance. For instance, the word *bull* may suggest any one of a number of things, depending upon one’s own personal experience of the various meanings the word has previously acquired—the papal bull that is signed by a Pope, the Bull that chased Paul Newman in *Butch Cassidy and the Sundance Kid*, the prizefighter in the ring “bulling” his opponent into the ropes, or even the interjection one may snort when told something obviously untrue. In other words, the word *bull* needs other words with it to give it context and pin its meaning down.

A word receives some of its meaning as it fills the grammatical slot in a sentence: as subject (e.g. *The bull chased him*), as object (e.g. *He signed the bull*), as verb (e.g. *Let’s bull our way into the line*), and as modifier (e.g. *We had a bull session*). It should also be noted that some words—prepositions like *by, at, of*; conjunctions like *and, but*; and so forth—are almost impossible to assign any meaning to without talking about their sentence function.

### 1.4 Words in Linguistic Analysis

Word can be an object of linguistic analysis. It can not be studied without reference to phonology, lexicology, morphology, syntax, semantics, functional linguistics, sociolinguistics, pragmatics, psycholinguistics, corpus linguistics, and discourse analysis. All these different aspects of analysis interact with one another in various ways. For instance, in many cases, the difference between two identical lexical items can be reduced to a difference at the level of phonology. Compare the pair of words *pit* and *bit*. They differ only in one sound unit but the difference has a serious effect at the level of lexicology. In Jackson and Amvela’s (2000) words, the sounds responsible for the difference may occur anywhere in the structure of the word; i.e. at the initial, medial, or final position. In some cases, the phonological difference
does not involve discrete sound units but suprasegmental features such as stress. For example, ex’port (verb), vs. ’export (noun).

We can also understand the relevance of phonology in lexicology from compounds. The process of compounding is often viewed as a simple combination of two words. Thus, green and house may be put together to form greenhouse, ‘glass house for growing plants’. For greenhouse, the primary stress falls on the first word. Yet, the same items can be put together in the same order to produce green house, ‘a house that is green’. In this case, both words receive stress, with the primary stress on the second word. The major difference between the two is a matter of stress, which is a phonological feature. This feature is enough to distinguish compounds from noun phrases containing the same words. Greenhouse is a compound, while green house is a phrase. This illustrates clearly the interdependence of phonology, lexicology and syntax.

Every word is involved in a network of associations which connect it with other terms in the language. As mentioned by Jackson & Amvela (2000), some of these associations are based on similarity of meaning, others are purely formal (i.e. based on forms), while others involve both form and meaning. Take the word lecture for example. It is related to the verb forms lectured and lecturing by formal and semantic similarity based on the common stem lecture. It is also related to teacher and tutor by semantic similarity. Furthermore, it is related to gardener and laborer because they all have the suffix -er forming agent nouns from verbs. It can be related to the adjective clever and the inflected adverb harder by accidental similarity in their endings. This shows, among other things, that any word chosen from a given context will suggest other words to us, because they either resemble or differ from each other in form, meaning or both.

### 1.5 Word Classes

We usually use the terms vocabulary, lexis and lexicon to refer to the total stock of words in a language. The total stock of English words is structured and organized in a systematic way. There have been some attempts to discuss the general principles on which vocabulary is structured and organized. The notion of word class has been used as a way of accounting for the structure of the English vocabulary.

The notion of word class is helpful for us to understand the structure of the vocabulary as a whole. In traditional grammar, eight parts of speech are distinguished in English: noun, pronoun, adjective, verb, adverb, preposition, conjunction, and interjection. Some grammarians have elaborated these parts of speech into further classes. For example, Quirk et al. (1985) distinguish the following:
(a) closed classes: preposition, pronoun, determiner, conjunction, auxiliary verb;
(b) open classes: noun, adjective, verb, adverb;
(c) lesser categories: numeral, interjection;
(d) a small number of words of unique function: the particle *not* and the infinitive marker *to*.

According to Jackson and Amvela (2000), the closed classes contain grammatical or function words, which generally serve the grammatical construction of sentences. They are small classes, with a restricted and largely unchanging membership. The open classes, by contrast, are large, and new words are constantly being added to them. The members of the open classes are the lexical or content words, carrying the main meaning of a sentence.

All English words must belong to one or more word classes. However, it is sometimes difficult to tell which word class a word belongs to, simply by looking at it, though inflections may provide a clue (e.g. a word ending in *-ed* is likely to be a verb, and one ending in *-able* an adjective). Thus, we usually need to study a word’s behavior in sentences. All words that function in the same way are deemed to belong to the same word class. For example, consider the following sentence (from Jackson & Amvela, 2000):

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  The book was in the cupboard.
  under
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The words *on*, *in*, and *under* have the same function and express some kind of locational relationship between the book and the cupboard. Since they behave similarly in the sentence, we can say that they belong to the same word class, which we call ‘preposition’.

