54 WORDS AND LEXEMES

place of the short high-mid rounded vowel of (19a). Other forms differ from (19a) in having a lengthened vowel (19d, g), high tone (19e, f), falling tone (19g), and contrasting vowel quality (19f):

(19)	Stems of the verb 'to throw at'			
	a.	bòk	(inflectionally unmarked)	Ø, 2sg
	b.	bóok		NTS
	с.	bàok		1sg
	d.	bàok		3sg
	e.	bók		1pl, 3pl, pass
	f.	bźk		2pl
	g.	bộok		PASS:CT

From the perspective of a speaker of English or most other European and Asian languages, Agar Dinka morphology is exotic, but it clearly is not from the perspective of speakers of the language. There is no evidence that these seemingly exotic processes are prone to disappear over time or that children of the community experience difficulty in learning to speak the language. We must conclude that non-segmental processes are just as natural as the affixal phenomena so familiar to speakers of English and many other languages and that a theory of morphology should be able to treat them with equal ease. Item-and-arrangement theories can be made to accommodate morphology of the sort that we see in Agar Dinka, but only awkwardly. This is one of the primary arguments that proponents of itemand-process morphology use in support of their general framework, which does not give affixation any special pride of place. A fascinating question is why one language should use a certain type of morphology and another language should not, but we will not attempt to answer it here.

2.6 The Lexicon

A discussion of words and lexemes would not be complete without a brief introduction to the **lexicon**. The word *lexicon* is from Greek *lexikós* 'pertaining to words' and often designates a book containing a list of words in a language along with their definitions. Linguists use the term in particular to refer to the mental dictionary. Within linguistics, lexicon has taken on multiple definitions. This complicates matters, particularly because linguists do not always specify which definition they assume.

There are two widely accepted views of the lexicon. According to one, the lexicon is a list of the indivisible morphological units, or morphemes, in a language. This definition comes from Baudouin de Courtenay (b. 1845 in Radzymin, Poland; d. 1929 in Warsaw), who, despite his French name and his relation to the Belgian royal family, was a Polish linguist of the middle to late nineteenth century and a very influential theorist of the time.

The second view of the lexicon, due more or less to Bloomfield (1933), is a list of irregular or arbitrary forms. Because they are irregular or arbitrary, they must be memorized. For example, a speaker of French must learn that the sound sequence [aʁbʁ] refers to a tree, and a speaker of English must learn that the word *slide* refers to a small square object that we put in a slide projector to project an image onto a screen or wall.

It would be an error to assume that the first definition is equivalent to the second and that the list of irregular forms is a list of morphemes, which is to say a list of indivisible units. If we spoke a perfect language, this would be true. Every irregular form in the language would be indivisible. But where natural language is concerned, this position is too extreme. A great deal of evidence suggests that even morphologically complex forms are present in a speaker's lexicon (see chapter 8).

One morphologically complex word that must be considered to be listed in the lexicon is *representative*. If it were enough to say that *re-, present*, and *-ative* are stored in the lexicon, we would expect the meaning of *representative* to be a function of its parts, which it is not. A representative is always a person who represents something, but in the United States, the word most commonly refers to an elected member of a specific state or federal legislative body. Senators may represent us, and thus they are representatives, but a United States Senator is not a *Representative*. (If you doubt us, perform the simple experiment of referring to a senator as a representative in conversation, and see what happens.)

Digging deeper, we find that most words ending in *-ative* are adjectives. *Representative* can be an adjective, but in this specific sense it is a noun, again an idiosyncrasy that must be listed in the lexicon along with the special meaning it has come to have in the context of United States government. In this and many other cases, we are tempted to think that the meaning of a complex word is the sum of the meaning of its parts, because the difference between the meaning that we expect a word to have on the basis of the meanings of its parts and the meaning that it actually has is quite subtle. Still, there is no way out. If we know the meaning of the word *representative*, it must be the case that we store

56 WORDS AND LEXEMES

the whole word and its very specific meaning. The abstract list or place where it is stored is the lexicon.