However, word classes have central and peripheral members and may sometimes overlap. The boundaries between classes are sometimes fuzzy. A word may belong to more than one word class, e.g. *close* is an adjective in ‘a close look’, a noun in ‘at the close of the 20th century’, and a verb in ‘Please close the door behind you’.

### 1.6 Lexical and Grammatical Words

English words can be divided into several word classes. However, words can also be classified into lexical words and grammatical words.

Generally speaking, lexical words are nouns, verbs, adjectives, and adverbs. Classes of lexical words contain hundreds or even thousands of members, and they form open classes. For example, the English vocabulary has a large number of nouns,
and new nouns can always be added to the list. Open class words carry most of the semantic content of utterances. They are often used to represent our experience of the world. They can be used to refer to persons, places, things and concepts (e.g. the nouns Smith, London, pineapple, unity), describe qualities and properties (e.g. the adjectives excellent, kind, high), represent actions, processes or states (e.g. the verbs jump, bite, stay), describe circumstances like manner (e.g. the adverbs kindly, slowly, cheerfully), and so on. Furthermore, lexical words have their own content meanings and may be meaningful when used alone. For example, book and house have their own content meanings.

Grammatical words are words like pronouns, prepositions, demonstrative, determiners, conjunctions, auxiliary verbs, and so on. To linguists, they differ from lexical words. As mentioned above, lexical words carry most of the semantic content, but grammatical words mainly present grammatical information or indicate logical relations in an utterance. They are said to belong to closed classes, and contain relatively few members. The addition of new members to grammatical words is relatively rare. For instance, words like a, in, the, of, and, this do not carry any identifiable meaning.

Understanding the difference between lexical and grammatical words is useful. However, we should be careful with the distinction between these two types of words, because there is no definite distinction between them. There are cases where it is difficult to tell whether a word is a grammatical word or not. This is because there are some words which can not fit very well into either type. For instance, the conjunction because indicates a cause-effect relationship, but at the same time carries some semantic content. It is possible that there is a continuum ranging from words with semantic content such as boys, prize, to words empty of semantic content such as it and that in a sentence like ‘It is likely that two boys will win the prize.’ We should also note that although prepositions may be classed as grammatical words, they are not devoid of semantic content. The sentence ‘The textbook is on the desk’ has a different meaning when on is replaced by behind, under, near, etc. We can also see that the conjunctions and, or, and but have different meanings, but we cannot change one with another, because they do not share the same meaning.

1.7 Words and Semantic Fields

The vocabulary of a language is not an unstructured collection of words. There exist certain meaning relations among them. Lexicologists use meaning relations to propose descriptions of vocabulary structure. One of the concepts used is the semantic or lexical field. A semantic field contains words that belong to a defined area
of meaning. Crystal (1995) defines a semantic field as a ‘named area of meaning in which lexemes interrelate and define each other in specific ways’.

Thus, the vocabulary is said to be organized into a number of partially overlapping semantic fields. The field then becomes the context within which meaning relations can be established. Some attempts have been made to study the structure of some semantic fields, such as the hierarchy of military ranks, numerals, color and kinship terms. For example, the semantic field of color terms comprises the words: black, white, red, green, yellow, blue, orange, etc. Similarly, the lexical field of color terms, together with those of kinship terms, military ranks and vehicles, are only parts of the whole English vocabulary. According to Jackson and Amvela (2000), the vocabulary of a language is essentially a dynamic and well-integrated system of words structured by relationships of meaning. The system is changing continuously. Previously existing lexemes may go out of use and disappear. The meanings of some words may be broadened or narrowed. (We shall talk about this in Chapter 8.)

Yet, it is not easy to assign all the words in English to semantic fields. Crystal (1995) classifies the difficulties into three kinds. First, some words tend to belong to fields that are vague or difficult to define. For instance, it is not obvious to which field the words cute or difficult should be assigned. Secondly, some may validly be assigned to more than one field, e.g. orange, either to the field of ‘fruit’ or to that of ‘color’. Lastly, it is difficult to find the best way to define a semantic field in relation to the other fields and its constituent words. For example, it is hard to decide whether tractor belongs to the field of agricultural vehicles, land vehicles, or just vehicles.

In Jackson and Amvela’s observation, these difficulties indicate that English vocabulary is not made up of a number of discrete lexical fields in which each lexeme finds its appropriate place. Furthermore, language usually cannot be analyzed into well-defined categories. However, large numbers of lexemes can in fact be grouped together into fields and sub-fields in a fairly clear-cut manner.