The lexicon contains more than words. Affixes, such as English *re-*, can be assumed to be in the lexicon. Speakers know and understand such affixes and readily attach them to new stems.

Some affixed inflected forms, like *says*, must also be in a lexicon. We know this because *says* is an exception to the general rule "Add /-z/ to the basic stem of a verb to form the third person singular present." Say *say* and *says* out loud: *say* [sej] has a tense vowel, but *says* [sɛz] has a lax one. A speaker of English must memorize the third person singular of *say* because it does not follow the normal rules of English. In other words, he or she stores it in the lexicon. Is *says* a simple form or a complex form? We can safely assume that it is complex because it has two parts, a stem and a recognizable third person ending /-z/. This tells us that complex forms may be stored in the lexicon.

Now consider a famous complex word, *antidisestablishmentarianism*, in which we easily recognize the pieces *anti-*, *dis-*, *establish*, *-ment*, *-ary*, *-an*, and *-ism*. However, these pieces together tell us very little about the meaning of the word, 'opposition to denying special state recognition of a particular religion' (it was used in Irish political discussion in the mid-nineteenth century). If you are a speaker of English who happens to know and use this word, then it must be stored in your lexicon, because its meaning cannot straightforwardly be determined from the meaning of its parts.

We have established the need to list inflected forms and complex lexemes like *representative* in the lexicon. We need to list some compounds, too. Some people might argue that you don't need to list *doghouse* in the lexicon. (We would disagree: see exercise 1, chapter 4.) However, there is no doubt that the compound *cathouse* is listed there, because its meaning, 'brothel', is not predictable from its form. Fixed phrases (*with respect to* ..., *butterflies in my stomach*), phrasal verbs (*run up a bill, catch up with Tom*), names of people and places (*Audrey Hepburn, Gulf of Mexico*), and proverbs (*Don't count your chickens before they're hatched*) all need to be memorized, too, and are arguably in the lexicon. Psycholinguistic studies have even shown that perfectly regular complex forms, if frequent enough, are listed in the lexicon.

In sum, the most accurate conception of the lexicon is as a list of forms that you know. The lexicon is in some sense equivalent to your linguistic memory. It cannot simply be a list of indivisible morphological elements. Instead, it contains irregular forms, forms that are in some way unpredictable. Some are indivisible or unanalyzable morphologically, and others are not.

We close this section by mentioning a third use of lexicon among linguists. Some linguists equate the lexicon with the morphological component of the grammar as a whole. We believe that the mental dictionary should be considered separately from the internal mechanisms involved in the formation and analysis of words.

2.7 Summary

We began this chapter by looking at syntactic and phonological definitions of word and found that many definitions of word are problematic. Nevertheless, speakers have firm intuitions about what is a word and what isn't, and we were also able to present several empirical tests of wordhood involving the order of internal elements, non-separability, integrity, and stress. We presented key terms used in the discussion of words, particularly grammatical word, phonological word, and lexeme. The notion of lexeme led to an introduction to inflection and derivation, which will be discussed more fully in chapters 4 and 6. We looked at two approaches to morphology, item-and-arrangement and item-andprocess, noting that the latter is better able to account for non-affixal phenomena. Finally, we looked at the lexicon, a mental list of forms that you know. The Kujamaat Jóola portion of this chapter picks up on the notion of word by examining how nouns are organized into classes.

where there identican noisen distinction as it is traimportant (2, 10, 20, 0). Describing galatic case (mucocups, the basis of simultics will of the take decarly so far for describing. French, we are since problems when it is encounterwoods file provincipaes of and traimer withing, while are devay's tominine, seen when the future a main refered. Words file maining apper (macrofice) or chases thair (forming) are gender that is adding from a somentic point of view.

rice some is necessitation class systems, for angle for and grouping, women, fire, sind-disignishis things, together der sishardis grounds, but they all beliefig-to atsingle doub class iffilm. Atistralian