Some linguists use componential analysis as a method for establishing semantic fields. This method suggests that the words in a field share a common semantic component. Componential analysis aims to express the meaning of a word in terms of its semantic components. For instance, the meaning of woman could be said to be composed of the semantic components [+human], [+adult], [+female].

In semantic field analysis, words are grouped together into fields on the basis of an element of shared meaning. Such a field might comprise words referring to drinking vessels, or verbs of communication (e.g. speak, order, warn, promise, etc.). There is no set of agreed criteria for establishing semantic fields, though a ‘common component’
of meaning might be one.

As noted by Jackson and Amvela (2000), semantic field analysis has been used to the descriptions of vocabulary in dictionaries. They give a detailed account of several attempts that have been made. The first is *Roget’s Thesaurus*, which is an example of a semantic field arrangement of English vocabulary. It has a hierarchical organization, and entries are arranged in two columns on the page. Roger divides the vocabulary into several broad classes. Each of these classes is then subdivided into sections. For instance, affection has the sections: general, personal, sympathetic, moral, religious. A further two subdivisions are made so to reach the semantic fields. In this thesaurus, Roget provides for users of the language a practical guide to the available vocabulary to express given ideas. If the user has a particular idea to express, he can find in the thesaurus the words that are available in English to express that idea.

The second is McArthur’s *Longman Lexicon of Contemporary English*. In this dictionary, words that share the same semantic content are put together by the semantic field arrangement. McArthur has chosen around 15,000 words from the *Longman Dictionary of Contemporary English* (1978) and arranged them into fourteen semantic fields, e.g. Life and Living Things; People and the Family; Food, Drink and Farming; Thought and Communication, Language and Grammar; Movement, Location, Travel and Transport. The broad semantic fields are sub-divided. For example, the Movement field has subdivisions of Moving, Coming and Going; Putting and Taking, Pulling and Pushing; Travel and Visiting: Vehicles and Transport on Land; Places: Shipping, Aircraft; Location and Direction. These sub-divisions are further divided into smaller groups of related words. The user is thus able to find out how semantically related words differ from each other in meaning.

Another attempt is *Longman Dictionary of Scientific Usage* (1979). It arranges some 10,000 terms from the vocabulary of science into 125 sets according to subject matters (like Crystal Structure, Plant Tissue, Chromatography, Metabolism, Magnetism). A semantic field arrangement can also be found in the *Longman Language Activator* (1993), a dictionary for learners of English to find an appropriate word for use in a given context. It is arranged around some 1000 ‘Key Words’, which represent semantic fields such as clothes, give, nervous, typical.
1. Examine the following three definitions of lexicology. What are the differences and similarities among them?

(1) the study of the meaning and uses of words. (*Longman Dictionary of Contemporary English*. 2001)
(2) the study of the overall structure and history of the vocabulary of a language. (*Collins English Dictionary*. 1998)
(3) branch of linguistics concerned with the semantic structure of the lexicon. (*Oxford Concise Dictionary of Linguistics*. 1997)

2. Study the following sentences. In which of them would an alternative selection of words make an improvement, and in which does the arrangement of the words need to be adjusted?

(1) They go can the room into and as like shut they the door.
(2) You boys are require to give in your homework before 10 clock please.
(3) I saw the football match happy and find it very interesting.

3. How is the past tense ending –ed pronounced for each group of the following words? Try to find out what determines the pronunciation used in each case.

(1) hated, heated, suited, beaded, nodded
(2) missed, worked, flashed, walked, loafed
(3) paved, planned, freed, played, breathed

4. For each of the following sets of words, indicate what the principle is that groups them into a set. Is the principle one of a common meaning, related forms of a word or something else?

(1) oak, willow, pine, polar, gingko, mahogany
(2) fly, flying, flew, flies, flown
(3) mobile phone, dial, busy, answer, ring, answer
(4) gaze, peer, look, see, watch, squint
5. Find out the meanings of the following compound nouns in (a) and the corresponding adjective plus noun constructions in (b). Then, mark the primary stress in each noun and phrase.

(a) Compound: blackboard, blackbird, greyhound, White House
(b) Noun Phrases: black board, black bird, grey hound, white house

6. Count the number of words in the following sentences. Then, make a separate count of (a) open class words and (b) closed class words.

Girard emphasized that it is an important part of the teacher’s job to motivate learners. However, the teacher’s function is seen mainly as a provider of materials and conditions for learning, while the learner takes responsibility for his or her own motivation and performance. (Adapted from Ur, 1996:276)

7. What does the word bull mean in each of the following sentences?

(a) Beware of the bull!
(b) I decided to take the bull by the horn and ask him to leave.
(c) Stop acting like a bull in a china shop!
(d) There was a bull market on the stock exchange today.

8. Suggest the words that might be included in a semantic field of ‘drinking vessels’. Can they be organized within the field in some way?